



e-Newsletter, Issue 11, March 2012

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Announcement

ASCE – India Section has sent first lot of receipts of Section-Dues and Gifts

If you have not received yours, please send in your details to us by email and we will arrange to send this to you as early as possible

Those who paid their dues in March 2012, are requested to bear with us for a couple of weeks as we are in the process of sending the receipts and gifts

1.0 ASCE-IS Eastern Region's Technical Talk

ASCE-IS (Eastern Region) organized a technical event on March 10, 2012 at the conference room of Planning and Development Department, the Kolkata Municipal Corporation (KMC) at 4:30 pm.

Mr. B Mukherjee, Vice-President, ASCE-IS ER started with the preliminaries of welcoming all and saying a few lines about the relevance of ASCE-IS in Indian context. He first introduced Dr. Anil K Kar, President, ASCE-IS and the speaker, Mr. Nilangshu Bhusan Basu. Mr. Basu is currently Principal Chief Engineer heading the Planning and Development Department of the Kolkata Municipal Corporation. He was instrumental in initiating the rehabilitation program of century-old brick sewer system in the

Mr. B Mukherjee (standing) introduces the speaker, Mr. N B Basu (sitting) to the attendees



core city of Kolkata. Mr. Basu continues to lead his strong team of supervisors, comprising Dy. Chief Engineers, Executive Engineers, and Assistant Engineers, support staff, and outside Consultants over the execution stage of this project. He mentioned title of the talk as "Brick Sewer Rehabilitation in Kolkata".

Mr. Basu started his presentation thanking the attendees for coming over. He gave a historical perspective of the development of sanitation system in the core city area in the late 19th century. Kolkata was the first city in continental Asia and third city in the world to be provided with an underground brick sewer system way back in 1878 AD. A brief overview of the discussion that followed is given below.

After Kolkata's inception as a commercial center in 1690 AD, the city had seen a gradual and continuous development of sewerage and storm water disposal infrastructure over the past centuries. Its first comprehensive and organized combined sewerage system was planned in the 1st quarter of 19th century with the introduction of engineered canals and pumping stations. Calcutta (now Kolkata) Municipal Corporation was set up in 1852 and it was in 1870s when consciousness for safe sanitation evolved with drainage problems receiving unprecedented emphasis. Following this, the city witnessed its golden age of construction of medium (app. 600 mm) to large brick sewers (> 2000 mm) in what is present days' core city area.

Membership Advancement

If you are currently an Affiliate or Associate Member of ASCE

ASCE-IS encourages you to upgrade your membership and become a full Member

Please contact us at asce.is.email@gmail.com or member@asce.org for guidance

Such development in sanitation was amply supplemented by a culture of regular and systematic manual sewer cleansing mechanism.

View after Glass Reinforced Plastic Liner installation in Egg-shape Brick Sewer of Lenin Sarani



The system is still being practised even today to cater to the needs of drainage in spite of rapid urban development. However, constant deterioration of brick sewers has been a concern for KMC for many years. Several studies, undertaken by KMC, have established that such degradation is chiefly caused by sheer age of the sewers, lack of regular cleaning and maintenance, failure of limited and localized past measures to upgrade it. In summary, the talk illustrated the history of development of brick sewers in Calcutta, its technical features, effect of its gradual degradation over the centuries on urban life, associated problems, and the urgent need for its rehabilitation towards a sustainable future of its serviceability in decades to come. Several critical field conditions and technological parameters of the rehabilitation work, specific to Kolkata, were

emphasized and discussed.

Lastly, Mr. Basu mentioned that work on several trunk sewers like A P C Roy Road, Lenin Sarani, A J C Bose Road has already been completed. Work is going on in R B Avenue and Hazra Road sewers. Normal schedule of work is between 11 pm to 5 am during the lean flow and low traffic conditions. He encouraged those who would like to see the work in the field. Some individuals expressed their interest in seeing the work in the field. A field visit will be arranged at a later date. The talk was followed by an interactive question and answer session.

Mr. N B Basu was presented with a memento on behalf of ASCE-IS ER by Dr. A K Kar, President, ASCE-IS for his time, effort, and support to organize this event. The meeting concluded with a vote of thanks from Mr. Mukherjee and high tea was served to the attendees.

The talk created a great deal of interest among the students and faculties from Universities in and around Kolkata, Government officials, and practicing Civil Engineers of reputed Consulting Firms. The presentation was highly appreciated by all who got to know about the effort being put in by KMC to mitigate the water-logging by restoring the flow of age old sewers in the core city of Kolkata.

Mr. N B Basu ending his presentation with a positive note

