

The Case of Jōmon Archaeological Sites in Hokkaido and Northern Tohoku, Japan

Coexistence with Development

Headquarters for the Promotion of the World Heritage Inscription of Jomon Archaeological Sites

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Development and site preservation in accordance with administration systems of Japan

Regarding the administration work to protect buried cultural properties in Japan, identification, publication and in-situ preservation are general rules for archaeological sites. Recently, most of the excavations have been salvage investigations based on the "beneficiary payment principle," that is: the developer or other body that will benefit from the proposed development should pay for excavation costs (Ono and Kishimoto 2005 East Asia Case Study: Japanese Rescue Excavation. Heritage at Risk: 257, ICOMOS).

This poster introduces four sites that were successfully preserved in situ coexisting with development plan. The methods of preservation were various but included either a cancellation or a shift of industrial development plans so that there was no impact on the site from construction. The properties outlined here are components of the Jōmon Archaeological Sites, which are inscribed on the tentative list of World Heritage nominations for Japan and date to Jōmon Period (13,000–2,400 B.C.).

(Yo Negishi and Yasuhiro Okada)

Distribution of Jōmon Archaeological Sites in Hokkaido and Northern Tohoku



Stone Circle and Highway

Washinoki Site (Mori Town, Hokkaido) and Road Construction

Excavation preceding road construction by the local municipal board of education in 2003 revealed the biggest stone circle in Hokkaido, well preserved under a thick volcanic ash layer. While road construction was already underway, in 2005 it was decided to preserve the stone circle in situ based on consultation with the developers. This site was designated as a historic site in 2006 by national government.

From the standpoint of economic efficiency and preservation of the potential remains around a stone circle, the shift of the route was not thought to be realistic solution, so the pipe-roof method, which made it possible to preserve the archaeological site in situ, was selected by the developer with the agreement of the board of education of the town and Hokkaido local government.



Site Preservation by Roof and Culvert Method
(©Hokkaido Branch Office, East Nippon Expressway Company Ltd.)

Remarks:
45-meters-long tunnel was constructed by non-open cut tunneling method under the stone circle. For the tunnel construction, R&C (Roof & Culvert) and ESA (Endless Self Advancing) methods were used in combination.



Tunnel Construction under the Stone Circle

The structural strength of the tunnel was closely examined, and three-dimensional displacement of the ground surface was constantly monitored during construction. Road construction was completed and the road went into service in 2011 with the only measured effect on the site being a vertical depression of 10 mm.

Having the road integrated with the site is an effective way to promote visits and appreciation of Japan's prehistory. The site office of the town plans to conserve the stone circle and build an archaeological park.

(Tsuyoshi Takahashi and Tetsuro Tanaka)

Sannai-Maruyama Site (Aomori City, Aomori Prefecture) and Sports Park

Numerous artifacts and remains were recovered in the salvage excavation associated with sports park construction in 1992–94. The discovery resulted in a "Jōmon boom" throughout Japan. Preservation of the site was discussed in popular media and there occurred a public debate. Although construction was already in progress, the local government in Aomori decided to preserve the 38 hectare site and subsequently open and promote it to the public as educational and tourism resource. It was designated as a historic site in 1997 and a special historic site in 2000 by the national government. As outlined by the Master Plan of Archaeological Site Zone in Sports Park of Aomori Prefecture and Cultural Assets Preservation Act, the site office has conducted management, research and maintenance projects altogether.



Ongoing Construction of Baseball Stadium

(Yutaka Nagashima)

Ishedotai site (Kita-Akita City, Akita Prefecture) and Road Construction

This site was discovered by a distributional survey preceding the construction of an airport access road. Starting in 1995, the Akita Prefectural Board of Education conducted a salvage survey on it. The excavation results revealed the importance of site, and in accordance with a strong request for its preservation by local residents, the governor of Akita prefecture decided to preserve this site in situ.

This site was a ceremonial center in the Late Jōmon period with four large stone circles, and about 16 hectares of the site were designated as a historic site. Road construction that had been disrupted for about twenty years was restarted. In order to preserve the site and landscape, a new construction plan was designed to divert the route to around the plateau on which this site was located. In addition, it was designed to be in harmony with a cultural properties and guidance facility to be built in the near future.

(Kazuhiro Shinkai and Takeharu Enomoto)



Aerial View of Site and Road



On-site Briefing Meeting about the Excavation

Goshono site (Ichinohe Town, Iwate Prefecture) and Development of Agricultural and Industrial Park

Containing a flat area that was close to downtown, the site area was designated as an exclusive industrial district of Ichinohe town. A salvage survey by the municipal board of education in 1989 revealed several stone arrangements in the center and many pit dwellings around them. Archaeologists and local residents took part in a briefing meeting about the excavation. The municipal board of education announced their desire to preserve the site and utilize it as a historic site park, and local residents demanded preservation of the site to the town council. Following the requests, in 1990, the town mayor abandoned the development plan and submitted a preservation and public utilization plan for the site. Goshono site, whose preservation area was finally extended to the whole plateau, was designated as a historic site in 1993. Based on the acquisition of public ownership of the site and neighboring land, Jōmon park and museum were opened in 2002.

(Kazunori Takada)

Preservation of Outstanding Universal Values in Jōmon Archaeological Sites

In spite of the industrial development that was planned in many of the properties component of the Jōmon Archaeological Sites in Hokkaido and Northern Tohoku, through detailed preliminary surveys and continuous coordination with developers, all of the sites and landscapes were preserved and proved their outstanding universal values of Jōmon culture for World Heritage nomination as a whole. They are: a) Achievement of prehistoric sedentary society based on hunting, gathering and fishing; and b) Adaptation to environmental change and sustainable development for over 10,000 years. Such achievements show the efficiency of the administrative management system for buried (subterranean) cultural properties at local and national levels in Japan, which is backed by the supportive involvement of local people. Since buried archaeological sites are found not only in Japan but in other parts of the world, we would like to propose the necessity of preservation methods coexisting with development pressures, as an example of a best practice for heritage management in the East Asian context.

(Yasuhiro Okada and Yo Negishi)

