

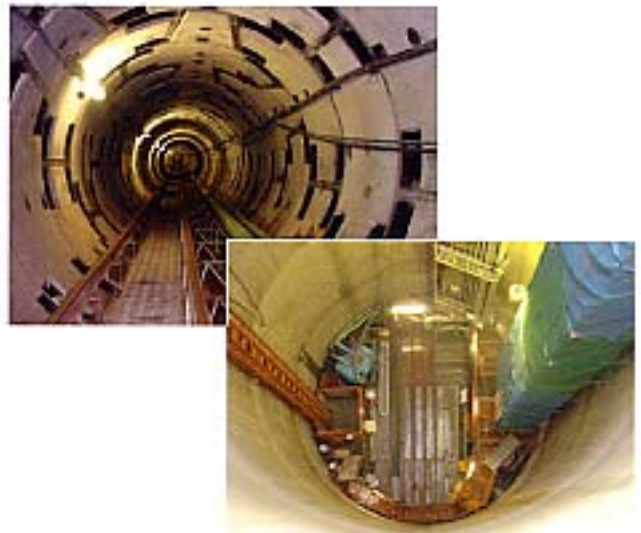
On-land Civil Engineering

Through its dredging and reclamation business to create industrial zones, TOA has accumulated a lot of technical know-hows and has achieved to take long strides for on-land civil engineering businesses. We have completed many construction projects of roads, water supply and drainage, bridges, railway bridges and land development for plants and housing with its highest level of technology and abundant experiences. All of these are considered to harmonize with the natural environment so that people can enjoy their richness in life as well. Each and every project has different characteristics, such as remarkable contents representing change in time, newly required concepts on new infrastructure, and satisfaction of new functions.

We are expecting that projects for all-round development, which require our integrated power of technology, planning and execution, will be born in both domestic and global markets in the future. Toward these projects in the near future, TOA continues to strive to create an ideal relationship between our corporate companies.

Construction of New Shibakawa Tunnel

Shibakawa is a river without a headspring, and the deterioration of water quality due to household wastewater from various sources became a problem with ever increasing concern. To improve this situation, a project was promoted to introduce clean water from Arakawa River for purification by constructing Shibakawa water tunnel. It was difficult to recycle the sludge produced by the construction work that contained large quantities of water using conventional technologies and equipment. Accordingly, we introduced the sludge recycling system into the 2,300-meter long shield tunneling work site to recycle the sludge generated by the construction work. A total of approximately 5,300m³ of excavated mud was recycled for use as banking material. Our efforts are highly rated and acknowledged as the model for effective recycling work, winning the Chairman's Award of the Recycling Promotion Committee.



Shirotori-Ohchi Interchange Work in Takamatsu Highway

The Shikoku Island Intersection Highway crossing the Setouchi Inland Sea and Pacific Ocean with the total mileage of 441km, is playing an important role for the industry, economy and culture of Shikoku Island. The newly opened Takamatsu Highway (which is located in the north eastern area of Shikoku Island) with the traveling distance of 32.5km, is also contributing to the industry and culture for these areas, both locally and the island as a whole. This completed section included the earth works with the total volume of 6.3 million m³ along the Setouchi Inland Sea. It consists of the construction works of highway, general road, tunnels, parking service area and four interchanges including this Shirotori-Ohchi Interchange.



Completion of Hyosaka Tunnel

In the precipitous site and severe weather, the Company completed the 620m long Hyosaka Tunnel by NATM method. In addition, TOA improved the road connection of both sides of the tunnel which totaled 700m. During the period, we put our best effort to carry out most careful civil engineering work in order to have no accidents and disasters.



Seisho Bypass Improvement Work

The Seisho Bypass improvement work commissioned by the Japan Highway Public Corporation was completed within the scheduled construction period, without any accidents. The project was to extend the existing Seisho Bypass along the coastal route in order to alleviate the traffic congestion in Odawara city, Kanagawa Prefecture. As for the topography around the site, there is a hill with steep slopes. Along the entire length of the 1.9 kilometer extension, TOA was in charge of 366 meters and the substructure section of the Hayakawa Bridge.



Newly Completed Projects

Expansion Works of Dangozaka Service Area

To improve traffic retardation in Chuo Expressway, the Authority completed to expand the width of the road between Ueno IC and Ohtsuki JCT, including the expansion in Dangozaka Service Area.



Kasubuchi Tunnel

The tunnel extending 316m is a part of Ohchi Bypass in the National Road Route 375; it is contributing to the convenience of local transportation.

