



Explore API Documentation

SelfService_Estimate_CostItemTags

Version 1.0

Last Modified: 11/14/2023

Last Modified By: Aaron Cohen

Change Log

This changelog only contains significant or notable changes to the revision. Any editorial type changes or minor changes are not included.

Revision	Change Date	Description	Modified By
1.0	6/6/2022	Initial draft	Aaron Cohen

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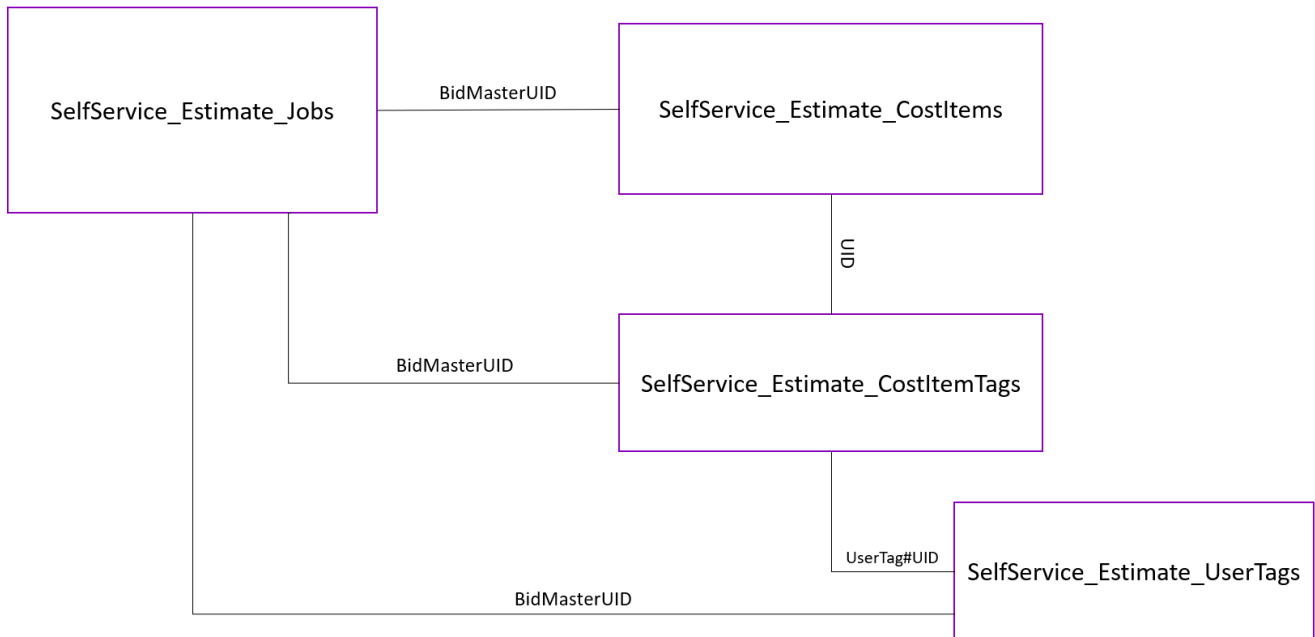
Overview

The **SelfService_Estimate_CostItemTags** API is one of multiple APIs comprising the data contained in the Estimate Cost Item entity. A Cost Item is an item representing an activity for a scope of work being estimated. It is commonly a collection of resource employments, labor, equipment, material, etc., whose quantities are related to the amount or work or duration of the activity. The total cost of a Cost Item can be based on its detailed resource employments, or it can be a plug cost, or it can be determined from the proportional amount of an awarded quote. Cost Items have a position in a hierarchy of costs, all or which roll up to the Job level, which is the top level cost item representing the projects total estimated cost. Terminal level cost items are where all the costs in an estimate exist, either as detailed, plugged or quoted costs, and superior cost items are cost items having subordinate and/or terminal cost items belonging to them. Superior Cost Items do not contribute to the cost of the estimate but rather roll up the costs of all cost items belonging to them.

Data fields included in the **SelfService_Estimate_CostItemTags** are the Cost Item Tag field identifiers, which can be used to look up the Tag field values in UserTags table, as well as the User Defined Field (UDF) values for Cost Item records.

Relationships and Dependencies

From: Table	To: Table	Relationship	Cardinality ¹	Comment
CostItemTags (CIT)	Jobs (J)	CIT.BidMasterJobUID = J.BidMasterJobUID	M:1	
CostItemTags (CIT)	CostItems (CI)	CIT.UIID = CI.UIID	1:1	
CostItemTags (CIT)	UserTags (UT)	CIT.UserTag#UID = UT.UIID	M:1	



¹ 1:M = One to Many, 1:1 = One to One, M:1 = Many to one



API Detail

Direction	From Project Suite	
Pagination	50,000 Rows	
Frequency	All Reporting APIs are used by calling a GET method at an interval determined by the customer. InEight suggests using these APIs on an infrequent basis (once per day) to avoid potential performance impact to live systems when the returned data set could be large.	
Trigger Method(s)	All default OData filters are supported	
Average Payload Size	Depends on date range selected	
APIM Name	SelfService_Estimate_CostItemTags	
Data Refresh/Delta/Incremental Loads		
Project Suite	Starting Version	23.4
	Ending Version	N/A

Supported Filters

All default OData filters are supported by this API.

Fields

Name	Type	Char Max Length	Numeric Precision	Date Precision	Product	PK
EstimateCostItemTagId	bigint	8	19	0	Estimate	X
EstimateCostItemTagUF	uniqueidentifier	16	0	0	Estimate	
EstimateCostItemUID	uniqueidentifier	16	0	0	Estimate	
UserDefined1	nvarchar	500	0	0	Estimate	
UserDefined2	nvarchar	500	0	0	Estimate	
UserDefined3	nvarchar	500	0	0	Estimate	
UserDefined4	nvarchar	500	0	0	Estimate	
UserDefined5	nvarchar	500	0	0	Estimate	
UserDefined6	nvarchar	500	0	0	Estimate	
UserDefined7	nvarchar	500	0	0	Estimate	
UserDefined8	nvarchar	500	0	0	Estimate	
UserDefined9	nvarchar	500	0	0	Estimate	
UserDefined10	nvarchar	500	0	0	Estimate	
UserDefined11	nvarchar	500	0	0	Estimate	
UserDefined12	nvarchar	500	0	0	Estimate	
UserDefined13	nvarchar	500	0	0	Estimate	
UserDefined14	nvarchar	500	0	0	Estimate	
UserDefined15	nvarchar	500	0	0	Estimate	
EstimateUserTag1UID	uniqueidentifier	16	0	0	Estimate	
EstimateUserTag2UID	uniqueidentifier	16	0	0	Estimate	

EstimateUserTag3UID	uniqueidentifier	16	0	0	Estimate	
EstimateUserTag4UID	uniqueidentifier	16	0	0	Estimate	
EstimateUserTag5UID	uniqueidentifier	16	0	0	Estimate	
EstimateUserTag6UID	uniqueidentifier	16	0	0	Estimate	
EstimateUserTag7UID	uniqueidentifier	16	0	0	Estimate	
EstimateUserTag8UID	uniqueidentifier	16	0	0	Estimate	
EstimateUserTag9UID	uniqueidentifier	16	0	0	Estimate	
EstimateUserTag10UID	uniqueidentifier	16	0	0	Estimate	
EstimateUserTag11UID	uniqueidentifier	16	0	0	Estimate	
EstimateUserTag12UID	uniqueidentifier	16	0	0	Estimate	
EstimateUserTag13UID	uniqueidentifier	16	0	0	Estimate	
EstimateUserTag14UID	uniqueidentifier	16	0	0	Estimate	
EstimateUserTag15UID	uniqueidentifier	16	0	0	Estimate	
EstimateUserTag16UID	uniqueidentifier	16	0	0	Estimate	
EstimateUserTag17UID	uniqueidentifier	16	0	0	Estimate	
EstimateUserTag18UID	uniqueidentifier	16	0	0	Estimate	
EstimateUserTag19UID	uniqueidentifier	16	0	0	Estimate	
EstimateUserTag20UID	uniqueidentifier	16	0	0	Estimate	
EstimateUserTag21UID	uniqueidentifier	16	0	0	Estimate	
EstimateUserTag22UID	uniqueidentifier	16	0	0	Estimate	
EstimateUserTag23UID	uniqueidentifier	16	0	0	Estimate	
EstimateUserTag24UID	uniqueidentifier	16	0	0	Estimate	
EstimateUserTag25UID	uniqueidentifier	16	0	0	Estimate	
BidMasterJobUID	uniqueidentifier	16	0	0	Estimate	
LastUpdateID	int	4	10	0	Estimate	
IsActive	bit	1	1	0	Estimate	
CreatedById	bigint	8	19	0	Estimate	
CreatedDate	datetimeoffset	10	34	7	Estimate	
ModifiedById	bigint	8	19	0	Estimate	
ModifiedDate	datetimeoffset	10	34	7	Estimate	

Field Descriptions

Name	Description	Example
EstimateCostItemTagId	Unique identifier assigned to each record in the table	2386702
EstimateCostItemTagUF	System generated field, for internal use only	2d9ae57b-e145-0e47-05c5-102db00ebb11
EstimateCostItemUID	Unique identifier for the Cost Item. Not visible in the Interface	f35992fc-451c-487c-a0a2-cdad40f9bea2
UserDefined1	Value of the User Defined 1 text type data field on the Cost Item record	BEG STA 1945+22
UserDefined2	Value of the User Defined 2 text type data field on the Cost Item	END STA 2004.82



	record	
UserDefined3	Value of the User Defined 3 text type data field on the Cost Item record	null
UserDefined4	Value of the User Defined 4 text type data field on the Cost Item record	null
UserDefined5	Value of the User Defined 5 text type data field on the Cost Item record	null
UserDefined6	Value of the User Defined 6 text type data field on the Cost Item record	null
UserDefined7	Value of the User Defined 7 text type data field on the Cost Item record	null
UserDefined8	Value of the User Defined 8 text type data field on the Cost Item record	null
UserDefined9	Value of the User Defined 9 text type data field on the Cost Item record	null
UserDefined10	Value of the User Defined 10 text type data field on the Cost Item record	null
UserDefined11	Value of the User Defined 11 text type data field on the Cost Item record	null
UserDefined12	Value of the User Defined 12 text type data field on the Cost Item record	null
UserDefined13	Value of the User Defined 13 text type data field on the Cost Item record	null
UserDefined14	Value of the User Defined 14 text type data field on the Cost Item record	null
UserDefined15	Value of the User Defined 15 text type data field on the Cost Item record	null
EstimateUserTag1UID	Identifier of the Tag value entry in the UserTags table of the Tag 1 dropdown field on Cost Item record	0e69be84-6230-49cd-bc17-dce21413f795
EstimateUserTag2UID	Identifier of the Tag value entry in the UserTags table of the Tag 2 dropdown field on Cost Item record	ccf9aa68-464f-44a2-9080-24081d37cefa
EstimateUserTag3UID	Identifier of the Tag value entry in the UserTags table of the Tag 3 dropdown field on Cost Item record	null
EstimateUserTag4UID	Identifier of the Tag value entry in the UserTags table of the Tag 4 dropdown field on Cost Item record	null

	record	
EstimateUserTag5UID	Identifier of the Tag value entry in the UserTags table of the Tag 5 dropdown field on Cost Item record	null
EstimateUserTag6UID	Identifier of the Tag value entry in the UserTags table of the Tag 6 dropdown field on Cost Item record	null
EstimateUserTag7UID	Identifier of the Tag value entry in the UserTags table of the Tag 7 dropdown field on Cost Item record	null
EstimateUserTag8UID	Identifier of the Tag value entry in the UserTags table of the Tag 8 dropdown field on Cost Item record	null
EstimateUserTag9UID	Identifier of the Tag value entry in the UserTags table of the Tag 9 dropdown field on Cost Item record	null
EstimateUserTag10UID	Identifier of the Tag value entry in the UserTags table of the Tag 10 dropdown field on Cost Item record	null
EstimateUserTag11UID	Identifier of the Tag value entry in the UserTags table of the Tag 11 dropdown field on Cost Item record	null
EstimateUserTag12UID	Identifier of the Tag value entry in the UserTags table of the Tag 12 dropdown field on Cost Item record	null
EstimateUserTag13UID	Identifier of the Tag value entry in the UserTags table of the Tag 13 dropdown field on Cost Item record	null
EstimateUserTag14UID	Identifier of the Tag value entry in the UserTags table of the Tag 14 dropdown field on Cost Item record	null
EstimateUserTag15UID	Identifier of the Tag value entry in the UserTags table of the Tag 15 dropdown field on Cost Item record	null
EstimateUserTag16UID	Identifier of the Tag value entry in the UserTags table of the Tag 16 dropdown field on Cost Item record	null
EstimateUserTag17UID	Identifier of the Tag value entry in the UserTags table of the Tag 17 dropdown field on Cost Item record	null
EstimateUserTag18UID	Identifier of the Tag value entry in the UserTags table of the Tag 18	null



	dropdown field on Cost Item record	
EstimateUserTag19UID	Identifier of the Tag value entry in the UserTags table of the Tag 19 dropdown field on Cost Item record	null
EstimateUserTag20UID	Identifier of the Tag value entry in the UserTags table of the Tag 20 dropdown field on Cost Item record	null
EstimateUserTag21UID	Identifier of the Tag value entry in the UserTags table of the Tag 21 dropdown field on Cost Item record	null
EstimateUserTag22UID	Identifier of the Tag value entry in the UserTags table of the Tag 22 dropdown field on Cost Item record	null
EstimateUserTag23UID	Identifier of the Tag value entry in the UserTags table of the Tag 23 dropdown field on Cost Item record	null
EstimateUserTag24UID	Identifier of the Tag value entry in the UserTags table of the Tag 24 dropdown field on Cost Item record	null
EstimateUserTag25UID	Identifier of the Tag value entry in the UserTags table of the Tag 25 dropdown field on Cost Item record	null
BidMasterJobUID	Identifier of the Job record from the Jobs table in the BidMaster database. This field is not unique in this table but is unique to an instance of a Job. Not visible in the application	dec37787-a459-463b-a567-dd80f0f705b3
LastUpdateID	Field for internal use only	730
IsActive	Indicates if record is active. Please note: records will become inactive if a user un-syncs a job from Estimate application	true
CreatedById	System generated Id, will always represent the system, not actual users. This field is for internal use only	1
CreatedDate	Date/timestamp record is entered	2023-06-05T23:33:02.2557453Z
ModifiedById	System generated Id, will always represent the system, not actual users. This field is for internal use only	1
ModifiedDate	Date/timestamp record is modified	2023-06-05T23:33:02.2557453Z

Sample

```

{
  "EstimateCostItemTagId": 2386702,
  "EstimateCostItemTagUF": "2d9ae57b-e145-0e47-05c5-102db00ebb11",
  "EstimateCostItemUID": "f35992fc-451c-487c-a0a2-cdad40f9bea2",
  "UserDefined1": "BEG STA 1945+22",
  "UserDefined2": "END STA 2004.82",
  "UserDefined3": null,
  "UserDefined4": null,
  "UserDefined5": null,
  "UserDefined6": null,
  "UserDefined7": null,
  "UserDefined8": null,
  "UserDefined9": null,
  "UserDefined10": null,
  "UserDefined11": null,
  "UserDefined12": null,
  "UserDefined13": null,
  "UserDefined14": null,
  "UserDefined15": null,
  "EstimateUserTag1UID": "0e69be84-6230-49cd-bc17-dce21413f795",
  "EstimateUserTag2UID": "ccf9aa68-464f-44a2-9080-24081d37cefa",
  "EstimateUserTag3UID": null,
  "EstimateUserTag4UID": null,
  "EstimateUserTag5UID": null,
  "EstimateUserTag6UID": null,
  "EstimateUserTag7UID": null,
  "EstimateUserTag8UID": null,
  "EstimateUserTag9UID": null,
  "EstimateUserTag10UID": null,
  "EstimateUserTag11UID": null,
  "EstimateUserTag12UID": null,
  "EstimateUserTag13UID": null,
  "EstimateUserTag14UID": null,
  "EstimateUserTag15UID": null,
  "EstimateUserTag16UID": null,
  "EstimateUserTag17UID": null,
  "EstimateUserTag18UID": null,
  "EstimateUserTag19UID": null,
  "EstimateUserTag20UID": null,
  "EstimateUserTag21UID": null,
  "EstimateUserTag22UID": null,
  "EstimateUserTag23UID": null,
  "EstimateUserTag24UID": null,
  "EstimateUserTag25UID": null,
  "BidMasterJobUID": "dec37787-a459-463b-a567-dd80f0f705b3",
  "LastUpdateID": 730,
  "IsActive": true,
  "CreatedById": 1,

```



```
"CreateDate": "2023-06-05T23:33:02.2557453Z",  
"ModifiedById": 1,  
"ModifiedDate": "2023-06-05T23:33:02.2557453Z"  
}
```

Data Validation

This data can be validated by opening the CBS Register or a Cost Item Record in an open job in the Estimate Application

Figure 1: Tag fields and User Defined Fields (UDF) on the CBS Register

The screenshot displays the 'Cost Breakdown Structure (CBS) Register' window. The table below represents the data shown in the interface.

CBS Position Code	Description	Account Code	Account Description	Quote Group	Tag 1	Tag 2	Tag 3	Tag 4	User Defined 1	User Defined 2	Tag 5	Tag 6	Tag 7	Tag 8
	JOB													
	Prime Bond													
	Job Financing													
	Direct Cost Escalation													
	Indirect Cost Escalation													
	Direct Cost Add-On													
	Indirect Cost Add-On													
	Job Management & Equipment													
	General Expense													
1	Mobilization	1020	Mobilization		Estimator 1	Roadway								
2	Clearing & Grubbing	1110	Clearing and Grubbing		Estimator 1	Roadway								
3	Unclassified Excavation	1122	Unclassified Excavation		Estimator 1	Roadway								
3.1	Excavation	1122.100	Excavation		Estimator 1	Roadway								
3.2	Embankment	1122.200	Embankment		Estimator 1	Roadway								
4	Aggregate Base	1120	Aggregate Base		Estimator 1	Roadway								
4.1	Furnish & Haul Base Material	1120.100	Furn and Haul Base Material		Estimator 1	Roadway								
4.2	Finegrade Subgrade	1180	Finegrade Subgrade		Estimator 1	Roadway								
4.3	Install Aggregate Base	1120	Aggregate Base		Estimator 1	Roadway								
4.3.1	Place Aggregate Base	1120.200	Place Aggregate Base		Estimator 1	Roadway			BEG STA 1945+22	END STA 2004+82				
4.3.2	Blue Top Aggregate Base	1120.200	Place Aggregate Base		Estimator 1	Roadway								
5	Asphalt Concrete Hot Mix Type A	1240	Asphalt Concrete		Estimator 1	Roadway								
5.1	Furnish & Haul Hot Mix	1240.100	Furnish and Haul Asphalt Concrete		Estimator 1	Roadway								
5.2	Install Hot Mix Type A	1240.200	Install Asphalt Concrete		Estimator 1	Roadway								
6	36 Inch RCP Culvert Class III	1754	36 Inch RCP		Estimator 2	Roadway								
6.1	Furnish RCP Materials	1754.100	Furnish 36 RCP Materials		Estimator 2	Roadway								
6.2	Excavate RCP Trench	1754.200	Excavate 36 RCP		Estimator 2	Roadway								
6.3	Install RCP Pipe	1754.300	Install 36 RCP		Estimator 2	Roadway								
6.4	Backfill RCP Pipe	1754.400	Backfill 36 RCP		Estimator 2	Roadway								
7	10 Inch PVC Force Main (SDR21)	1762	10 Inch PVC Force Main		Estimator 2	Water/Sewer								
7.1	Furnish 10 Inch PVC Materials	1762	10 Inch PVC Force Main		Estimator 2	Water/Sewer								
7.2	Excavate-Install-Backfill 10 Inch PVC	1762	10 Inch PVC Force Main		Estimator 2	Water/Sewer								
8	24 Inch PVC Gravity Sewer (SDR35)	1763	24 Inch PVC Gravity Sewer		Estimator 2	Water/Sewer								



Figure 2: Tag fields on the Cost Item Setup datablock of the Cost Item Record

Training Job - Reporting - Estimate

File Setup Estimate Quote Price System Integrations Actions

Display Parent Information Highlight Unique (Delta) Resource Fields Insert Subordinate Trench Calculator
Display Billing Rate Highlight Unique (Delta) Cost Item Fields Edit Resource Periods Shift / Rate Calculator
Break Cost Allocation Link

Default Data Blocks View Tools

Cost Breakdown Structure (CBS) Register Cost Item Record

CBS Code:	Optional Code:	Description:	Forecast (T/O) Qty:	Unit of Measure:	Unit Cost:	Total Cost:	Currency:
4	303 5912	AggregateBase	45,000.00	Ton	\$268.29	\$12,072,852.34	U.S. Dollar
4.3	4.3	Install AggregateBase	45,000.00	Ton	\$2.17	\$97,567.33	U.S. Dollar
4.3.1	4.3.1	Place Aggregate Base	45,000.00	Ton	\$1.63	\$73,460.92	U.S. Dollar

PI Assignment: 303 5912	PI Line Number: 40	PI Description: AggregateBase	Cost Segment: Direct Cost	Pay Quantity: 40,000.00	Cost Source: Detail	Alternate: BASE
-------------------------	--------------------	-------------------------------	---------------------------	-------------------------	---------------------	-----------------

Cost Item Summary	Detail: \$1.63	Plug: \$0.00	Quote: \$0.00	Allocation
-------------------	----------------	--------------	---------------	------------

Drag columns here to group

Row Number	Code	Resource Assembly	Description	Quantity (Less Waste)	Waste % Add-on
+	1	LL2	Laborer		
+	2	LO2	Operator Class 2		
+	3	LT1	Teamster		
+	4	EG14G	Grader 14G		
+	5	ECOMP1	Compactor Smooth ...		
+	6	ETWT	Water Truck		

Default Pay Rules

Composite Wage Scale: Scale 2: Scale 3:

For every hours worked, pay hours

Default Shift Arrangements

Work Hours per Shift: Shifts per Day: Days per Week:

Default Properties

Account Code: ✓

Cost Curve:

Worker's Comp Override:

Quantity Driver:

Quote Group Tag:

Minority Goal Allowance:

Phase Code:

When man-count changes: Change UM / Man-Hour Change Days

Suspend:

Period Quantities

Use Period Quantities Edit

Execution

Allow As-Built:

Tag 1:	<input type="text" value="Estimator 1"/>	Tag 16:	<input type="text"/>
Tag 2:	<input type="text" value="Roadway"/>	Tag 17:	<input type="text"/>
Tag 3:	<input type="text"/>	Tag 18:	<input type="text"/>
Tag 4:	<input type="text"/>	Tag 19:	<input type="text"/>
Tag 5:	<input type="text"/>	Tag 20:	<input type="text"/>
Tag 6:	<input type="text"/>	Tag 21:	<input type="text"/>
Tag 7:	<input type="text"/>	Tag 22:	<input type="text"/>
Tag 8:	<input type="text"/>	Tag 23:	<input type="text"/>
Tag 9:	<input type="text"/>	Tag 24:	<input type="text"/>
Tag 10:	<input type="text"/>	Tag 25:	<input type="text"/>
Tag 11:	<input type="text"/>		
Tag 12:	<input type="text"/>		
Tag 13:	<input type="text"/>		
Tag 14:	<input type="text"/>		
Tag 15:	<input type="text"/>		

Security

Last Changed By: aaron cohen

Last Changed On: 6/5/2023 4:32:23 PM

Employment Setup Notes Cost Item Setup Production Man-Hour Factors Resource Employment Break... Schedule User Defined Benchmarking

< Prev Next > OK Cancel

As-Entered Currency | As-Entered Units | InEightSuite T01-QA 23.4 | Training Job - Reporting



Figure 3: User Defined Fields (UDF) on the User Defined datablock of the Cost Item Record

Training Job - Reporting - Estimate

File Setup Estimate Quote Price System Integrations Actions

Split Default Data Blocks Edit View Tools

Display Parent Information Highlight Unique (Delta) Resource Fields Insert Subordinate Trench Calculator

Display Billing Rate Highlight Unique (Delta) Cost Item Fields Edit Resource Periods Shift / Rate Calculator

Break Cost Allocation Link

Cost Breakdown Structure (CBS) Register **Cost Item Record**

CBS Code: Optional Code: Description: Forecast (T/O) Qty: Unit of Measure: Unit Cost: Total Cost: Currency:

4	303 5912	AggregateBase	45,000.00	Ton	\$268.29	\$12,072,852.34	U.S. Dollar
4.3	4.3	Install AggregateBase	45,000.00	Ton	\$2.17	\$97,567.33	U.S. Dollar
4.3.1	4.3.1	Place Aggregate Base	45,000.00	Ton	\$1.63	\$73,460.92	U.S. Dollar

PI Assignment: PI Line Number: PI Description: Cost Segment: Pay Quantity: Cost Source: Alternate:

303 5912 40 AggregateBase Direct Cost 40,000.00 Detail BASE

Cpst Item Summary Detail : \$1.63 Plug : \$0.00 Quote : \$0.00 Allocation

Drag columns here to group Saved views: Standard View

Row Number	Code	Resource Assembly	Description	Quantity (Less Waste)	Waste % Add-on	Quantity	Unit of Measure	Productivity Factor	Work Hours	Pay Hours	Unit Cost
1	LL2		Laborer			1.00	Each	1.00	240.00	240.00	\$26.33
2	LO2		Operator Class 2			3.00	Each	1.00	720.00	720.00	\$28.00
3	LT1		Teamster			1.00	Each	1.00	240.00	240.00	\$30.60
4	EG14G		Grader 14G			1.00	Each	1.00	240.00	240.00	\$60.20
5	ECOMP1		Compactor Smooth ...			2.00	Each	1.00	480.00	480.00	\$36.40
6	ETWT		Water Truck			1.00	Each	1.00	240.00	240.00	\$29.60

User Defined

User Defined 1: BEG STA 1945+22

User Defined 2: END STA 2004.82

User Defined 3:

User Defined 4:

User Defined 5:

User Defined 6:

User Defined 7:

User Defined 8:

User Defined 9:

User Defined 10:

User Defined 11:

User Defined 12:

User Defined 13:

User Defined 14:

User Defined 15:

Em... No... Co... Pro... Ma... Re... Sch... Us... Re...

< Prev Next > OK Cancel

As-Entered Currency As-Entered Units InEightSuite T01-QA 23.4 Training Job - Reporting

