

Contract Name	Blke Paths - 2011	Date	10/28/2011
		Change Order No.	CO 1
		Contract No.	6450
		Project No.	53W0878
		Change Order Project No.	53W0878

Change Order Description	Account Numbers for this Change Order:
Addition of Approach Slabs, EBS, Breaker, Topsoil and Seeding on Starkweather Creek Path, Additional asphalt material for Glenway Path and silt sock	CS53-58240-810375-00-53W0878
TRI COUNTY PAVING INC	

Contractor: TRI COUNTY PAVING INC
 PO BOX 384
 DEFOREST, WI 53532

You are authorized and directed to make the following changes in this contract:

Item No.	Description	Est. Qty	Unit	Unit Price	*N/B	Total
1	Concrete Approach Slabs	360.00	SF	26.50	N	9,540.00
2	40201 HMA Pavement Type E-0.3	210.00	TN	88.00	B	18,480.00
3	20101 Ex. Cut	1630.00	Cy	22.00	B	35,860.00
4	20219 Breaker Run	2500.00	TN	13.00	B	32,500.00
5	21024 silt sock	1800.00	LF	6.75	B	12,150.00
6	20221 topsoil	6000.00	SY	3.10	B	18,600.00
7	20701 Seeding	6000.00	SY	0.95	B	5,700.00
Net Change Order						132,830.00
The Original Contract Total						267,582.00
Sum of previous Change Orders						
The new Contract Sum including this Change Order will be						400,412.00

This Contract is a:	<input checked="" type="checkbox"/> Calendar Days	<input checked="" type="checkbox"/> Working Days	<input type="checkbox"/> Completion Date
	Original Contract Time/Completion Date	45	
	Net Change in Contract Time by previous change order		
	Contract Time/Completion Date prior to this change order		
Additional day(s) as a result of this Change Order	7	0	
Contract time/completion date as a result of this change order	52		

* Mark if negotiated (N) or bid (B) unit price

Contractor's Acceptance
 By: *[Signature]*
 Title: Vice President
 Date: 10-26-11

City's Approval (see reverse side for instructions)
 Construction Inspector: *[Signature]* Date: 10-27-11
 Construction Supervisor: *[Signature]*
 Engineer: *[Signature]*
 Board of Public Works: *[Signature]*

11/28/11 BCR
 11-16-11 M...
 11/28/2011 MRO

BIKE PATHS – 2011 PN 53W0878 Contract No. 6450
Change Order No. 1 Designer Comments for Justification and Assessment

1. Concrete Approach slabs: Designers failed to get the info into the plans and quantities. This was necessary work but undoubtedly cost more as a C.O. than had the item been in the bid. Future: Better communication and QC prior to letting.

2. HMA Pavement increased quantity: Designer error in computing the final quantities. It was necessary work and was done at contract bid price, which appears competitive. This was necessary work and C.O. did not increase cost, but it would be better to know the correct cost at bidding. Future: Review quantity calcs prior to bidding.

3 & 4, Excavation cut and breaker run: Overrun due almost entirely to undercut on Starkweather Path. Designers incorrectly assumed that because this was just a pulverize and overlay of an existing path that the existing base and subgrade would be sound. During construction it was clear that this was not the case and an average of 1.5' of undercut was required for about 25% of the length. Work was done under bid prices, but the price for the cut was quite high. Future: Designers need to estimate higher quantities for undercut, even for overlay-type projects, unless there is good reason to think there is a very good base. For larger path projects, soil borings may be desirable. Recommend that for path rehab projects, the designer routinely schedule a detailed field review with construction staff PRIOR TO PREPARING PLANS to agree on the recommended paving section and technique and estimated percent of undercut. In some cases, a simple overlay may be preferable to pulverize and overlay.

5. Silt Sock: Two issues contributed to overrun: 1) Bid quantity was about 500 LF less than the length of silt sock actually shown on plans and 2) City EC inspector requested additional silt sock during construction adding another 1300 LF. Work was done at bid prices, but the low estimate may have contributed to a high bid price. Also, application of this device may have been overly conservative. Future: Better QC of bid quantities. Design section will review guidelines for use of EC measures to ensure we meet our responsibilities on erosion as cost-efficiently as possible.

6 & 7. Topsoil and seeding: Very large overrun occurred mostly on Starkweather path due a design error on the original typical section and an unrealistically low estimate of the width that would have to be disturbed to construct the project. The actual average restoration width was reasonable for this type of project. Future: Better QC of plans and quantities and designers should allow for a little more width of disturbance even if not strictly necessary for grades.

[Comments by ASF 11-21-11]