Abstract Submitted for the HAW09 Meeting of The American Physical Society

Construction of high resolution beam line for SHARAQ spectrometer RIKEN RI Beam Factory YOSHIYUKI YANAG- \mathbf{at} ISAWA, TOSHIYUKI KUBO, KENSUKE KUSAKA, MASAO OHTAKE, KOICHI YOSHIDA, TETSUYA OHNISHI, RIKEN Nishina Center, YOSHIKO SASAMOTO, AKITO SAITO, TOMOHIRO UESAKA, SUSUMU SHIMOURA, CNS, University of Tokyo, TAKAHIRO KAWABATA, Department of Physics, Kyoto Univesity, SHUMPEI NOJI, HIDEYUKI SAKAI, Department of Physics, Univesity of Tokyo — A high resolution beam line [1] has been constructed for the SHARAQ spectrometer [2] at RIKEN RI Beam Factory (RIBF), in order to achieve dispersion matching that allows high resolution measurement at the focal plane of the spectrometer. This beam line is formed by the existing BigRIPS separator [3] at RIBF and a newly constructed beam line that diverges from BigRIPS and leads to the target position of SHARAQ. The ion optics is so designed that it can be operated in the dispersion matching mode. The new part of the beam line consists of two 30-degree bend dipoles, three quadrupole singlets and three superconducting quadrupole triplets. Recently the beam line has been successfully commissioned together with the SHARAQ spectrometer. Overview of the beam line will be reported. [1] T. Kawabata et al.: Nucl. Instr. and Meth. B 266 (2008) 4201. [2] T. Uesaka et al.: Nucl. Instr. and Meth. B 266 (2008) 4218. [3] T. Kubo: Nucl. Instr. and Meth. B 204 (2003) 97.

> Yoshiyuki Yanagisawa RIKEN Nishina Center

Date submitted: 01 Jul 2009 Electronic form version 1.4