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Best Practices for AIA Billing AND Resolving User Data Entry Errors from QuickBooks When Using Construction Application for Payment Solution for AIA Billing

Since CAPS was initially released in January 2000 we've tried to make the program accommodate what we discovered were typical *thoughtless and rash* user data entry errors in QuickBooks so that these errors have no affect on existing billing history. I say thoughtless and rash because these data entry errors are made without thought to how these changes will affect a user's QuickBooks financial data not to mention compromise the billing history – and rash because rather than stop and think about how their actions will affect their financial data and billing history they just make the changes "willy-nilly", in a rush, and with no thought as to how their changes are going to affect anything.

When the consequences of these thoughtless and rash actions compromise their billing in CAPS, these same users call our Support Line and proclaim that "the program isn't working" because IT has totally screwed up their billing information. The proclamation is always the same; the program has screwed up – not them.

We've documented "typical user errors", which unfortunately few read, in a Technical Support document called the **8 Deadly Sins of AIA Billing with Construction Application for Payment Solution** as well as a manual section, which is referenced in our QuickStart Guide, called **"Things you absolutely cannot do"** more specifically when a user:
1. Deletes lines from the QuickBooks Estimate after issuing one or more progress invoices/draws whether that line had been billed or not – pages 3-8
2. Changes the structure of the QuickBooks Estimate after issuing one or more progress invoices/draws – this includes moving or rearranging the way the line items appear on the Estimate whether or not those line Items have billing history - page 9- 12
3. Inserting multiple lines into the existing QuickBooks Estimate using the **same** QuickBooks Item repeatedly – page 13 - 15
4. Handles Change Orders in a manner that no one can really track the changes without consulting the original paperwork – this includes simply changing the dollar amounts on the QuickBooks Estimate – page 16-25

The items above cause QuickBooks to present the user with warning messages and other visible signs that there will be consequences to their actions and because of these warnings and, these same visible signs do exist in QuickBooks; users should be aware of consequences long before they ever bring this garbage data into CAPS.

Ignoring these warnings cause CAPS to duplicate or repeat lines on the Continuation sheet.

If the QuickBooks warnings are ignored and the Progress Invoice data is brought into CAPS, it would be quite obvious that there is a REAL issue just by clicking on the **Detail** button and taking a look at the way your pay app data will appear on the Continuation Sheet – **BEFORE** you print your Application

for Payment and commit the garbage data to your billing history.

The CAPS **Detail** button and **Detail** window are two very important trouble-shooting features contained within the program and they are also the most under-utilized by our customers.

Use the Detail button to verify that your billing information is correct

When viewing the **Detail** window and recognizing that "something" isn't right, clicking the **Cancel** button and then the **Exit** button prevents the bad data from touching your existing good billing history and allows you to go back to QuickBooks and correct the offending data.

The Detail Window will show you how data will be displayed and recognized on your printed bills

CAPS **must** track the history of each **Item**, which originates on your QuickBooks Estimate in the **Item Column**. The **Items** used in the Estimate then become "linked" and flow through into the Progress Invoices as your job progresses. These "links" in turn are brought into CAPS in order to accurately create your AIA Billing and track prior billings, amount completed and stored to date, retainage, etc., for each of those **Items** and display the information on both your Application for Payment and Continuation Sheet correctly.

It is important to note and understand that we are specifically talking about the QuickBooks Item and not the Description from the QuickBooks Estimate and Progress Invoice forms.

If there are never any changes made to the Estimate/Progress Invoices and if Change Orders are handled as outlined in our manual, then the CAPS program will have absolutely no problem in accurately generating your Applications for Payment and Continuation Sheets every month.

In spite of previous support articles, with titles that one would think would "grab" the users attention and cause them to read the articles and remember the actions that were known to cause errors --- user errors still continue to happen.

Let's look at some examples of typical user errors and their effect, in both QuickBooks and CAPS.

Data Entry Error #1 Deleting Lines from the QuickBooks Estimate after issuing one or more progress invoices/draws whether that line had been billed on or not

Background:

You've been awarded a job for $21,000.00. You enter the Scheduled Values that were awarded into the QuickBooks Estimate form using QuickBooks Items in as much or as little detail that is required to be shown on the Continuation Sheet of your AIA draw – these Items are all pieces of your original contract and should remain untouched. See below:

Example 1 – Original Contract as awarded

You issue the following draws:

Draw 1 – 10% of Site Work, Excavation and Supervision totaling $1600.00
Draw 2 – 10% of Site Work, Excavation, Demolition, and Supervision totaling $1950.00

The Project Owner tells, and presents you with a **Change Order**, which removes the Selective Tree & Shrub Removal item for $2000.00.

You or your bookkeeper decides to just delete the Selective Tree & Shrub Removal item from the Estimate.

WARNING: When a line item is deleted from the QuickBooks Estimate, your Application for Payment WILL NOT show the dollar amount of the deleted item as a Change Order AND the "Change Order" feature found in the Premier Contractor Edition DOES NOT flow over to the Change Order section on the Application for Payment page.

Let's look at what happens in QuickBooks and CAPS:
You go to QuickBooks and delete the line item – your contract value is now $19500.00 and NOT the original $21500.00 that you were awarded.

When you look back on this job later are you going to know what happened? Absolutely not, because you have no record of the removal of that line item – unless you actually go and pull the paperwork from the job file.

After you delete the line and you save and close your Estimate, QuickBooks presents you with a warning message; ok, so it's not the greatest warning message in the world, but it is a warning, none the less, that this action is going to cause a reaction or issues:
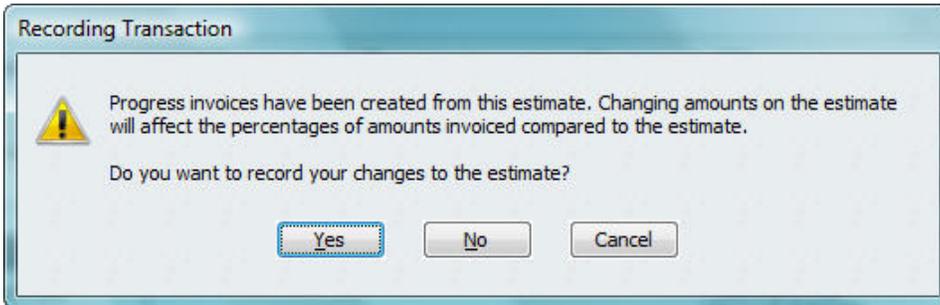
QuickBooks warning when deleting a line from an Estimate

So now you go ahead and create Progress Invoice #3 for 20% of Site Work, Excavation, Demolition, and Supervision totaling $3900.00 and pull it into CAPS and look at the **Detail Window**, where CAPS is still tracking that line item because it was part of your **Original** Schedule of Values and that the line item had existed in your previous billing history– remember, it's CAPS *job* to keep track of each and every line item that it found on your Estimate in order for your billing to be correct – deleting the line in QuickBooks does not delete the line in CAPS; AND it's duplicated your Supervision Line.

Line	Description	Scheduled	Previous Bill	Current Bill	Status	S
1	Site Work	$3,000.00	$600.00	$600.00	Original	$(
2	Excavation	$5,000.00	$1,000.00	$1,000.00	Original	$(
3	Demolition	$3,500.00	$350.00	$700.00	Original	$(
4	Supervision	$8,000.00	$0.00	$1,600.00	Current	$(
5	Selective Tree & Shrub Removal	$2,000.00	$0.00	$0.00	Original	
6	Supervision	$8,000.00	$1,600.00	$0.00	Original	$

CAPS Detail Window – still showing the item that was deleted

Resolving the problem and/or Best Practices:

You now have two choices for resolving this problem, a *"quick fix"* and a *"best practice"*:

1. A *"quick fix"*, which will get the draw out the door and completely remove any "history", associated with this item. The *"quick fix"* involves clicking the **Special Corrections** button on the lower left of the **Detail Window,** (CAPS will prompt you to make a backup before making corrections AND ASK if you've made one) choosing the **Delete Lines** option and telling it to **Start at Line 5 for 1 line.**

> **NOTE:** If you do not use the **Detail button and Detail Window** to review the data that will be displayed on the Continuation Sheet prior to printing, and just go directly to **Print** and discover the problem once the Continuation Sheet has printed, you'll need to go to the **Edit** menu, choose **Jobs**, click to select the Job, click the **History** button, click to select Pay App #3, and then click the **Edit** button to display the **Detail Window** before you are able to access the **Special Corrections** button continuing with the instructions.
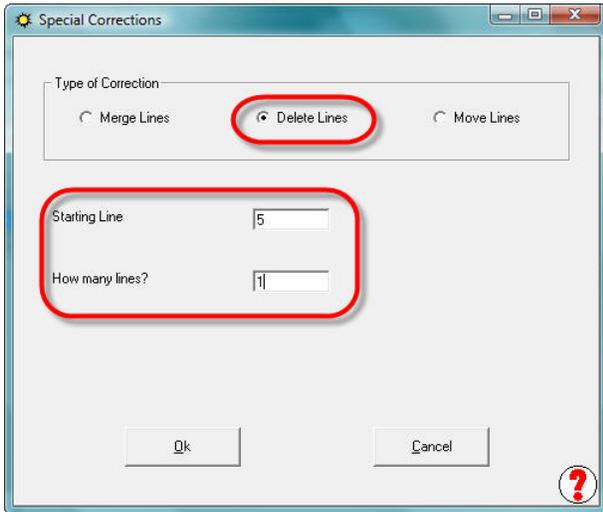
CAPS Special Corrections – Delete Lines option

Click the **Ok** button to continue with the process of deleting a line.

You will be taken back to the **Step 1** window, where you will need to click on the **Detail** button again.

The line has now been deleted from the Detail Window

This action will rid you of the Selective Tree & Shrub Removal line. However, you still have the duplicated Supervision line to deal with.

Click the **Special Corrections** button; choose **Merge Lines**, Starting at Line 4, for 1 lines, with the Merge Starting at Line 5.
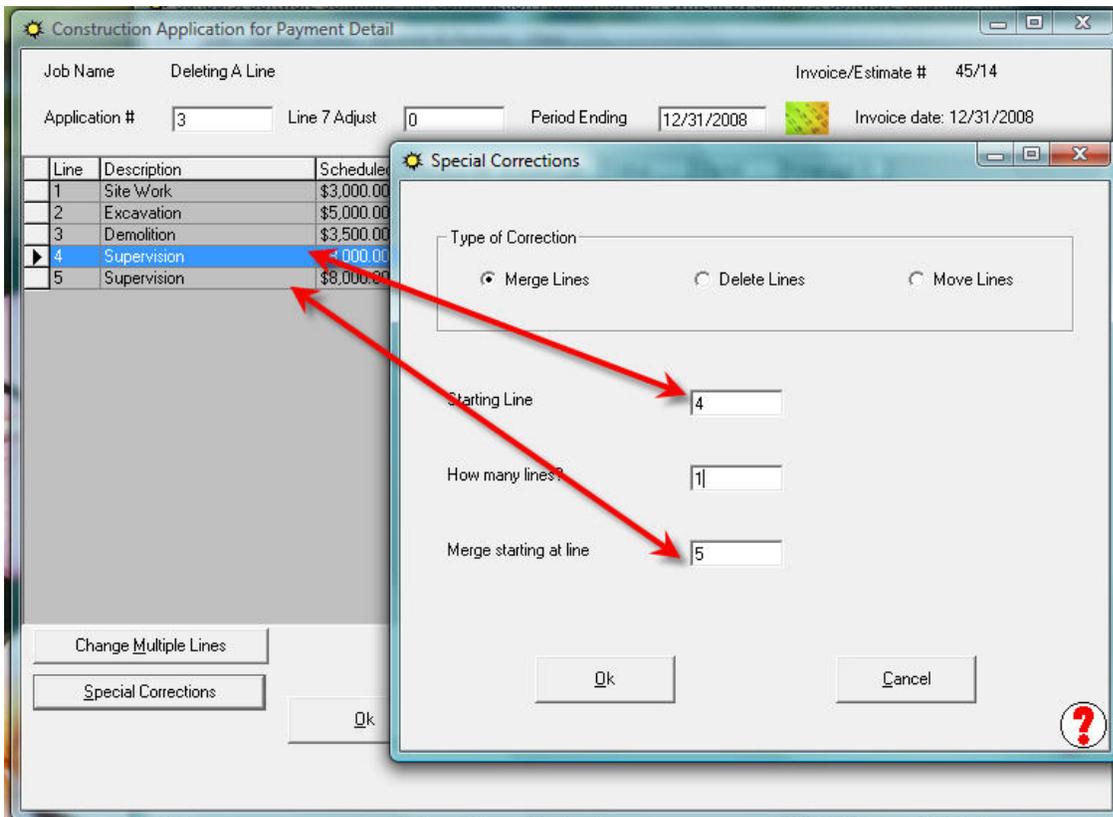
Merging duplicate lines

Click the **Ok** button. You'll be returned to the **Step 1** window, where you will click on the **Detail** button.

	Line	Description	Scheduled	Previous Bill	Current Bill	S
▶	1	Site Work	$3,000.00	$600.00	$600.00	0
	2	Excavation	$5,000.00	$1,000.00	$1,000.00	0
	3	Demolition	$3,500.00	$350.00	$700.00	0
	4	Supervision	$8,000.00	$1,600.00	$1,600.00	0

Duplicated lines have been successfully merged

Ok, so you have your Continuation Sheet fixed, but let's look at the effect of your actions on the Application for Payment:

CONTRACTOR'S APPLICATION FOR PAYMENT
Application is made for payment, as shown below, in connection with the Contract. Continuation Sheet is attached.

1. ORIGINAL CONTRACT SUM	$ 21,500.00
2. Net change by Change Orders	$ -
3. CONTRACT SUM TO DATE (Line 1 + 2)	$ 21,500.00
4. TOTAL COMPLETED & STORED TO DATE (Column G on Continuation Sheet)	$ 7,450.00

Where is the $2000.00 negative Change Order amount? Deleting an **Item** from the Estimate is NOT picked up as a Change Order by CAPS.

You still have a mess and it's NOT CAPS fault.

***"Quick fixes"* are not always the right answer – and seldom do they "save" you any time.** Now you'll need to **Restore** the history for this job from your last good backup, and follow the instructions under #2 for *Best Practice*.

To Restore Your History for this Job:
Go to the CAPS **Backup & Restore** menu, choose **Enhanced Restore CAPS Data**.
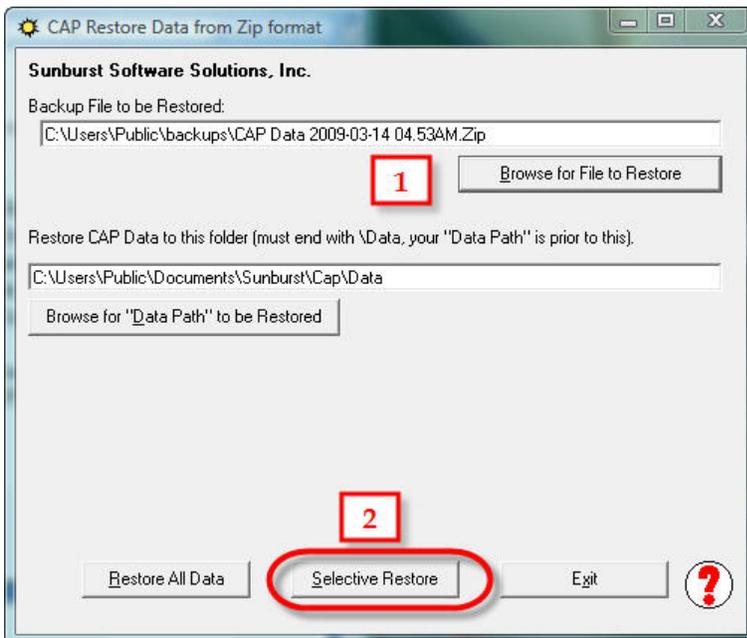
Using the **Browse for File to Restore** button, select your most recent backup (the one that has the billing history up through the previous Pay Application) and click the **Selective Restore** button.

Use the Enhanced Restore AND Selective Restore options to restore your good billing history just for this job

Using the **drop down menu** in the **Select from predefined file groups** window, choose the Job that you are working with and then click on the **Restore File Selected Above** button. This will restore the correct billing history PREVIOUS to this mess.
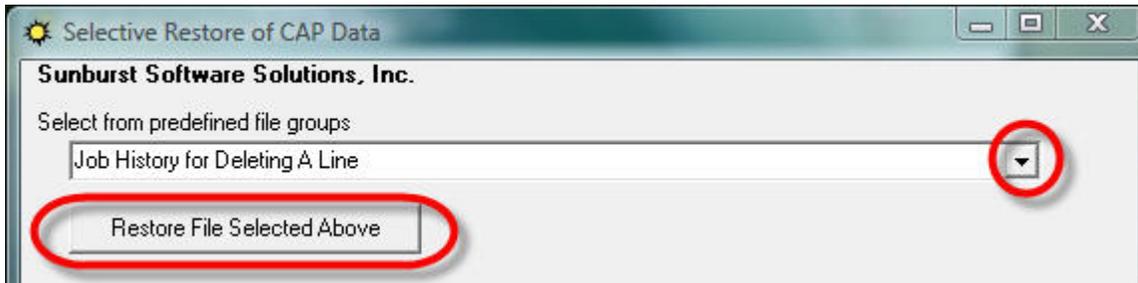
Restoring the billing history for a single job.

NOTE: If you haven't been using the CAPS backup function, you've just learned a very hard lesson. One that involves deleting the History of this Job in CAPS (Edit -> Jobs -> select Job -> click History button -> delete pay apps), AND THEN going back to QuickBooks and cleaning up your mess following *Best Practices* and recreating the billing history for this job.

2. The "*Best Practice*" method would be at the point when you look at the **Detail Window** and see that you really have issues, is to click the **Cancel** button and then the **Exit** button.

Go back to QuickBooks and **delete** the Progress Invoice.

Open the Estimate and put the **Item** back into the Estimate IN THE EXACT SAME SPOT THAT IT PREVIOUSLY HAD BEEN.

Create a negative Change Order Line, which then "shows" what happens, updates the value of your Estimate in QuickBooks AND will flow into the "Change Order" sections on the Application for Payment.

Correct your Estimate and indicate that there was a Change Order removing the line item

And THEN create your Progress Invoice, billing the original line at 100% AND the removal of the line at 100%, so the net effect is $0.00, before billing on your other line items.

Item	Est Amt	Prior Amt	Prior %	Amount	Curr %	Tot %	Tax
02 Site Work	3,000.00	600.00	20.0%	0.00	0.0%	20.0%	Non
03 Excavation	5,000.00	1,000.00	20.0%	0.00	0.0%	20.0%	Non
02.10 Demo	3,500.00	350.00	10.0%	0.00	0.0%	10.0%	Non
31.13.13 Tree & Shrub...	2,000.00		0.0%	2,000.00	100.0%	100.0%	Tax
29 Supervision	8,000.00	1,600.00	20.0%	0.00	0.0%	20.0%	Non
CO	0.00			0.00			Tax
31.13.13 Tree & Shrub...	-2,000.00		0.0%	-2,000.00	100.0%	100.0%	Tax

Total (w/ taxes) 0.00

Always bill the removed item AND the item that is being removed to "zero" them out before billing on other items.

When you pull the Progress Invoice into CAPS and view the **Detail**, you can see that CAPS has recognized this as a **"Current"** Change Order; when you look at the **Status** column.

Line	Description	Scheduled	Previous Bill	Current Bill	Status
1	Site Work	$3,000.00	$600.00	$600.00	Original
2	Excavation	$5,000.00	$1,000.00	$1,000.00	Original
3	Demolition	$3,500.00	$350.00	$700.00	Original
4	Selective Tree & Shrub Removal	$2,000.00	$0.00	$2,000.00	Original
5	Supervision	$8,000.00	$1,600.00	$1,600.00	Original
6	Change Order #1	$0.00	$0.00	$0.00	Current
7	Remove Selective Tree & Shrub Removal Item	($2,000.00)	$0.00	($2,000.00)	Current

The Detail Window, Status column will indicate that CAPS recognizes your changes as a CURRENT Change Order

And will automatically update your Application for Payment with the Change Order.

CONTRACTOR'S APPLICATION FOR PAYMENT
Application is made for payment, as shown below, in connection with the Contract. Continuation Sheet is attached.

1. ORIGINAL CONTRACT SUM $ 21,500.00

2. Net change by Change Orders $ (2,000.00)

3. CONTRACT SUM TO DATE (Line 1 + 2) $ 19,500.00

4. TOTAL COMPLETED & STORED TO DATE $ 7,450.00
   (Column G on Continuation Sheet)

Your Application for Payment now accurately reflects that a negative $2000.00 Change Order has occurred

Data Entry Error #2 Changing the structure of the QuickBooks Estimate after issuing one or more progress invoices/draws – this includes moving or rearranging the way the line items appear on the Estimate

Background:

You've been awarded a job for $18,250.00. You enter the Scheduled Values that were awarded into the QuickBooks Estimate form using QuickBooks Items in as much or as little detail that is required to be shown on the Continuation Sheet of your AIA draw – these Items are all pieces of your original contract and should remain untouched. See below:

Example 2 - Original Schedule of Values

You issue the following Progress Invoice/draw:

> **Draw 1** – 10% of Site Work ($600.00), Excavation ($375.00) and Supervision ($500.00) totaling $1475.00

Just before issuing the 2nd Progress Invoice, you decide that you don't like the way the Estimate Items are arranged; and want to put the 01 Plans & Permits Item first, followed by the 29 Supervision Item, so your Estimate now looks like this:

You then issue your 2nd Progress Invoice/draw.

WARNING: When you delete or move a line that has ALREADY been billed on in your Estimate, QuickBooks will no longer remember that you had billing history for that item. When you delete and/or move a line that you previously billed on, you have severed that connection which allows QuickBooks to keep track of that history.

Let's look at what happens in QuickBooks and CAPS:

After you have moved the items and go to save your Estimate, QuickBooks presents you with the following warning; ok, so it's not the greatest warning message in the world, but it is a warning, none the less, that this is going to cause issues:
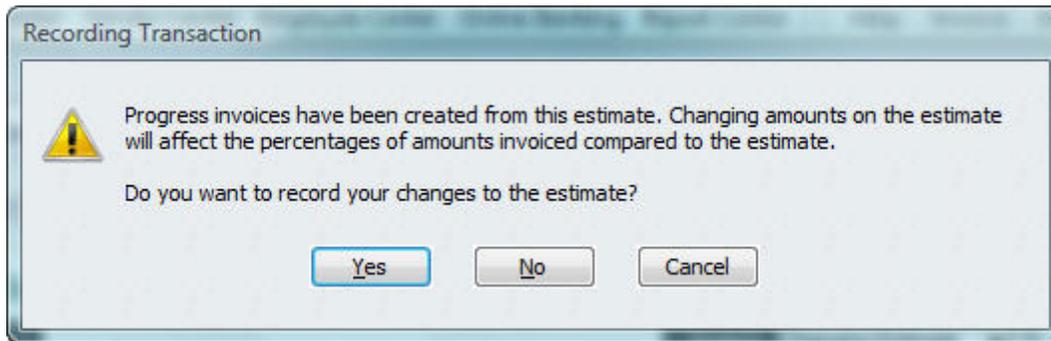
So, now you go ahead and create your 2nd Progress Invoice/draw from the Estimate for 100% of 01 Plans and Permits, 20% of 29 Supervision, and 10% of each of the other items – when in the **Specify Invoice Amounts for Items on Estimate** window *you should notice that QuickBooks is not recognizing any prior amount billed on the 29 Supervision Item* – **this is because you have compromised the structure of your Estimate AND your billing history**.

NOTE: Even if you catch the error now, click the **Cancel** button and go back and put the Estimate back to its original structure, it's too late, you have severed the billing history for the 29 Supervision Item. The problem will not be resolved, even if you Rebuild your QuickBooks data.
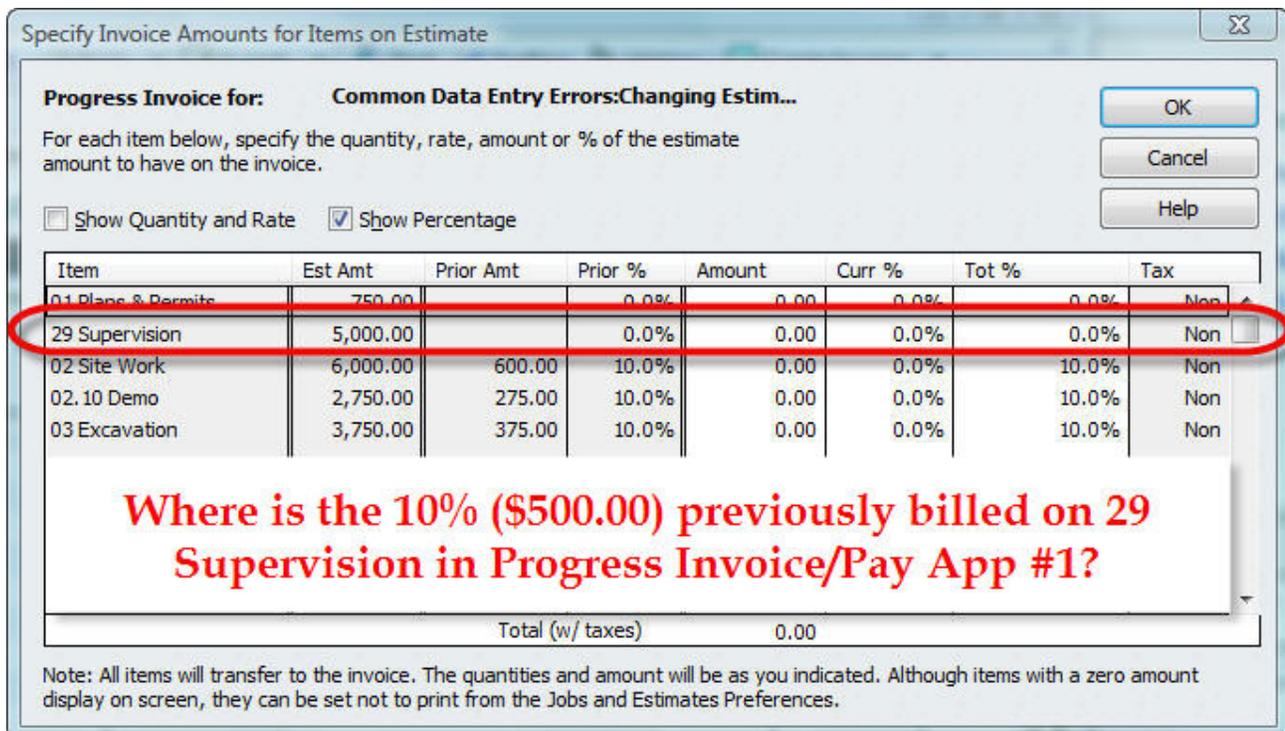
So, maybe you don't see this blatant problem with your QuickBooks data and create the Progress Invoice and bring it into CAPS to create your draw.

When looking at the **Detail Window or AFTER you've printed your Pay App**, you'll see that CAPS is also having "issues" over your changes, and you've got a mess in CAPS because you compromised your billing history in QuickBooks.

Line	Description	Scheduled	Previous Bill	Current Bill	Status	S
1	Plans & Permits	$750.00	$600.00	$750.00	Original ▾	$
2	Supervision	$5,000.00	$275.00	$1,000.00	Original	$
3	Site Work	$6,000.00	$375.00	$600.00	Original	$
4	Demolition	$2,750.00	$0.00	$275.00	Original	$
5	Excavation	$3,750.00	$0.00	$375.00	Original	$

Now, remember CAPS **must** track the history of each **Item**, which originates on your QuickBooks Estimate in the **Item Column**. The **Items** used in the Estimate then become "linked" and flow through into the Progress Invoices as your job progresses. These "links" in turn are brought into CAPS in order to accurately create your AIA Billing and track prior billings, amount completed and stored to date, retainage, etc., for each of those **Items** and display the information on both your Application for Payment and Continuation Sheet correctly.

Resolving the problem and/or Best Practices:

There are three ways in which to deal with a situation like this, none of which are really a "*quick fix*":

1. There are two ways in which to resolve this problem and get your payment application out the door, if you Print (and commit to History) the Pay Application
    a. Restore your previous CAPS backup and then go back to QuickBooks -> delete Progress Invoice #2 -> structure your Estimate the way it originally was -> recreate Progress Invoice -> pull back into CAPS.
    b. If you haven't been backing up your CAPS data, well this is about to be a hard lesson learned - delete your billing history in CAPS (Edit menu -> Jobs -> select this Job -> click History button -> select App -> Delete button). Then go back to QuickBooks -> delete BOTH Progress Invoices -> structure your Estimate the way you want it -> recreate Progress Invoices -> pull back into CAPS.
2. The "*Absolute Best Practice*" for a situation like this, is to simply **take the time up front to structure your estimate the way you want it to appear on the Continuation Sheet and then leave the "Original Contract" portion of your Estimate structure alone, once you have started billing.**

Additional information on restructuring items on your Estimate IF YOU HAVE NOT PREVIOUSLY BILLED ON THE LINE ITEMS YOU WISH TO MOVE:

As a "*Best Practice*", if you are absolutely intent in changing the position of the line item **THAT YOU HAVE NOT PREVIOUSLY BILLED ON**, in addition to moving the line on the QuickBooks Estimate you will need to make that SAME line item move in the CAPS program in the previous draw BEFORE you create your Progress Invoice and bring it into CAPS.

To accomplish this from the CAPS **Edit** menu -> choose **Jobs** -> click to **Select this job** -> click the **History** button -> click on the last pay app -> click the **Edit** button -> and then click the **Special Corrections** button.

> **NOTE:** A CAPS message window will appear, prompting you to make a backup of your existing CAPS data. **You must perform this function.** If you currently do not use the built in CAPS **Enhanced Backup** function, click the **Cancel** button on the Detail window and exit until

you reach the main window. From the **Backup & Restore** menu -> choose **Enhanced Backup CAPS Data** option -> click the ? mark in the lower right corner for instructions on how to set up an automatic backup of your CAPS data.

When you get into the **Special Correction** window, select the **Move Lines** option and tell the program what line you want to move (line 1 of the detail), how many lines you want to move (4), and where you want to move the line to (line 6 of the detail) – which translates to: I want to move lines 1-4 of the Continuation Sheet to a Line 6 position, so that the Plans & Permits item will reside in the first position. See below:
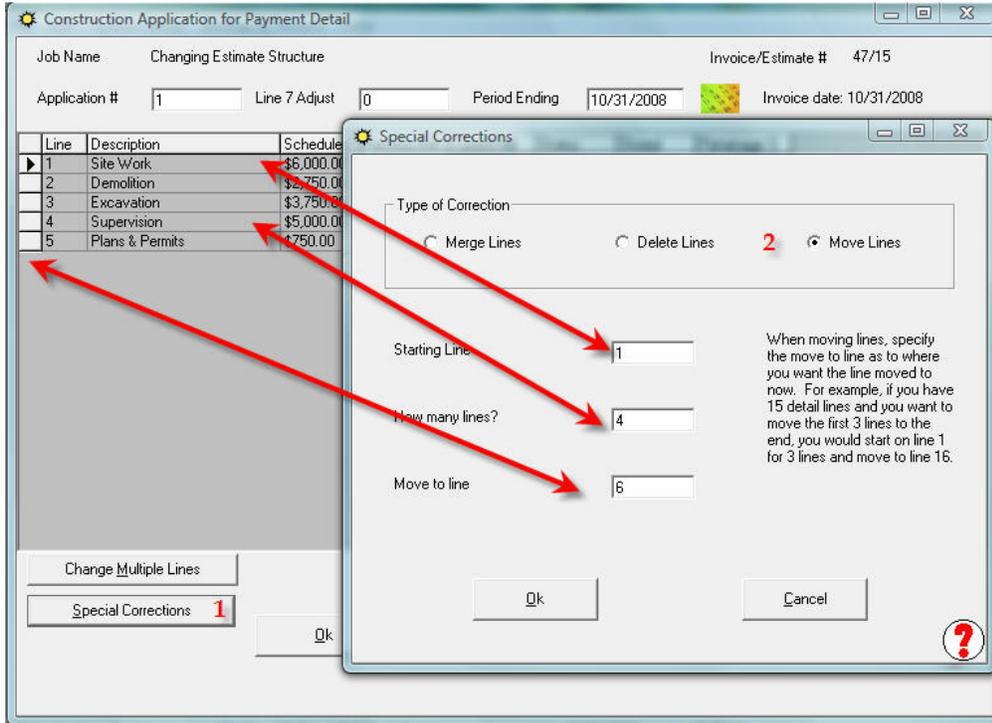
Use the "Special Corrections" button to duplicate the same Item move that you did in QuickBooks

Click the **Ok** button (takes you back to the **Step 1** window) and then click the **Detail** button and you'll see that the Plans & Permits line now resides in the first position on your Continuation Sheet.

Line	Description	Scheduled	Previous Bill	Current Bill	S
1	Plans & Permits	$750.00	$0.00	$0.00	0
2	Site Work	$6,000.00	$0.00	$600.00	0
3	Demolition	$2,750.00	$0.00	$375.00	0
4	Excavation	$3,750.00	$0.00	$500.00	0
5	Supervision	$5,000.00	$0.00	$0.00	0

Now your CAPS detail matches your Estimate setup

And when you bring in the Progress Invoice from QuickBooks, everything is lined up correctly.

Line	Description	Scheduled	Previous Bill	Current Bill	St
1	Plans & Permits	$750.00	$0.00	$750.00	Or
2	Site Work	$6,000.00	$600.00	$600.00	Or
3	Demolition	$2,750.00	$375.00	$275.00	Or
4	Excavation	$3,750.00	$500.00	$375.00	Or
5	Supervision	$5,000.00	$0.00	$500.00	Or

Data Entry Error #3 Inserting multiple lines into an existing QuickBooks Estimate using the SAME QuickBooks Item repeatedly. This includes only having a single Item in your QuickBooks Item List.

Some of our customers create a multi-line QuickBooks Estimate using a single Item from their Item List repeatedly and changing the Description for each instance of use, this method of estimate creation will only cause CAPS to be confused, not to mention yourself – see below:

Item	Description	Total	Tax
Bid Item	description 1	5,000.00	Tax
Bid Item	description 2	2,500.00	Tax
Bid Item	description 3	1,000.00	Tax

Using the SAME Item multiple times while changing the Description for each instance is NOT recommended

OR, in an attempt to add a little more detail regarding a specific task, such as 02 Site Work, use the line multiple times changing the description.

Item	Description	Total	Tax
01 Plans & Permits	Plans & Permits	1,000.00	Non
02 Site Work	Site Work	3,500.00	Non
29 Supervision	Supervision	2,000.00	Non
02 Site Work	Additional Site Work - grading	1,500.00	Non
02 Site Work	Site Work - equipment rental	3,500.00	Non

Customer:Job — Common Data Entry Erro... ☑ Estimate Active   Class   Template: Schedule of Values — Print Preview

Schedule of Values

Date: 03/16/2009 Estimate #: 16

To Owner
Common Data Entry Errors
Performed by Users
City, VT 05872

Project: Same Item-Multiple
Using the SAME Item
Repeatedly on an Estimate
City, VT 05872

Customer Message   Tax Exempt (0.0%)   0.00
Total   11,500.00

Now, for the most part, if you don't add another 02 Site Work Item to your Estimate after you start your billing, CAPS will deal with this sort of situation without a problem.

> **The problem occurs for CAPS when you add the same Item to your Estimate after you start billing and will depend on HOW/WHERE you add these repetitive items.**

Let's look at what happens in QuickBooks and CAPS:

You issue your first Progress Invoice for 10% of EACH line item shown above for a total of $1,150.00 (Plans & Permits - $100.00, Site Work - $350.00, Supervision - $200.00, Additional Site Work – grading - $150.00, and Site Work – Equipment Rental - $350.00) and pull that into CAPS without an issue.

The trouble happens when let's say you get a Change Order for Tree Removal AND Debris Removal, both of which you want to classify as more under the 02 Site Work category as separate lines . If you add these repetitive lines at the bottom of your Estimate as shown below – CAPS will not have any problem accurately noting that they are both Change Orders:

Item	Description	Total	Tax
01 Plans & Permits	Plans & Permits	1,000.00	Non
02 Site Work	Site Work	3,500.00	Non
29 Supervision	Supervision	2,000.00	Non
02 Site Work	Additional Site Work - grading	1,500.00	Non
02 Site Work	Site Work - equipment rental	3,500.00	Non
02 Site Work	Site Work - tree removal	750.00	Non
02 Site Work	Site Work - debris removal	500.00	Non

And you create your 2ⁿᵈ Progress Invoice for the balance of 01 Plans & Permits and 10% on each of the remaining items and pull it into CAPS and everything is fine.

Line	Description	Scheduled	Previous Bill	Current Bill	Status	S
1	Plans & Permits	$1,000.00	$100.00	$900.00	Original	$
2	Site Work	$3,500.00	$350.00	$350.00	Original	$
3	Supervision	$2,000.00	$200.00	$200.00	Original	$
4	Additional Site Work - grading	$1,500.00	$150.00	$150.00	Original	$
5	Site Work - equipment rental	$3,500.00	$350.00	$350.00	Original	$
6	Site Work - tree removal	$750.00	$0.00	$75.00	Current	
7	Site Work - debris removal	$500.00	$0.00	$50.00	Current	

BUT .... let's say that instead of adding the new line items for 02 Site Work at the bottom of your Estimate, you INSERTED them **AFTER** the Additional Site Work – grading and **BEFORE** the Site Work – equipment rental, like this:

Item	Description	Total	Tax
01 Plans & Permits	Plans & Permits	1,000.00	Non
02 Site Work	Site Work	3,500.00	Non
29 Supervision	Supervision	2,000.00	Non
02 Site Work	Additional Site Work - grading	1,500.00	Non
02 Site Work	Additional Site Work - tree removal	750.00	Non
02 Site Work	Additional Site Work - debris removal	500.00	Non
02 Site Work	Site Work - equipment rental	3,500.00	Non

And issued the same 2ⁿᵈ draw - remainder of 01 Plans & Permits and 10% of each remaining item. QuickBooks presents you with the "warning", but everything is good – you can see that QuickBooks remembered that you previously billed 10% or $350.00 on the Site Work – equipment rental and you think all is good.

When looking at the **Detail Window or AFTER you've printed your Pay App**, you'll see that CAPS is having "issues" over your changes, and you've got a mess; there are 4 things that are VERY WRONG in the detail, numbered 1 – 4 in the screenshot below:

Line	Description	Scheduled	Previous Bill		Current Bill	Status		S
▶ 1	Plans & Permits	$1,000.00	$100.00		$900.00	Original ▾		$0
2	Site Work	$3,500.00	$350.00		$350.00	Original		$0
3	Supervision	$2,000.00	$200.00		$200.00	Original		$0
4	Additional Site Work - grading	$1,500.00	$150.00		$150.00	Original		$0
5	Additional Site Work - tree removal	$750.00	$350.00	**1**	$75.00	Original	**2**	$0
6	Additional Site Work - debris removal	$500.00	$0.00		$50.00	Current		$0
7	Site Work - equipment rental	$3,500.00	$0.00	**3**	$350.00	Current	**4**	$0

1. CAPS is indicating that you have a previous billed amount under the Additional Site Work - tree removal description. This is because it simply doesn't know which 02 Site Work line item belongs to which position. It "remembers" that on the previous draw there was $350.00 billed against the 02 Site Work Item that was in this position. The problem is that when you use the same Item multiple times is that CAPS has no way to distinguish what belongs with what.

2. CAPS has the status of the Additional Site Work – tree removal item set to original. This is because it simply doesn't know which 02 Site Work line item belongs to which position. It "remembers" that on the previous draw the line item that was in this position was part of your original contract amount The problem is that when you use the same Item multiple times that CAPS has no way to distinguish what belongs to what.

3. CAPS has "lost" the previous billed amount for the 02 Site Work Item with the description of Site Work – equipment rental. This is because it can't tell which Description belongs with which 02 Site Work Item, and frankly so am I, because there is nothing to distinguish between one 02 Site Work Item Entry and the next. CAPS doesn't keep Descriptions linked to Items, it relies on you to use different QuickBooks Items for each line item entry to keep things straight.

4. CAPS has set the Status of the 02 Site Work item with the description of Site Work – equipment rental to Current, meaning that this is a Change Order that is current as of this billing.

Excuse the repetition, but:
Remember CAPS **must** track the history of each **Item**, which originates on your QuickBooks Estimate in the **Item Column**. The **Items** used in the Estimate then become "linked" and flow through into the Progress Invoices as your job progresses.   These "links" in turn are brought into CAPS in order to accurately create your AIA Billing and track prior billings, amount completed and stored to date, retainage, etc., for each of those **Items** and display the information on both your Application for Payment and Continuation Sheet correctly. When you use the same Item with different descriptions CAPS has no way to "match" the different descriptions that are used with each instance of the item and therefore gets confused.

Resolving the problem and/or Best Practices:
There are two ways in which to resolve this problem:
1. **If you've already printed your pay app – Restore** the History for this job using the Selective Restore option (see pages 6 & 7) **OR** if you haven't been using the CAPS Backup feature you will need to delete your **ENTIRE** billing history in CAPS (Edit menu -> Jobs -> select this Job -> click History button -> select App -> Delete button) and then go back to QuickBooks -> delete your Progress Invoices -> structure your Estimate the way you want it -> recreate Progress Invoices -> pull back into CAPS.
2. **If you are at the Detail Window –** click the Cancel button, and then the Exit button. Go back to QuickBooks -> delete your Progress Invoice(s) -> structure your Estimate the way you want it -> recreate Progress Invoices -> pull back into CAPS.

The *"Best Practice"* for a situation like this is, to simply **leave your Estimate structure alone once you have started billing OR use different QuickBooks Items for each line item entry on your Estimate.**

Data Entry Error #4 Handling Change Orders in a manner that no one can really track the changes without consulting the original paperwork.

Change Orders *can sometimes* cause issues, depending upon how you record them, we've provided instructions for a tried and true method of recording change orders in our manual, so that everyone will know what happened – including CAPS.

Let's start looking at some examples.

Your Estimate/Progress Invoice/Continuation Sheet has a total of 3 line items for the first 3 Progress Invoices/Draws using the following **Items**: 02 Site Work, 03 Excavation, and 29 Supervision as shown below.
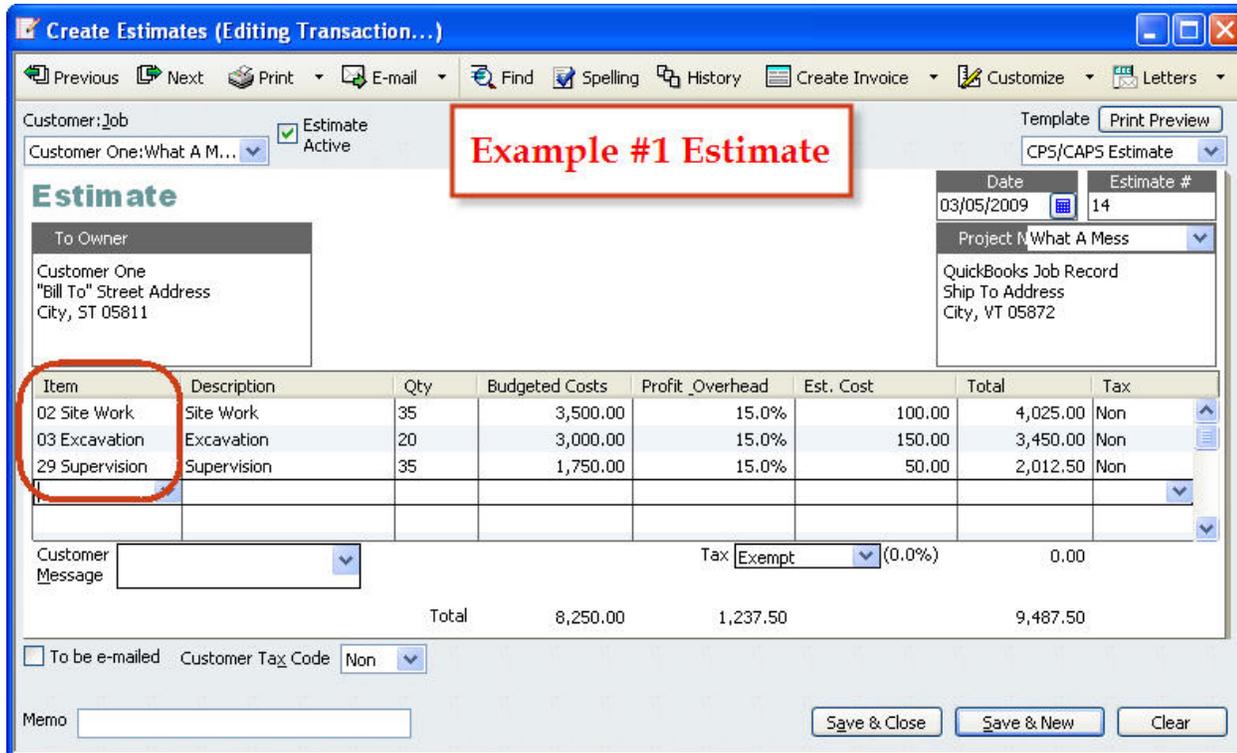
Example #1 Original Estimate

Everything goes smoothly with your billing up through Draw #3.

The day before you are due to issue Draw #4, you FINALLY get approval for some change order items that you've been waiting for and you need to "hurry up and slam them into the Estimate so you can do billing tomorrow" and bill for half of the Demolition portion of the Change Order.

The Change Order included the following:
        Increase Excavation by $1000.00
        Add Demolition $2000.00
        Increase Supervision by $1000.00

        Total Change Order $4000.00

THERE are multiple ways that you could handle this Change Order and multiple things that can happen as a result of the way you handled the Change Order with each one having a different result.

Recording a Change Order - Method 1

You enter a "single Change Order" **Item** for the full amount **at the bottom of your existing Estimate**; see below

Item	Description	Qty	Total
02 Site Work	Site Work	35	3,025.00
03 Excavation	Excavation	20	4,450.00
29 Supervision	Supervision	35	2,012.50
CO	Change Order	10	4,000.00

Change Order – Method 1

While this is an acceptable manner for you to record your Change Order it does have its drawbacks.
- You loose the details of the Change Order and over time you will find that you have to go back and *find* the original documents to remind yourself of the details.
- You loose the ability to Job Cost to the items that represent the Change Order.
- Your customer or the Architect may reject the bill due to insufficient level of detail – or just because they don't like it.

CAPS, however, will not have an issue recognizing this as a CURRENT Change Order, see below. The Change Order Item has a **Status** of *Current* – meaning this is a Change Order that is Current as of this billing.

Line	Description	Scheduled	Previous Bill	Current Bill	Status	
1	Site Work	$3,025.00	$1,207.50	$302.50	Original	
2	Excavation	$4,450.00	$690.00	$445.00	Original	
3	Supervision	$2,012.50	$603.75	$201.25	Original	
4	Change Order	$4,000.00	$0.00	$1,000.00	Current	

Change Order – Method 1 – CAPS Detail window

And will accurately report the Change Order and update the Contract Sum to Date on your Application for Payment Sheet

CONTRACTOR'S APPLICATION FOR PAYMENT
Application is made for payment, as shown below, in connection with the Contract. Continuation Sheet is attached.

1. ORIGINAL CONTRACT SUM	$	9,487.50
2. Net change by Change Orders	$	4,000.00
3. CONTRACT SUM TO DATE (Line 1 + 2)	$	13,487.50

Change Order – Method 1 – Updated Application for Payment

Just before your next billing you are notified that your Application for Payment #4 has been rejected because no one can tell which piece of the Change Order you billed on, you need to show more detail, and you are told you "need to fix it".

In the next section we'll look at common ways that users have actually tried to "fix" things which lead to a big mess and a call to Sunburst indicating that CAPS **isn't working**.

Common User Fixes

Since CAPS was initially released in January 2002, we have commonly seen users who will go back to QuickBooks and on the Estimate they often do any of the following

1. Delete the line in the Estimate for the CO Item *{this is BAD – Deadly Sin # 1}* and then either:
   a. insert a new line using the 03 Excavation **Item** changing the **Description** to read "Increase Excavation" and an amount of $1000.00; insert a new line using the 29 Supervision **Item** changing the **Description** to read "Increase Supervision" and an amount of $1000.00; and then inserting a new line item using 02.10 Demo with a **Description** of Demolition and a value of $2000.00 *{this is BAD – you have now combined Deadly Sins #1 & # 2}*

   <div align="center">OR</div>

   b. Add the CO **Item** 3 more times at the bottom of the Estimate; changing the description to read "Increase Excavation", "Add Demolition", and "Increase Supervision" *{this is BAD – you have now combined Deadly Sins #1 & # 3}*
2. Change the **Description** of the CO **Item** to read "Change Order #1" and delete the $4000.00 amount from the amount column, insert a new line using the 03 Excavation **Item** changing the **Description** to read Increase Excavation and an amount of $1000.00; insert a new line using the 29 Supervision **Item** changing the **Description** to read Increase Supervision and an amount of $1000.00; and lastly inserting a new line item using 02.10 Demo with a **Description** of Demolition and a value of $2000.00 *{this is acceptable}*
3. Change the **Description** for the first use of the CO **Item** from Change Order to Add Demolition, and add the CO **Item** 2 more times at the bottom of the Estimate, changing the description to read "Increase Excavation", and "Increase Supervision" *{this can sometimes have a successful result)}*

The "Results" of these fixes:

Common User Fix 1a - First we'll look at **Fix #1 A** – where a user *deletes* the CO **Item** on the Estimate *{ Deadly Sin # 1}* and then compounds that by inserting a new line using the 03 Excavation **Item** changing the **Description** to read "Increase Excavation" and an amount of $1000.00; insert a new line using the 29 Supervision **Item** changing the **Description** to read "Increase Supervision" and an amount of $1000.00; and then inserting a new line item using 02.10 Demo with a **Description** of Demolition and a value of $2000.00 *{Deadly Sin # 2}* as shown below:

Item	Description	Qty	Total
02 Site Work	Site Work	35	3,025.00
03 Excavation	Excavation	20	4,450.00
29 Supervision	Supervision	35	2,012.50
03 Excavation	Increase Excavation		1,000.00
29 Supervision	Increase Supervision		1,000.00
02.10 Demo	Demolition		2,000.00

Change Order – Method 1 – "Fix" 1(a)

> Now bear in mind, QuickBooks will let you do any darn old thing to your data that you want to. And when you save your Estimate after these changes if you are using the Contractor Edition, it will even provide you with Intuit's version of a "Change Order", which **does not** update the Change Order sections on the Application for Payment.

So now you create your next Progress Invoice in QuickBooks for the current draw #5 and pull it into CAPS.

When you look at the CAPS **Detail** window, you'll find CAPS **isn't happy with you at all and now you have a mess!**

Let's look at and determine WHY you have the "mess"

CAPS still shows the Change Order Item with a $4000.00 Scheduled Value, $1000.00 being Currently Billed with a Status of Current – *that's because you issued your previous progress invoice in this manner and its CAPS job to keep track of all the line items and the amount billed on those line items.* While CAPS did recognize the new line items you inserted to "Increase Supervision" and add "Demolition" their **Status** shows as **Invalid** – meaning CAPS simply cannot figure out what the heck you did or what it's supposed to do.

	Line	Description	Scheduled	Previous Bill	Current Bill	Status	
▶	1	Site Work	$3,025.00	$1,207.50	$302.50	Original	
	2	Excavation	$4,450.00	$690.00	$445.00	Original	
	3	Supervision	$2,012.50	$603.75	$201.25	Original	
	4	Change Order	$4,000.00	$0.00	$1,000.00	Current	
	5	Increase Supervision	$1,000.00	$0.00	$0.00	Invalid	
	6	Demolition	$2,000.00	$0.00	$1,000.00	Invalid	

Resolving this mess

All is not lost; we can resolve this mess and get you back on track by following these easy steps.

Step 1: Restore your last CAPS backup – the one that included Pay App #3 where everything was still ok. To do this, from the **Backup & Restore** menu, choose **Enhanced Restore**. Using the **Browse for File to Restore** button, select the backup with the date that corresponds to Pay App #3, click on it to select it, and then click the **Open** button.
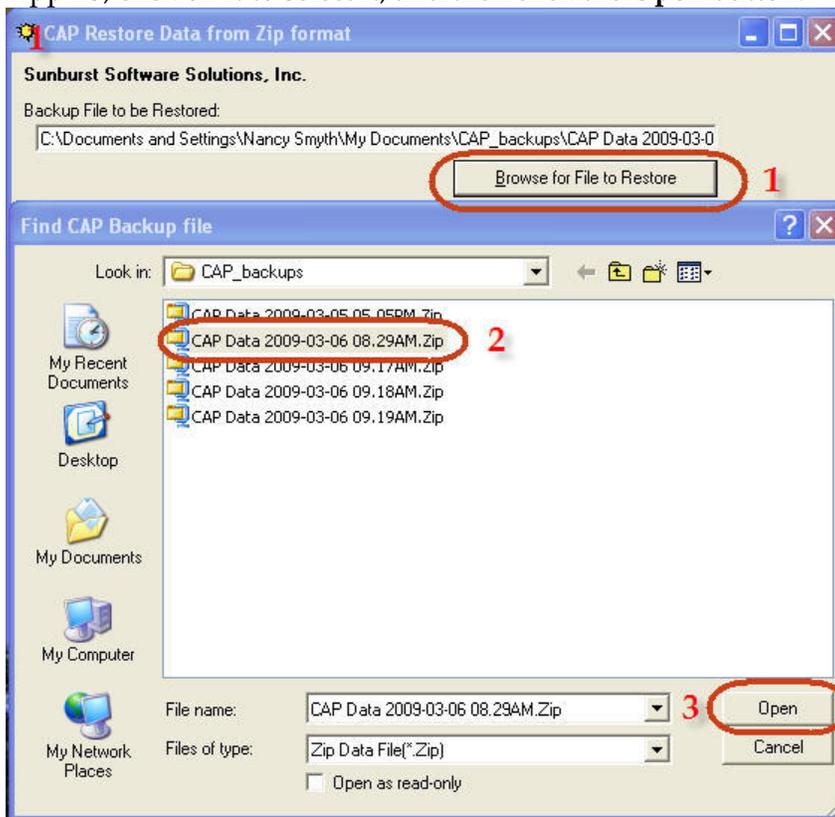
Step 2:   Click the **Selective Restore** button; then from the **Select from predefined file groups** drop down menu, choose the **Job Name** that you are working with, and then click the **Restore File Selected Above** button. This is to restore the job history for this job after you issued Pay App #3.
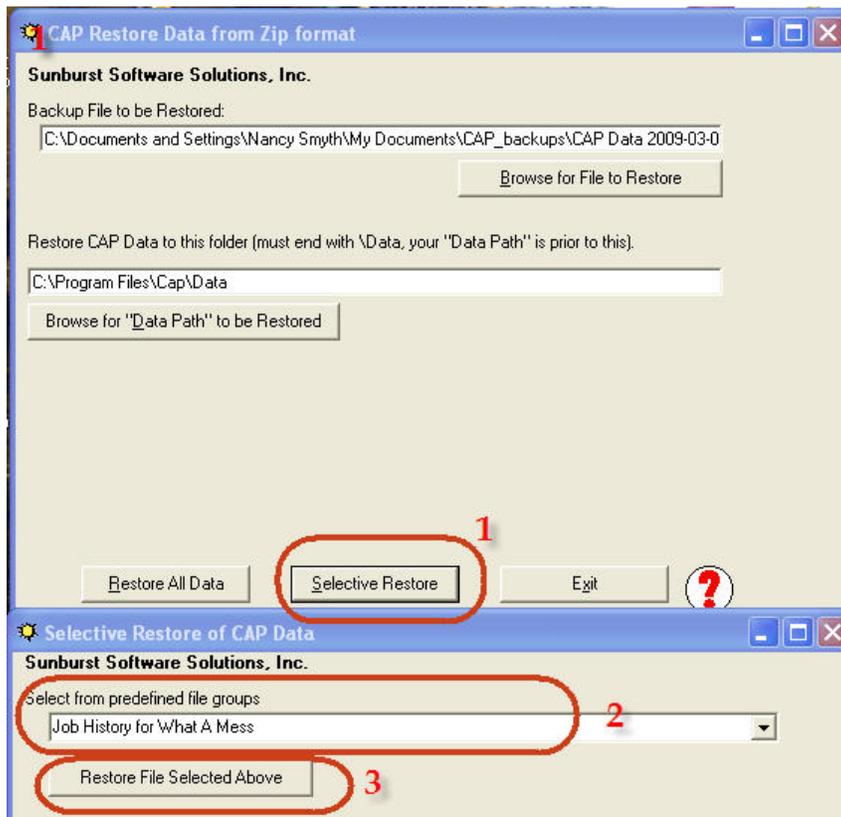
Step 3:   Go back to QuickBooks, delete the Progress Invoices for draws 4 and 5 (view each invoice, then from the Edit menu->Delete Invoice). Recreate the progress invoices using the revised structure of Estimate.

Step 4:   Pull in your "fixed" Progress Invoices for draws 4 & 5 from QuickBooks and View the CAPS **Detail** window. CAPS now accurately recognizes the changes you have made and knows what to do with them because you removed the conflicting history and gave CAPS its accurate "starting" point again.

Line	Description	Scheduled	Previous Bill	Current Bill	Status	
1	Site Work	$3,025.00	$1,207.50	$302.50	Original	
2	Excavation	$4,450.00	$690.00	$445.00	Original	
3	Supervision	$2,012.50	$603.75	$201.25	Original	
4	Increase Excavation	$1,000.00	$0.00	$0.00	Current	
5	Increase Supervision	$1,000.00	$0.00	$0.00	Current	
6	Demolition	$2,000.00	$0.00	$1,000.00	Current	

If you aren't using the CAPS **Enhanced Backup** function, you've just learned a hard lesson on why it is important to be backing up your CAPS data, and you'll need to delete ALL of your CAPS History (**Edit** menu -> **Jobs** -> **Select Job** -> click **History** button -> **Delete ALL pay apps** listed in the History Window) and one by one, pull in your QuickBooks Progress Invoices for this job, using the **Detail** window and setting the **Status** of the last 3 line items to **Future**, until you reach **Pay App #4**, then you would change them to **Current**.

Common User Fix # 1b – Next we'll look at **Fix # 1 b** – where a user *deletes* the CO **Item** on the Estimate *{Deadly Sin #1}* and then compounds that by adding the CO **Item** 3 more times at the bottom of the Estimate; changing the Description each time it is used to "Increase Excavation", "Add Demolition", and "Increase Supervision" *{Deadly Sin #3}*, as shown below:

Item	Description	Qty	Total	
02 Site Work	Site Work	35	3,025.00	N
03 Excavation	Excavation	20	4,450.00	N
~~29 Supervision~~	~~Supervision~~	~~25~~	~~2,012.50~~	N
CO	Increase Excavation		1,000.00	
CO	Add Demolition		2,000.00	
CO	Increase Supervision		1,000.00	

Change Order – Method 1 – "Fix" 1b

Even QuickBooks presents you with a "warning" when you do something like this:

Recording Transaction

Progress invoices have been created from this estimate. Changing amounts on the estimate will affect the percentages of amounts invoiced compared to the estimate.

Do you want to record your changes to the estimate?

[Yes]   [No]   [Cancel]
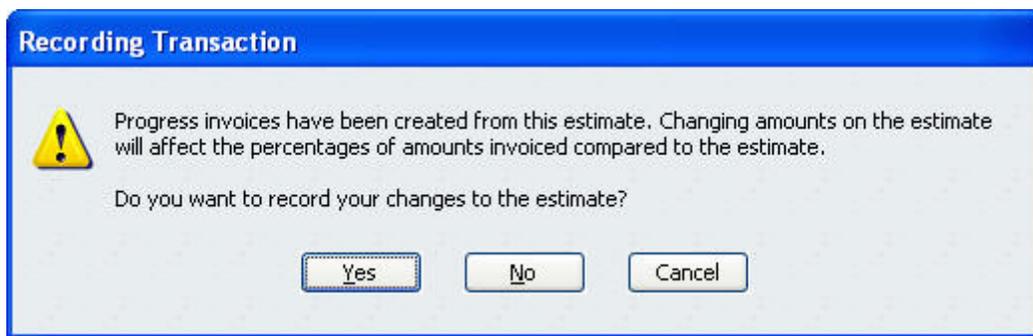
And in spite of the warning users proceed to generate Progress Invoice/Pay App #5, even though you can clearly see that you've lost the billing history for $1000.00 when you are in the QuickBooks **Specify Invoice Amounts for Items on Estimate** window entering the amounts you wish to bill on this invoice:

Specify Invoice Amounts for Items on Estimate

Progress Invoice for: **Making A Mess:Mess 1b**

For each item below, specify the quantity, rate, amount or % of the estimate amount to have on the invoice.

[OK]
[Cancel]
[Help]

☑ Show Quantity and Rate   ☐ Show Percentage

Item	Est Qty	Est Rate	Est Amt	Prior Qty	Prior Amt	Qty	U/M	Rate	Amount	Tax
02 Site Work		4,025.00	4,025.00	0.4	1,610.00	0			4,025.00	0.00	Non
03 Excavation		3,450.00	3,450.00	0.4	1,380.00	0			3,450.00	0.00	Non
29 Supervision		2,012.50	2,012.50	0.4	805.00	0			2,012.50	0.00	Non
CO		1,000.00	1,000.00	0		0			1,000.00	0.00	Non
CO		2,000.00	2,000.00	0		0			2,000.00	0.00	Non
CO		1,000.00	1,000.00	0		0			1,000.00	0.00	Tax

Where is the $1000.00 that you previously billed on Progress Invoice/Pay App #4?

Let's look at and determine WHY you are going to have a "mess"

Originally your Estimate contained a single line item that represented and recorded the total of the Change Orders ($4000.00) that was approved. From that Estimate "structure" you created Progress Invoice/Pay App #4 and you billed half of the $2000.00 demolition portion of the change order posting it using that item, then pulled it into CAPS. CAPS "knows" that it is now responsible for keeping track of that line item, its scheduled value, AND the current amount billed so it can update Pay App #5 correctly.

You've deleted the line item from the Estimate that you used to bill $1000.00 against in Progress Invoice/Pay App #4, therefore, removing the billing history; and then replaced it with the EXACT same Item, but with a different description and dollar amount – and then you've compounded the problem by using the same Item 2 more times with different descriptions and dollar amounts.

Bottom line – you've destroyed your billing history for the $1000.00 and compromised the integrity of your billing structure because you haven't gone back and incorporated this change in Progress Invoice/Pay App #4.

So, here's your mess when you bring Progress Invoice/Pay App #5 into CAPS and take a look, using the **Detail** window:

Pay App #4

Line	Description	Scheduled	Previous Bill	Current Bill	Status
1	Site Work	$4,025.00	$1,207.50	$402.50	Original
2	Excavation	$3,450.00	$1,035.00	$345.00	Original
3	Supervision	$2,012.50	$603.75	$201.25	Original
4	Change Order #1	$4,000.00	$0.00	$1,000.00	Current

Pay App #5

Line	Description	Scheduled	Previous Bill	Current Bill	Status
1	Site Work	$4,025.00	$1,610.00	$402.50	Original
2	Excavation	$3,450.00	$1,380.00	$345.00	Original
3	Supervision	$2,012.50	$805.00	$201.25	Original
4	Increase Excavation	$1,000.00	$1,000.00	$0.00	Prior
5	Increase Supervision	$1,000.00	$0.00	$0.00	Current
6	Add Demolition	$2,000.00	$0.00	$0.00	Current

Pay close attention to Line #4 on Pay App #4 & Pay App #5. On Pay App #4 your original line item that represented the Change Order AND the amount billed against the Change Order existed on Line #4 and while CAPS has "recognized" that you changed the **Description** and the **Scheduled** Value for line item #4, it's going to keep track of that **Previous Bill** amount of $1000.00 to keep your pay applications correct.

Resolving this mess

All is not lost; we can resolve this mess and get you back on track by following the same steps found on pages 5 & 6 this time deleting the Progress Invoices in QuickBooks for Applications 4 & 5.

Recording a Change Order - Method 2 –

You edit the Estimate in the following manner:
1. Increase **Item** 03 Excavation to $4,450.00 (3450.00 original PLUS 1000.00 Change Order)
2. Increase **Item** 29 Supervision to $3,012.50 (2012.50 original PLUS 1000.00 Change Order)
3. Add **Item** 02.10 Demo for $2,000.00

Item	Description	Qty	Total
02 Site Work	Site Work	35	4,025.00
03 Excavation	Excavation	20	4,450.00
29 Supervision	Supervision	35	3,012.50
02.10 Demo	Demolition	10	2,000.00

Change Order Method 2

Results:

Don't even bother with attempting to record your Change Order in this fashion. This is NOT an acceptable manner in which to record your Change Order, although QuickBooks will allow you to do this and if you use the Contractor Edition, it will provide you with what QuickBooks considers to be the recognition of a Change Order in the form of a "text box".

Item	Description	Qty	Total
02 Site Work	Site Work	35	4,025.00
03 Excavation	Excavation	20	4,450.00
29 Supervision	Supervision	35	3,012.50
02.10 Demo	Demolition	10	2,000.00

~~~~~ CHANGE ORDER ~~~~~
March 6, 2009
> Increased price of 03 Excavation from $3,450.00 to $4,450.00. (+$1,000.00)
> Increased price of 29 Supervision from $2,012.50 to $3,012.50. (+$1,000.00)
> Added 10 02.10 Demo. (+$2,000.00)
Total change to estimate +$4,000.00
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

The QuickBooks "Change Order" does not update the Change Order sections on the Application for Payment.

Change Order Method 2 – QuickBooks Recognition

This is NOT an acceptable method for recording Change Orders because:
1. You have no documented record of the Change Order, except perhaps the QuickBooks Change Order.
2. You and the customer you are billing will have no visual documentation of what the Original Contract amount for Excavation and Supervision was or what the Change Order amounts were, without having to go back at a later date and find the original paperwork for the Change Order.
3. CAPS **will not** be able to accurately report the increased amounts as Change Orders for **Items** 03 Excavation and 29 Supervision.
4. CAPS will ONLY recognize the addition of **Item** 02.10 Demo with a 2000.00 Change Order increase.

Line	Description	Scheduled	Previous Bill	Current Bill	Status
1	Site Work	$4,025.00	$1,207.50	$402.50	Original
2	Excavation	$4,450.00	$690.00	$445.00	Original
3	Supervision	$3,012.50	$603.75	$301.25	Original
4	Demolition	$2,000.00	$0.00	$100.00	Current

5. CAPS will not accurately update your Contract Sum to Date to $13,487.50.

CONTRACTOR'S APPLICATION FOR PAYMENT
Application is made for payment, as shown below, in connection with the
Contract. Continuation Sheet is attached.

1. ORIGINAL CONTRACT SUM	$	9,487.50	
2. Net change by Change Orders	$	2,000.00	
3. CONTRACT SUM TO DATE (Line 1 + 2)	$	11,487.50	
4. TOTAL COMPLETED & STORED TO DATE (Column G on Continuation Sheet)	$	3,750.00	

Resolving this mess

All is not lost; we can resolve this mess and get you back on track by following the same steps found on pages 5 & 6 this time deleting the Progress Invoices in QuickBooks for Applications 4 & 5.

Recording a Change Order - Method 3 –

You edit the Estimate in the following manner:
1. Change the **Description** for the first use of the CO **Item** from Change Order to **Add Demolition**
2. Add the CO **Item** 2 more times at the bottom of the Estimate, changing the description to read "Increase Excavation" and "Increase Supervision"

The Estimate Structure for Progress Invoice/Draw #4 looked like this:

Item	Description	Qty	Total
02 Site Work	Site Work	35	3,025.00
03 Excavation	Excavation	20	4,450.00
29 Supervision	Supervision	35	2,012.50
CO	Change Order	10	4,000.00

Now the Estimate Structure for Progress Invoice/Draw #5 looks like this:

Item	Description	Total	Tax
02 Site Work	Site Work	4,025.00	Non
03 Excavation	Excavation	3,450.00	Non
29 Supervision	Supervision	2,012.50	Non
CO	Add Demolition	2,000.00	Tax
CO	Increase Excavation	1,000.00	Tax
CO	Increase Supervision	1,000.00	Tax

You create your Progress Invoice/Draw #5 and the Specify Invoice Amounts window looks fine

Specify Invoice Amounts for Items on Estimate

Progress Invoice for: Common Data Entry Errors:Handling Chan...

For each item below, specify the quantity, rate, amount or % of the estimate amount to have on the invoice.

☐ Show Quantity and Rate   ☑ Show Percentage

Item	Est Amt	Prior Amt	Prior %	Amount	Curr %	Tot %	Tax
02 Site Work	4,025.00	2,213.75	55.0%	0.00	0.0%	55.0%	Non
03 Excavation	3,450.00	1,897.50	55.0%	0.00	0.0%	55.0%	Non
29 Supervision	2,012.50	1,106.88	55.0%	0.00	0.0%	55.0%	Non
CO	2,000.00	1,000.00	50.0%	0.00	0.0%	50.0%	Tax
CO	1,000.00		0.0%	0.00	0.0%	0.0%	Tax
CO	1,000.00		0.0%	0.00	0.0%	0.0%	Tax

So you now bring this information into CAPS and when you view the Detail, you'll see that CAPS has actually done a pretty decent job of dealing with your changes – you just need to change the STATUS of the last two line items to Prior, because they really were included in the Previous Change Order.

Line	Description	Scheduled	Previous Bill	Current Bill	Status	Stored	Retainage %
1	Site Work	$4,025.00	$1,610.00	$402.50	Original		
2	Excavation	$3,450.00	$1,552.50	$517.50	Original		
3	Supervision	$2,012.50	$905.63	$201.25	Original		
4	Add Demolition	$2,000.00	$1,000.00	$0.00	Prior		
5	Increase Excavation	$1,000.00	$0.00	$250.00	Current		
6	Increase Supervision	$1,000.00	$0.00	$250.00	Current		

Change "Status" to PRIOR

If you printed the Pay App, without looking at the detail window, and then realized that the Change Order sections on the Application for Payment were incorrect, it's pretty simple to correct this.

In CAPS, go to the Edit menu -> Jobs -> click this Job -> Click the History button -> click Pay App #5 -> choose Edit and change the "Status" column entries from "Current" to "Prior".

CAPS picked these two line items up as Current Change Orders because they HAD NOT existed on your previous applications.