

Project of reviewing and certifying the construction technology (Sewerage technology)

Whole term

2003. 4 ~ 2004. 3

(Purpose)

This foundation was recognized by the minister of construction (Ministry of construction Bulletin No.475 on March 2, 1993) based on “Rules for technical review and certification of the construction technology developed by the private sector”. Therefore, this foundation executed “Sewerage technology and the project of reviewing and certifying the technology” to promote the construction technology developed by the private sector and to adopt the innovative technology into their projects of constructions, as well as to contribute towards the upgrading of the construction technology. However, it was abolished by the Ministry of Land, Infrastructure and Transport Bulletin No.44 in January, 2001.

Anyhow, the development of the construction technology that supports the base of an economic activity, maintaining the public lives, becomes more and more important. Moreover, when these technological developments are supported, it is thought that it grows more and more being owe it to private technology in the future. Especially, the projects of reviewing and certifying the technology are demanded even by the self-governing community which is the user from the viewpoint of environmental improvement in relation to the new technological development of the sewer systems, not only the developer.

As for such a situation, in order to answer these needs, the public service corporation where “Project of reviewing and certifying the technology developed by the private sector” was executed, started "Conference on the project of reviewing and certifying the construction technology” on 10th January 2001. This conference has aimed to contribute to an appropriate and prompt introduction to the promotion of the research technology of the private sector, and a new technology into the construction project; aiming at a project of reviewing and certifying the construction, in a transparent and object-oriented manner, securing the honesty and social authenticity; and it designates that it contributes to the improvement of the construction technology. In 2001, the aforementioned foundation also joined this conference, and commenced “Project of reviewing and certifying the construction technology (sewerage technology) developed by the private sector” according to regulations of the above conference, executing standards.

(Results)

In 2003 fiscal year, it was requested by sixty eight private companies to review and certify twenty seven technologies (renewal 1, changed 9, new 17), and the reviewing and certification were done based on “Sewerage technology and instructions of reviewing and certifying the technology” (Japan Institute of Wastewater Engineering Technology). On this occasion, under the committee for reviewing and certifying-(Chairperson of the committee: Tetsuya Kusuda, a professor of Kyushu University), five committees composed of academic experts were appointed for reviewing and certifying:

Committee [No.1] for reviewing and certifying-(Chairperson of the committee: Masataka Sugawara, a professor of Osaka-Sangyo University).

Committee [No.2] for reviewing and certifying-(Chairperson of the committee: Michimasa Nakamura, a professor of Nihon University).

Committee [No.3] for reviewing and certifying-(Chairperson of the committee: Naoki Matsuo, a professor of Chubu University).

Committee [No.4] for reviewing and certifying-(Chairperson of the committee: Yoshihiko Hosoi, a professor of Tottori University).

Committee [No.5] for reviewing and certifying the sewer treatment technology-(Chairperson of the committee: Naoyuki Funamizu, a professor of Hokkaido University).

Followings are the twenty seven technologies granted to the committees for reviewing and certification, on 3th March, 2004:

1. Renewal technology

- 1) Rehabilitated system of sewer-manhole[MLR system]

Client: KANSEI co., Tokai Rubber Industries,Ltd., Nisso Shoji Co.,Ltd., Tokai Chemical Industries,Ltd.

2. Changed technology

- 1) [hyperfine bubble aerator]

Client: Tsukishima Kikai Co.,Ltd., Iwao Jiki Kogyo Co.,Ltd., Organo Corporation, Kubota Corporation, TAKUMA Co.,Ltd., Kawasaki Heavy Industries,Ltd., JFE Engineering Corporation, Hitachi Metals,Ltd., Hitachi Plant Engineering & Construction Co.,Ltd., Maezawa Industries,Inc.

- 2) Corrosion-preventive material for wastewater treatment systems [Bicrete (corrosion-preventive concrete)]

Client: Nippon Hume Corporation, Hazama Corporation

- 3) Earthquake-resistant joint for sewer-manhole[Suntack cap FD]

Client: Nihon-Step Corp., Hayakawa Rubber Co., Ltd.

- 4) Rehabilitated sewer-manufacturing system-[Paltem/Flooring system]

Client: Ashimori Industry; Co., Ltd., Ashimori Engineering Co., Ltd.

- 5) Propulsive system for small diametral sewers [Unicorn DH-ES system]

Client: Asahi Engineering Co., Ltd., Sakurai Ltd., RASA Industries, Ltd., Suyama Corporation

- 6) Rehabilitated sewer-formation system [FFT-S system]

Client: TAKIRON Co., Ltd., TAKIRON Engineering

- 7) Rehabilitated sewer-inversion system [SD Liner system]

Client: Kansui

- 8) Flexible joint for sewer pipe connections [Mecha-lock branched tube]

Client: Sanritsu Corp., Shinmei Rubber Ind Co., Ltd.

- 9) System to adjust the height of the assembled sewer-manhole cover[Spot system]

Client: Nichicon Corporation, Kando, Ltd.

3. New technology

- 1) Advancing and returning sludge removing equipment

Client: Sumitomo Heavy Industries, Ltd., Ebara Corporation, Kobelco Eco-Solutions Co., Ltd.

- 2) Rehabilitated sewer- formation system [EX system]

Client: Osaka Bousui Construction Co., Ltd., Kubota Corporation

- 3) Corrosion-protective coating system for concrete-sheet lining system-[Jik Board system]

Client: Nippon Jikkou Co., Ltd., Nippon Polyester Co., Ltd.

- 4) Screw press dewatering facility combined with a pre-condenser[HiSP screw press dewatering facility]

Client: Kajima Corporaion, Heisei Kiko Co., Ltd.

- 5) Wastewater precipitation-controlling facility[plastic basement-storage tank]

Client: Sekisui Chemical Co., Ltd.

- 6) Rehabilitated sewer-manufacturing system-[3S segment system]

Client: Shonan Plastic Mfg.Co., Ltd., Maeda Corporation, Nishimatsu Construction Co., Ltd., Nippon Hume Corporation

- 7) Rehabilitated sewer -stainless pipe system-[Box system]

Client : Kajima Corporation, Kajima Rinobeito Co.,Ltd., Teihyu Corp., HOBAS Japan, Japan Life, Fukuvi Chemical Industry

- 8) Rehabilitated sewer - formation system [EPR-LS system]

Client: Nippon Kanro Service

- 9) Rehabilitated sewer -inversion system-[In situ form work system]
Client: Nippon Steel Corporation, Insituform Technologies, Inc.
- 10) Inner corrosion- preventive coating system of sewer shield tunnels [anchor sheet segment system]
Client: Obayashi Corporation, TAKIRON Co., Ltd.
- 11) Inner coating system of sewer shield tunnels [BKU-Plas system]
Client: Nippon Steel Corporation, Teihyu Corp.
- 12) Rehabilitated sewer-inversion system [All liner-1 system]
Client: Asahi Tec Corporation, KANSEI co.
- 13) Gate switch for sewer [lock method gate switch (unicorn, neorock)]
Client: Hokoku-Kogyo Co., Ltd.
- 14) Earthquake-resistant joint for sewer-manhole-propulsive system [sun tack cap U-FD method]
Client: Nihon-Step Corp., Hayakawa Rubber Co., Ltd.
- 15) Vortex pump combined with an inverter [submerged vortex pump with variable speed drive]
Client: Tsurumi Manufacturing Co., Ltd., Torishima Pump Mfg.Co., Ltd.
- 16) Equipment for non-point pollutant loading reduction [Rain Cool]
Client: Hokukon Co., Ltd.
- 17) Rehabilitated sewer-formation system-[FFT-S system(F type)]
Client: TAKIRON Co., Ltd., TAKIRON Engineering

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Keywords

Investigate verification, Rehabilitating technology, System and materials resisting earthquakes, System of anti-corrosive coating for concrete, Materials for sewage, Improvement of combined sewage overflows