



Digital Angel Corporation
 490 Villaume Avenue
 South St. Paul, MN 55075

B2CC Transceiver Enhancement Cost Estimates

Software Estimates: Item #1 required for any or all of the correction items 2-9.

Item	Description of Task	Delivery	Price
1*	Take over of the software developments for the BCC system	5 weeks	\$39,000.00
2	Enhancement Storage card #2 - The absence of the card in certain conditions will generate Boot Loop Errors.	week #6	\$ 4,500.00
3	Enhancement I/P Addressing Issues and testing - Reader I/P address cannot be changed.	week #7	\$ 4,375.00
4	Enhancement Deletion of Log file in Storage Card 1 – The log file cannot be deleted. This is not true for Storage Card #2	week #8	\$ 3,050.00
5	New Enhancement Need Command to GET Reader ID - As of now, this command does not exist.	week #9	\$ 3,050.00
6	New Enhancement Attach unique identifier to real time transmitted spurious tag codes. Requires enhancement of current Algorithm.	week #10	\$ 4,375.00
7	Enhancement While in Stand-By reader generates Out of Tune errors, fires test tag and resets to On Line.	week #11	\$ 4,375.00
8	Enhancement Current and Voltage Calibration Values and Reader ID - These values return to the Raw A/D values and Reader ID reset to 00 when the reader is issued the default parameter command.	week #12	\$ 3,050.00
9**	On Site Evaluation Review, implement, and modify as needed, the enhancements of items 2-8 (item 6 is required) on the B2CC system. Includes travel to B2CC site (est. 2 weeks) by two engineers. (not a fixed price item)	weeks #13-15	Estimated \$ 48,520.00
Total Software enhancement estimates			\$114,295.00

1* - This is a new project for our long term contractor and involves evaluating the existing code and development tools. The estimated time for this required item is 325 hours. This includes a minimum of 45 hours of Digital Angel time and 280 hours (as quoted) of contractor time.

9** - This item involves the implementation, review, and modifications of enhancements 2-8 as well as concentrated time and effort with the current algorithm, An attempt will be made to

enhance the current algorithm by reducing the effective noise levels and increasing sensitivity without reducing the current hit rate level for PIT-Tag detection. An estimated total of 340 man hours is required for this task which includes travel time for the contracted engineer and Digital Angel engineers. The time will be spent both on site at B2CC and at the Digital Angel facility in South St. Paul, MN. The estimated cost also includes all expenses for a total of 3 roundtrips – 2 roundtrips for contracted engineer to DA facility and B2CC, and 1 roundtrip for DA engineer to B2CC. Travel expenses include airfare, rental car, lodging and food. ****Note** – For a fixed price quote for task #9 the work will be terminated at a point when the budget has been exhausted for labor and expenses.

B2CC Transceiver Hardware Discrepancies

Item	Description of Task	Completed # of Hours	# Hrs to complete	Cost of Task
1	Ensure all internal modules and associated circuits are at the latest revision level	14	2	\$1,600.00
2	Standardize all transceiver enclosures interface ports and internal cabling. This should include a universal grounding scheme for the DC power grounds in each transceiver enclosure.----	4	4	\$ 800.00
3	Correct all mechanical differences to ensure consistency between the 4 transceivers	28	4	\$3,200.00
4	Perform extensive testing of the 4 units to ensure peak performance of the readers and all embedded functionality has been tested and documented as fully operational. The testing of the systems will include but not limited to testing at Digital Angel. Additional in-situ testing maybe required at the BCC installation	32	8	\$4,000.00
4a	Optional in-situ testing At B2CC – includes \$2500.00 travel and expenses.		(40)	(\$6,500.00)
	Total cost @ \$100/hr.	78	18	\$9,600.00
	Total cost with option 4a		(58)	(\$16,100.00)

** To date - Alex has spent 78 hours both on and off site resolving issues of items 1-4. PSMFC has agreed to pay for expenses for on site visit April 18-20, 2007. The invoiced amount under PSMFC PO #5320 was \$2,750.86, which included 10 hours of travel time. NOAA agreed to pay for Alex's May 9-11, 2007, on site travel expenses. NOAA prepaid airfare and Digital Angel will invoice NOAA \$373.18 for travel, car rental, lodging and meal expenses. B2CC Transceiver unit #1 is being shipped back to Digital Angel to complete items 1-4 and will require an estimated 18 hours to complete. Digital Angel has been paying for freight for the shipping of the B2CC transceivers to and from Kennewick and DA. These costs have been from \$200 up to \$590 each way.

Suggested B2CC Hardware Preventive Maintenance Agreement:

Upon completion of items 1-4 of the B2CC Transceiver Hardware Discrepancies, an extended warranty from May 1, 2007 – May 1, 2008 for the four B2CC Transceivers #1-4 would be offered at a price of \$50,000. This would include 4 trips on site by Digital Angel, which includes all expenses, off site telephone support, all repairs including shipping. This does not include software support.

B2CC Software Support:

Offered at current Digital Angel labor rates at \$120/hr.