Tohoku Chapter, Architectural Institute of Japan Reconnaissance Report (17) on Ishinomaki City The 2011 off the Pacific Coast of Tohoku Earthquake Released on April 15, 2011

> Disaster Committee, Tohoku Chapter Dr. Tomoyuki Obata, Vice President Yamagata Technical College, (Translated by Shunsuke Otani, University of Tokyo)

Ishinomaki City, Miyagi Prefecture, is located approximately 45 km to the north east of Sendai City. The population is 160,336; 2,482 were dead and 2,770 were missing as of April 5, 2011. Port and Airport Research Institute determined the tsunami height at Ishinomaki Harbor to be 5 m, and at Ogachi-machi, Ishinomak City to be 16 m (run up).

The route map of Ishinomaki is shown in Fig. 1 at the end of this report. The damage was surveyed on April 8 (Friday). There was a magnitude 7,4 earthquake(Epicenter at Miyagi-ken Oki) at 23:30 on April 7. Therefore, the observed damage was caused by the March 11 main shock and also by the April 7 after shock.

## 1. Damage between Sendai City and Ishinomaki City





Photo 3: Piling of thrown items on the road side near Yamoto (Higashi-Matsushima City).



Photo 4: Teizan, Ishinomaki City

2. Minato area, Ishinomaki City





Photo 3: Both sides of National Highroad 398.

Photo 4: Damage in the first story was severe, damage was relatively light on hill side.

## 3. Minami-hama-Cho, Ishinomaki



4. Kadowaki-cho, Ishinomaki City



back was in use.

## 5. Greek Orthodox Church (No. 3 in route map)

There was debris around the church and it was difficult to approach the church. Damage was severe on the sea side, and tsunami must have flowed though the building. Columns and walls were deformed. The columns appeared to support the building by visual observation. The building was damaged by the 1978 Miyagi-ken Oki Earthquake, and was reconstructed at this site. Temporary repair work appeared necessary to survive aftershocks.



Photo 3: Front view facing the sea.

Photo 4: Greek Orthodox Church



<sup>6.</sup> Chuo 3-chome, Ishinomaki City





Photo 1: China-ware Kankei-maru, the damage in the first story due to inundation (N o. 4 in route map)

Photo 2: Daini SS building, many buildings suffered damage in the first story due to tsunami.

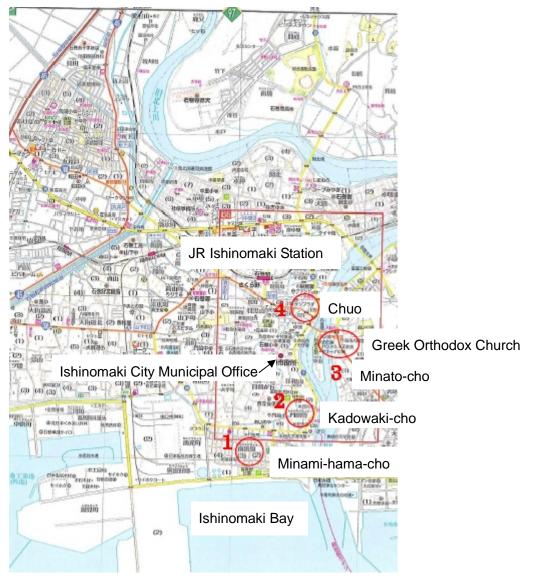


Fig. 1: Route Map in Ishinomaki City