

The HRI system informs approaching motorists of potential delays due to a blocked at-grade railroad crossing at the Washington Street and Camp Street (IL Route 8), Main Street and Camp Street, or the Washington Street (adjacent to the East Peoria Public Safety Building) railroad crossings. This advisory warning is communicated to approaching motorists using a flashing beacon that is placed above a static advanced warning sign.

The HRI system transmits the railroad crossing blocking contact closure status from the traffic signal controllers to a communications cabinet at the East Peoria Public Safety building via fiber optic cable (IFS DT-1810 and DR-1810). The contact closures status are read in by an Ethernet to contact closure converter (Advantech ADAM6060) and processed by an event message processor (Broadax Systems RMS-6104 rack mounted computer). The Modbus communication protocol over Ethernet is used to communicate between the Ethernet to contact closure converter and event message processor. A response based on the inputs is formulated and is transmitted to the appropriate HRI signs via the Ethernet to contact closure converter and wireless contact mapping transmitter and receivers (Encom 7328).

A visual display is shown on a video monitor at the East Peoria Public Safety Building to provide operators with status information on each of the monitored at-grade crossings.

FILE NAME =	USER NAME = howalder	DESIGNED	REVISED		HIGHWAY RAILROAD INFORMATION (HRI) EQUIPMENT SCHEMATIC	F.A.I. SECTION	COUNTY TOTAL SHEET
P:\RFP 8-3-08\68273 - ATMS Software Pla	ns.dgn	DRAWN	REVISED	STATE OF ILLINOIS	HIGHWAY MAILROAD INTONWATION (NAI) EQUIPMENT SCHEWATIC		Peorla/Tazewell 20 18
	PLOT SCALE = 58.9985 '/ IN.	CHECKED	REVISED	DEPARTMENT OF TRANSPORTATION		CONTRACT NO. 682	
	PLOT DATE = 11/7/2008	DATE	REVISED		SCALE: SHEET NO OF SHEETS STA TO STA.	FED. ROAD DIST. NO ILLINOIS FEE	D. AID PROJECT
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