

EUAGGELION

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DEPARTMENTAL VISION

“ To build a department of global repute for providing technical ability and professional skills in the field of civil engineering ”

DEPARTMENTAL MISSION

- To transform young mind into productive civil engineers using technical knowledge and professional skills through contemporary curriculum and effective learning system with continuous evaluation.
- To provide, exposure to students to modern engineering tools and innovative projects to become globally competent civil engineers embedded with ethical values and leadership capabilities.
- To serve the people of state and nation by providing a broad and high quality education with co-curricular and extracurricular

Father of civil engineering

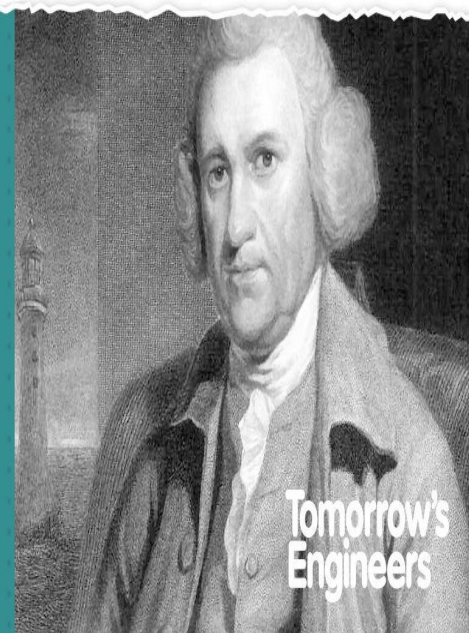
John Smeaton

“Father of Civil Engineering”

Born in Leeds in 1724, John Smeaton was the first self-proclaimed Civil Engineer.

He designed bridges, canals, harbours and lighthouses and pioneered the use of hydraulic lime in concrete.

He was also a mechanical engineer and physicist - his lift and drag coefficient was used (and updated) by the Wright Brothers for the first powered flight.



X-STATIC

C.C.C.T 18th commencement and 10th X-STATIC celebration on the 22nd of September at our multipurpose hall. Our Chief guest for the function was Technical Director with special secretary Shri D.K Pradhan and various other dignitaries. The programme was conducted very joyfully with immense colours, lights and celebration. The function started with lighting of lamps, and khada offering, after that various cultural presentation was done. Our principal Mr. Praveen Pradhan presented the annual report 2016-2017, which was the main event of the day followed by felicitation of staff and student by the dignitaries by the principal. The Parents teachers meeting was also conducted on the same day before the arrival of the chief guest. The closing of the program was with the vote of thanks by our vice principal Mr. Anup Sarmah followed by the National Anthem.



ANNUAL DAY CELEBRATION

PARENTS TEACHERS MEETING

The parents teachers meet was held on 22nd of September from 10am onwards. The meeting of all the departments were conducted successfully.



PROM NIGHT

On 23rd of September the most awaited event was held for the first time in the history of CCCT. Organised by both faculties and students body, which was a successful program bringing together all the alumni guests and the local people and the students of CCCT. The program started from 5:30 pm and ended at 8:30 pm at MPH which was beautifully decorated. Everyone were dressed according to the dress code. The DJ lifted the environment by playing his best track. Everyone were enjoying to their fullest and lets hope we'll get to see more of this kind of event in



PICTURE GALLERY



ENGINEER'S DAY CELEBRATION

On 15th of September, CCCT celebrated Engineer's Day to honour Dr. Mokshagundam Visvesvaraya's contribution towards the country in the field of engineering. Dr. Visvesvaraya was an eminent engineer, scholar and statesman who is known for the floodgates which were installed at various dams across India including the khadakvada reservoir near Pune, Gwalior's Tigr dam and Krishna Raja Sagar dam. He is also known for his discourses and writing on engineering and economics.

As a tribute to this great man, the Department of Electrical and Electronics Engineering, CCCT organized various programs including Technical paper presentation, Case studies, Technical Quiz, Debate, Group Discussion and Extempore. It was an inhouse program, the finals of which were conducted in the presence of the chief guest Mr. Jigmey Namgyal, Superintendent Engineer (S/W), Energy & Power Department, Govt. of Sikkim. Also presiding over the function was Mr. Barun Gupta, Assistant manager, SBI Jorethang who emphasized on the importance of Digital Payment. The monthly departmental newsletter "ELECTRO SYNERGY" was launched at the same event. Among the invitees were senior students and faculty members from Jorethang



FOOTBALL REPORT

On the occasion of Gandhi Jayanti 2017 Borbately had organised a football tournament in borbately football ground. Our football team was also invited, we had our first match on the starting day itself with pradip 7. The tournament started well for us as we won the game 2-0 with the help of goals scored by Karma Dorjee Lepcha and Sonam Tashi.

Our next game was after a week with Sikip. Our team members were excited to play the game. Till the half time the game was scoreless, but as soon as the second half started we were in a lead with the help of goal scored by Pravesh Adhikari. But luck wasn't in our favour and we conceded a goal. The game went onto penalty shootout and we lost the game.

ALTERNATE BUILDING MATERIALS

FOUNDATION

In most parts of the country, the soil bearing capacity is very low or the soil of expansive nature like black cotton soil. Under such conditions, use under-reamed or pedestal pile foundation with plinth beams.

UNDER REAMED PILE FOUNDATION

Such type of foundations is ideally suitable in the areas where the black cotton soil or expansive soil is beyond 2.50 meter. The basic principle of under reamed pile is to anchor the structure at a depth where ground movement are negligible due to moisture variation or other reasons. Simple tools are required for construction of under-reamed piles like spiral auger, under reaming tool, and boring guide. This is a well proven and established technology for construction of foundation in expansive soils. For speeding up the construction bore and under ream for large diameter and deeper pile a mechanical rig can be used. The construction and design of such foundation can be done in accordance with Indian Standard Code of Practice IS 2911-Part III.

BRICK ARCH FOUNDATION

Construction of arches is an old technology. Such type of foundation is of much use where the bearing capacity of soil is good and there exist some loose/filled up soil pockets in between. The arches can be built by avoiding the pressure on such loose pockets and transfer the load to the isolated footings built to support the arches. For construction of such foundation the use of available material like brick or concrete blocks can be made. In order to resist the lateral forces buttresses at the corner or at the end are built. With the use of such foundation there is a considerable saving in the masonry and concrete between the two footings.

WALLING

STABILISED, COMPRESSED EARTH BLOCKS: are made of mud stabilised with 5% cement/lime etc. and compacted in block making machine with no burning. A good walling material as burnt bricks and is economical, stronger, energy saving and simple to manufacture. The soil to be used for the blocks should have the requisite component of clay and silt and sand etc. Soil stabilised hollow and interlocking blocks can provide better thermal insulation.

Stabilised ADOBE: is an improvement over traditional adobe or hand moulded and sun dried mud block in which mud is mixed with a small proportion of cement or lime or broken or cut dry grass as reinforcing media to impart added strength and lower the permeability. It is appropriate in dry climates.

Fal-G Stabilised MUD BLOCKS: are much stronger with less water absorption and cheaper than cement stabilised blocks. With 5 to 10 per cent Fal-G, 30 percent saving in cement could be achieved in addition to utilisation of the waste product like flyash. These blocks could be manufactured at village level. Most suitable where good burnt clay bricks are not available.

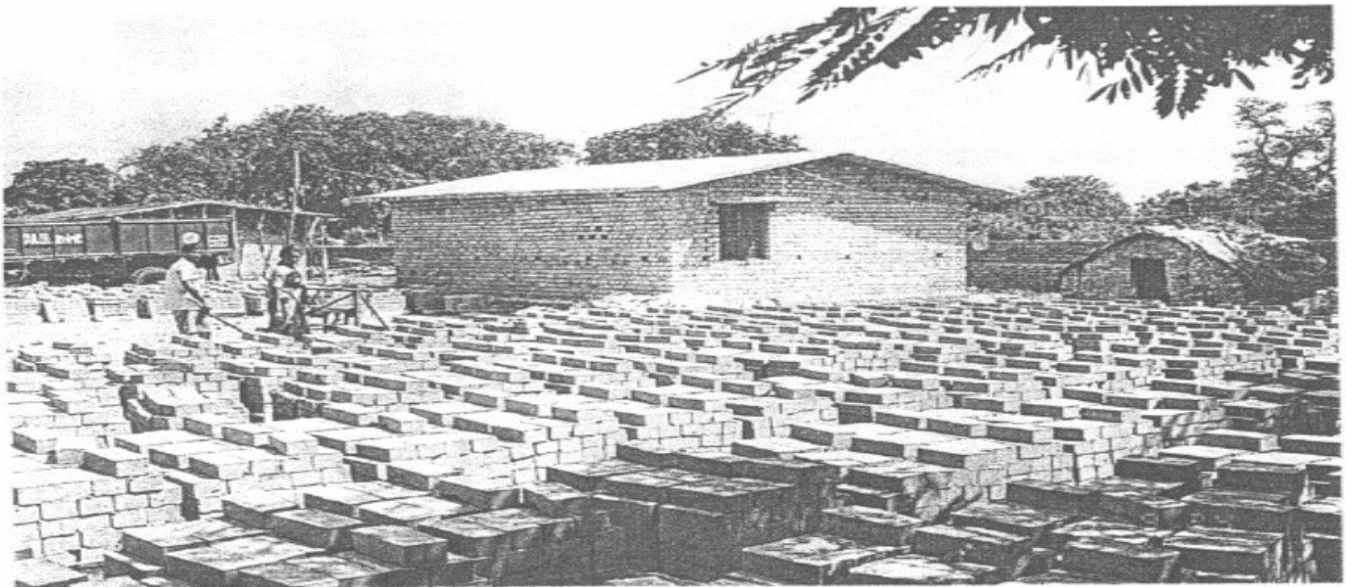
CLAY FLYASH BURNT BRICKS: produced from flyash and clay, are stronger than conventional burnt clay bricks, consume less energy, provide better thermal insulation and solve the environmental problem through utilisation of the flyash, an industrial waste.

FLYASH/SAND-LIME BRICKS: produced from flyash or sand with lime as binder, are strong, superior in water absorption and crushing strength. However this needs autoclaving.

ROOFS

CORRUGATED BAMBOO ROOFING SHEET: an innovative roofing material with an upgradation of traditional material from Bamboo Board. It is eco-friendly, light in weight, strong and durable and minimal fire hazard compared to thatch and other materials. These sheets can be used for roofing, walling, door and window shutters and other components in building construction. Sheets are bonded with phenol formaldehyde resin to which anti-termite chemical is added at the time of mat impregnation. These are termite resistant and fire retardant also.

FILLER SLABS: are normal RCC slabs where bottom half (tension) concrete portions are replaced by filler materials such as bricks, tiles, cellular concrete blocks, etc. These filler materials are so placed as not to compromise structural strength, result in replacing unwanted and non-functional tension concrete, thus resulting in economy. These are safe, sound and provide aes-



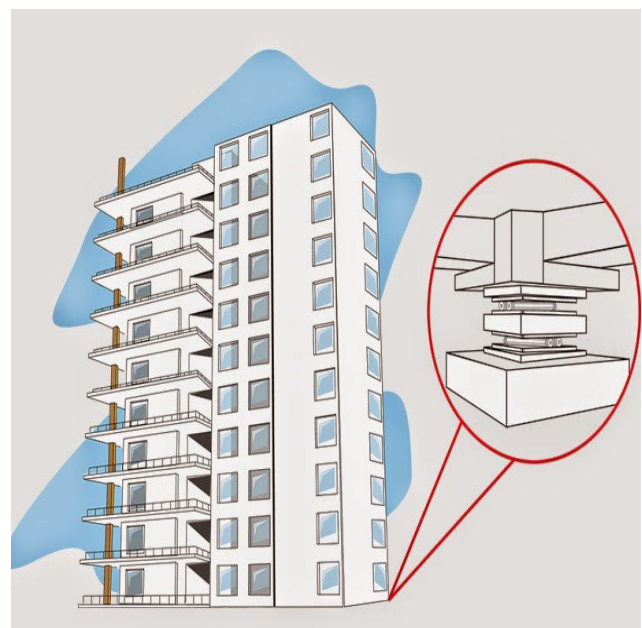
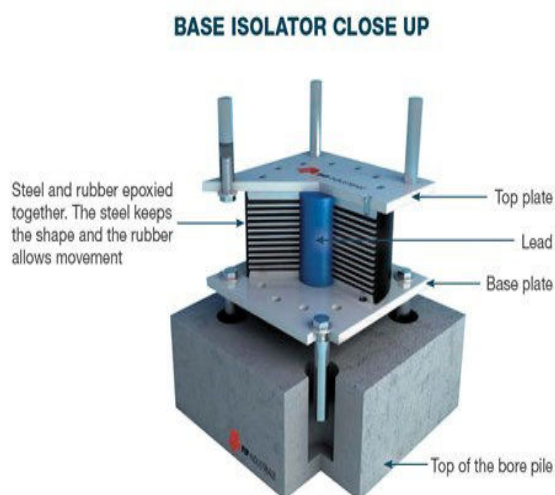
EARTHQUAKE RESISTANCE BUILDING

The seismic waves come out of the earthquake source and move in parallel to the surface of the earth, the speed of the waves change as they travel because the speed is dependent on the material that they travel. The seismic waves are responsible for the calamities on the surface of the earth, the structures or buildings built on the earth cannot be proved as totally earthquake proof structures and the only way that we can protect the structures is by enhancing the earthquake resistant of the buildings. The necessary treatment should be done in connection with the area where they are present and the earthquakes and losses occurred due to the earthquake made the people work on the problems and bring their solutions

Seismic Design Philosophy:

The intensity of the earthquake and its vibration can be mild, moderate and very strong. The minor or mild vibrations occur very often, the moderate vibrations happen occasionally and the strong vibrations occur seldom. Therefore, the philosophy of the seismic design lies in the following parameters:

- Earthquake resistant building
- Earthquake design philosophy



COLLEGE VISION

“ Techno education for global competence”



COLLEGE MISSION

To attain the status of “globally recognized education and training institution with multidimensional growth by enlarging and delivering trainee and industry focused programmes and prepare the “most sought after trainees ” with enhanced core competencies as required by customer and society.

QUALITY OBJETIVES

1. To impart employable skills to the youth.
2. To have a holistic approach in skill , knowledge and attitudinal development in a systematic manner
3. To assess the performance of trainees by continuous monitoring .
4. To keep pace with technological developments and update the curriculum , manpower and infrastructure suitably
5. To ensure discipline, cleanliness and proper house keeping .

UPCOMING EVENTS

- Remedial classes (9th October - 30th October)
- Diwali (19th October - 22th October)
- Maintenance day (25th October - 27 October)
- 2nd sessional (31st October - 14th November)

QUALITY POLICY

The institute is committed to provide Technical Education using the latest technology with continual improvement .

EDITOR

PRAVESH ADHIKARI