

Federal-Aid Policy Guide

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NS 23 CFR 646B

Attachment 2

**Non-Regulatory Supplement
Attachment**

OPI: HSA-10

EXAMPLE OF AN ESTIMATE OF COST FOR GRADE CROSSING WARNING DEVICES TO SUPPORT AN AUTHORIZATION TO PROCEED WITH CONSTRUCTION UNDER AN AGREEMENT PROVIDING FOR A LUMP SUM PAYMENT

a. Description of Improvement

Installation of two automatic gate units with cantilever mounted flashing light signal controlled by motion sensor and other track circuit equipment at the crossing of _____ Road and a single main line track, replacing existing reflectorized crossbuck signs.

b. Estimate of Cost

ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
Preliminary Engineering	_____	Man-Hrs.	_____	_____
Construction Engineering	_____	Man-Hrs.	_____	_____
<u>Material</u>				
Automatic gate signals	_____	Each	_____	_____
Cantilever amounted flashing light signals	_____	Each	_____	_____
Relays, incl. housing	_____	Each	_____	_____
Motion Sensor	_____	Each	_____	_____
Batteries and housing	_____	L. Sum	_____	_____
Foundations	_____	L. Sum	_____	_____
Wire, cable and conduit	_____	L. Sum	_____	_____
Insulated Joints	_____	L. Sum	_____	_____

ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
Miscellaneous items	_____	L. Sum	_____	_____
Total Material	_____	L. Sum	_____	_____
Transportation of Material	_____	L. Sum	_____	_____
Store expense	_____	%	_____	_____
<u>Equipment</u>				
Outfit cars	_____	Days	_____	_____
Trucks	_____	Days	_____	_____
Trencher	_____	Days	_____	_____
<u>Labor</u>				

Foreman	_____	Hrs.	_____	_____
Signalman	_____	Hrs.	_____	_____
Asst. Signalman	_____	Hrs.	_____	_____
Holidays	_____	%	_____	_____
Vacation	_____	%	_____	_____
Payroll taxes	_____	%	_____	_____
Supplemental pension	_____	%	_____	_____
Insurance	_____	%	_____	_____
Meal and Lodging Allowance	_____	Man-Hrs.	_____	_____
Total Labor	_____	Man-Hrs.	_____	_____
(No contingencies allowed)	_____		_____	_____

ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
Less Credit for material salvaged	_____	_____	_____	_____
Net Total	_____	_____	_____	_____

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