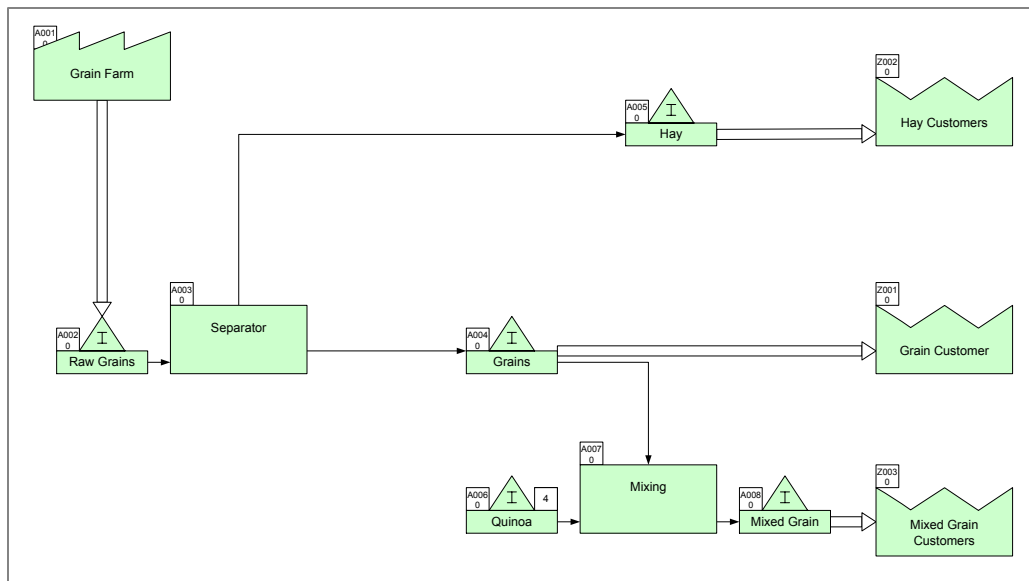


# Quick Processing Tutorial

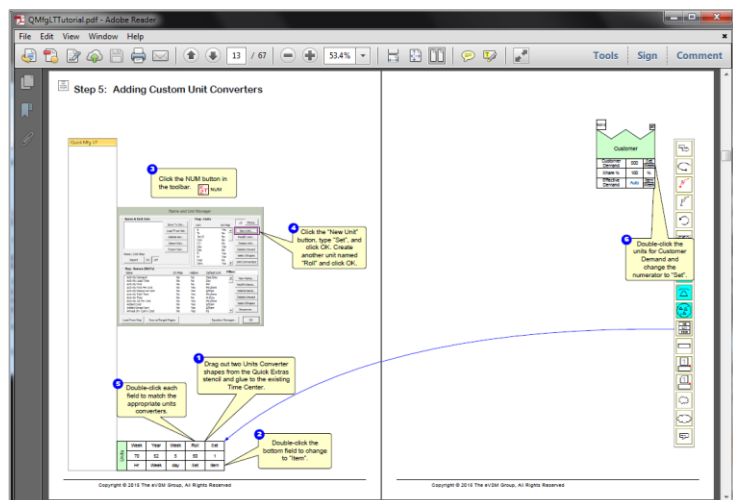
This tutorial will guide you through the steps to draw a simple map, perform common calculations, and plot charts using the Quick Processing stencil.



## Viewing/printing eVSM Tutorial:

This tutorial is designed for two page layout. If printing, you will need double-sided print.

For on-screen viewing, save the PDF file to your PC and then open it in Acrobat Reader (not in a web browser). In the Acrobat menus, click “View>Page Display”, make sure “Show Cover Page in Two Page View” is checked and then select “Two Page View”.



# Step 1: Start eVSM





## Step 2: Learn eVSM Basics

Quick Processing

Sketch Processing

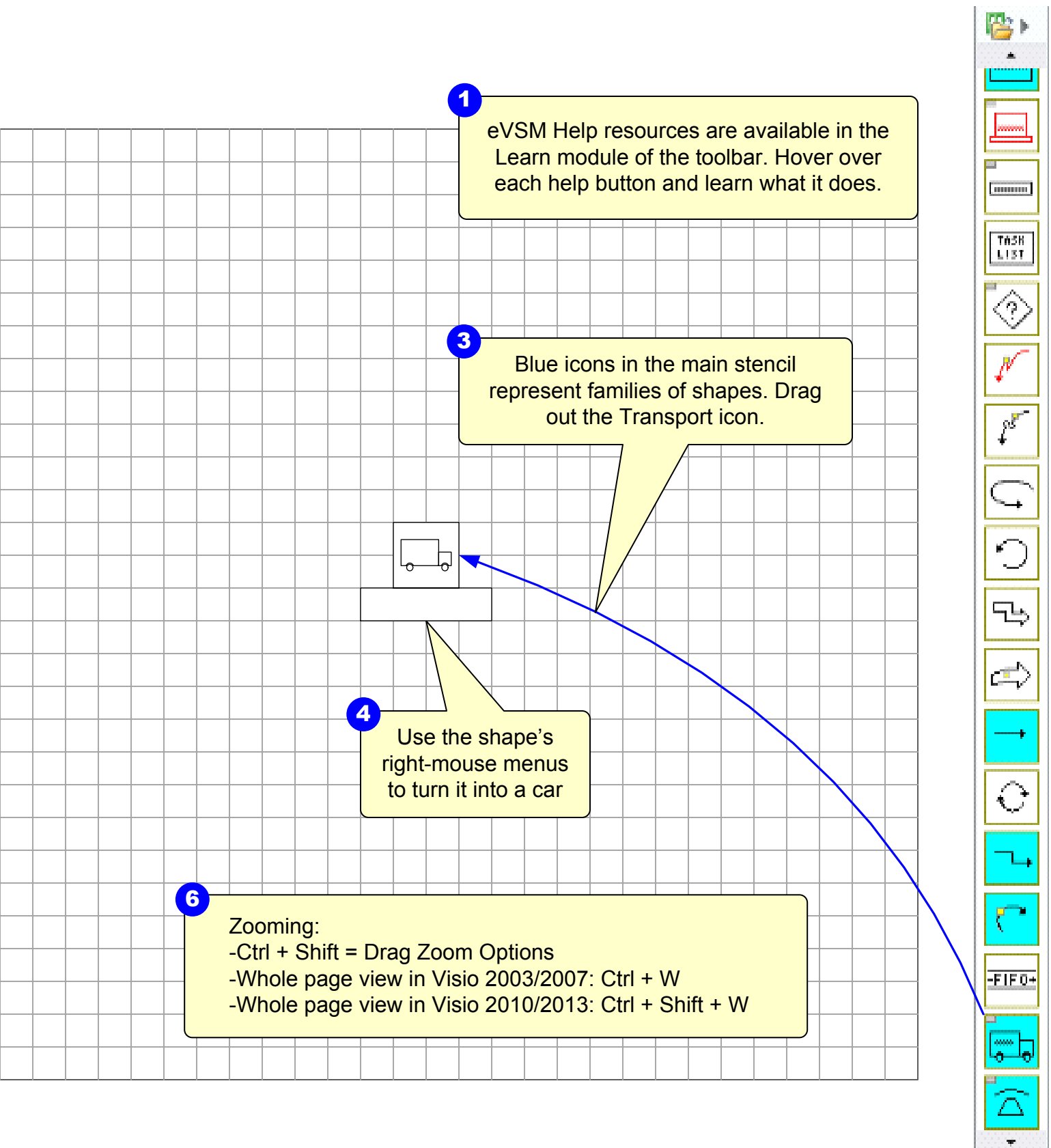
2

Avoid re-sizing eVSM shapes. Instead grow the drawing page when needed. To resize the page, hold down the "Ctrl" key, and then drag any page edge to the required size. This method works on all four edges of the page.



5


Save your Visio file and then insert a new page via the right-mouse menus on the page-tabs.




## Step 3: Initiate the map for Quick Processing

Quick Processing

Sketch Processing




Time and Unit Center



Customer Center

Units	Week	Year	Week
	5	52	75
	Day	Week	Hr

**1** Click the Open button and select the Quick Processing Stencil and click OK.  Open

**2** Drag out the red icons from the Quick Processing Stencil first. This is very important!

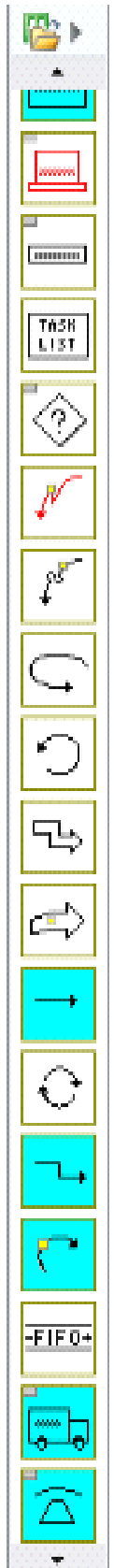
**3** A dialog box will appear asking you to select the map units. Select "US Units" for this example.

**6** Enter the available hours per day and days per week.

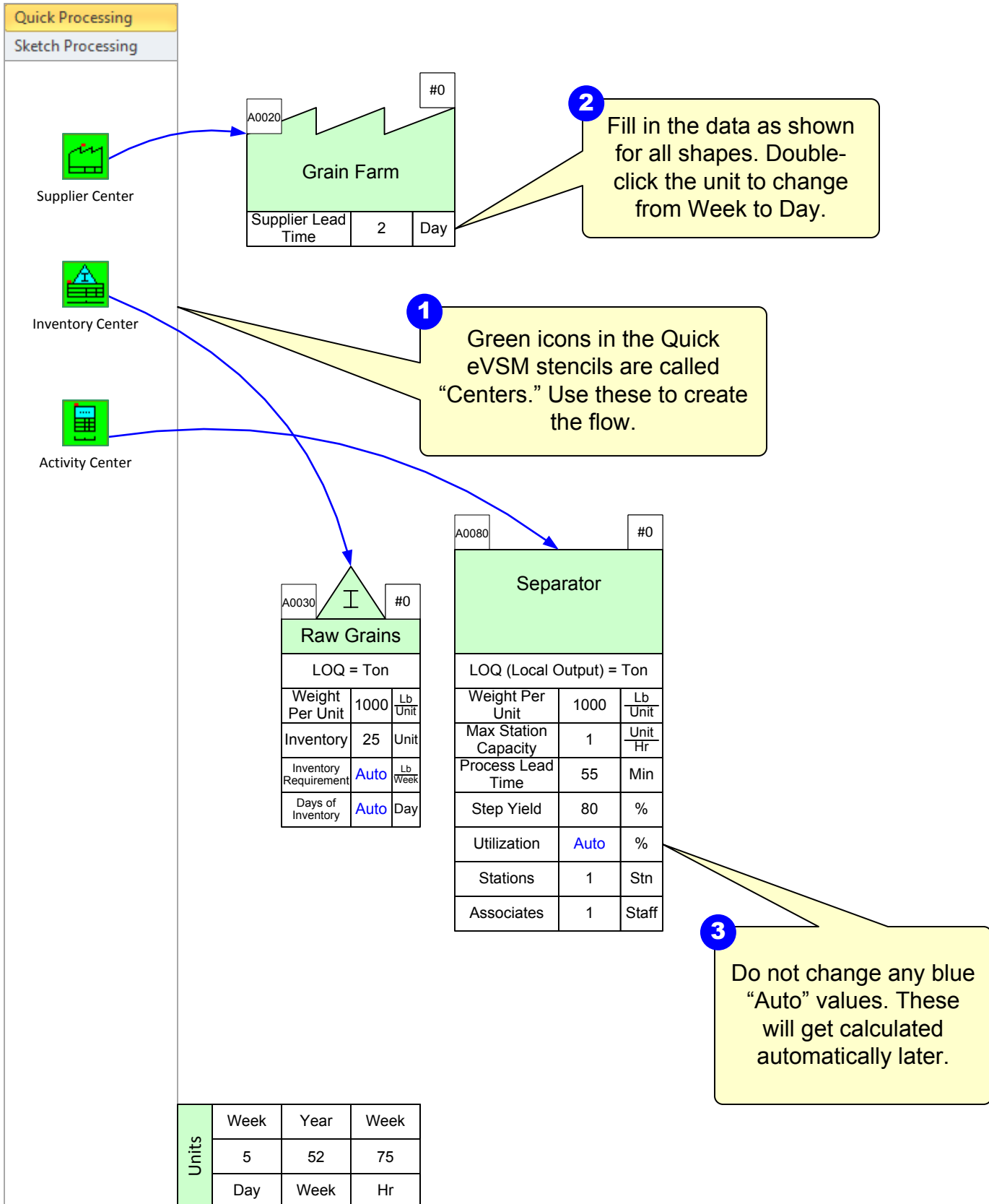
4  
Align all shapes  
to the grid as you  
drop them.

5  
Enter the  
demand  
weight.

Z0005			#0
Grain Customer			
Demand Weight	1875	Lb	Day
Takt Rate	Auto	Lb	Hr
Expected Lead Time	1	Day	



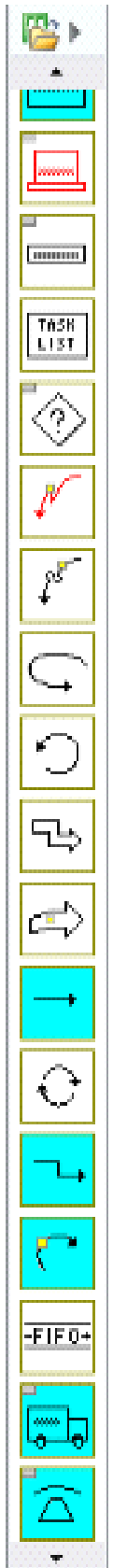
## Step 4: Draw the Flow for Raw Grains





A0050	I	#0
Grains		
LOQ = Ton		
Weight Per Unit	1000	Lb Unit
Inventory	5	Unit
Inventory Requirement	Auto	Lb Week
Days of Inventory	Auto	Day

Z0005		#0
Grain Customer		
Demand Weight	1875	Lb Day
Takt Rate	Auto	Lb Hr
Expected Lead Time	1	Day



## Step 5: Draw the Flow for Hay

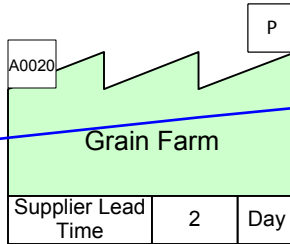
### Quick Processing Sketch Processing



Customer Center

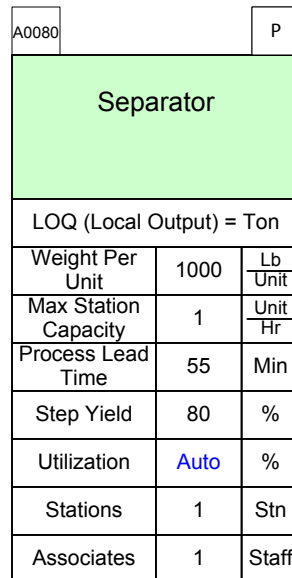
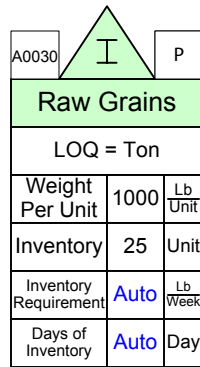


Inventory Center



1

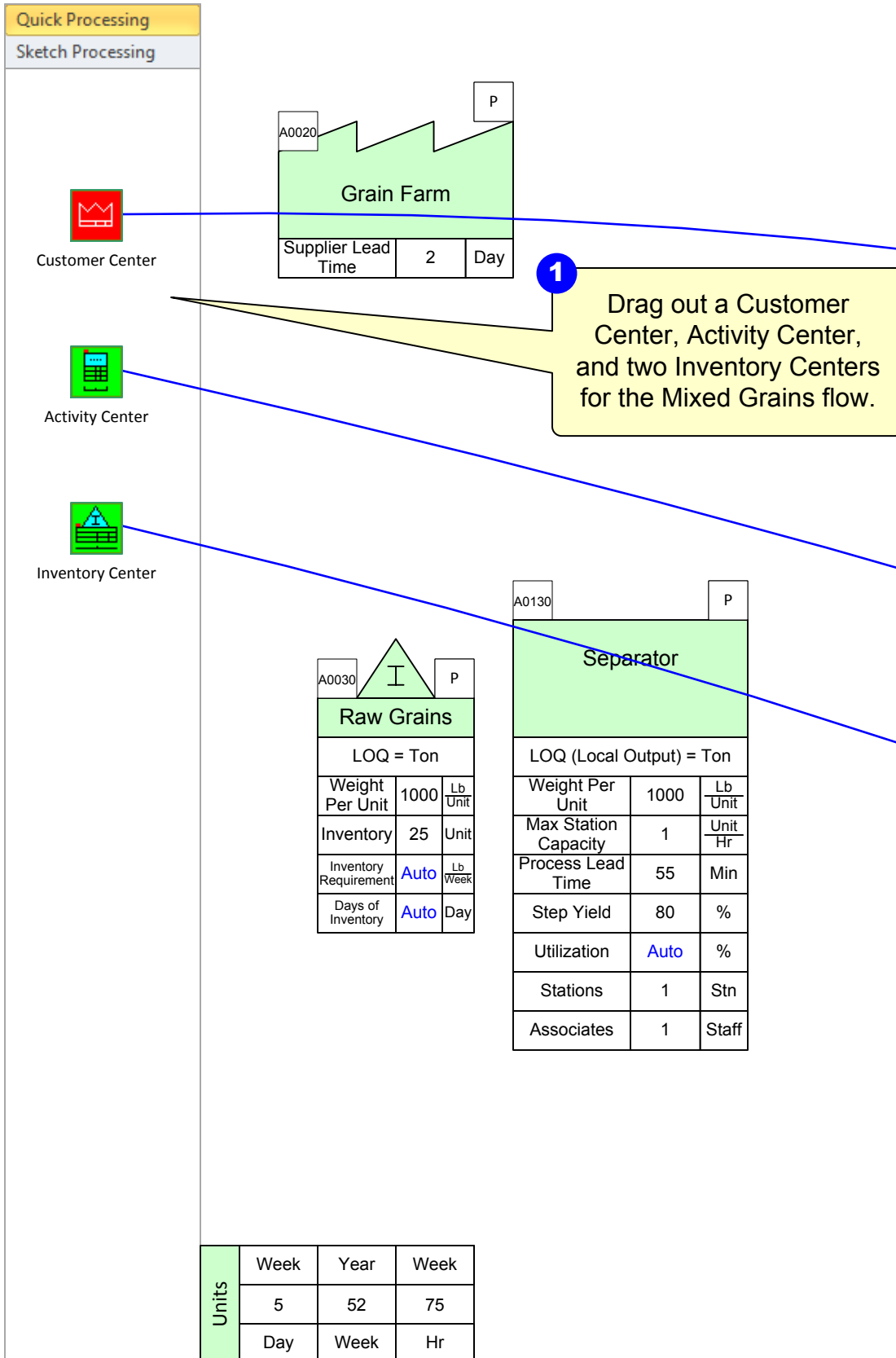
Drag out a Customer Center and Inventory Center for the Hay flow.



Units	Week	Year	Week
	5	52	75
	Day	Week	Hr



# Step 6: Draw the Flow for Mixed Grain

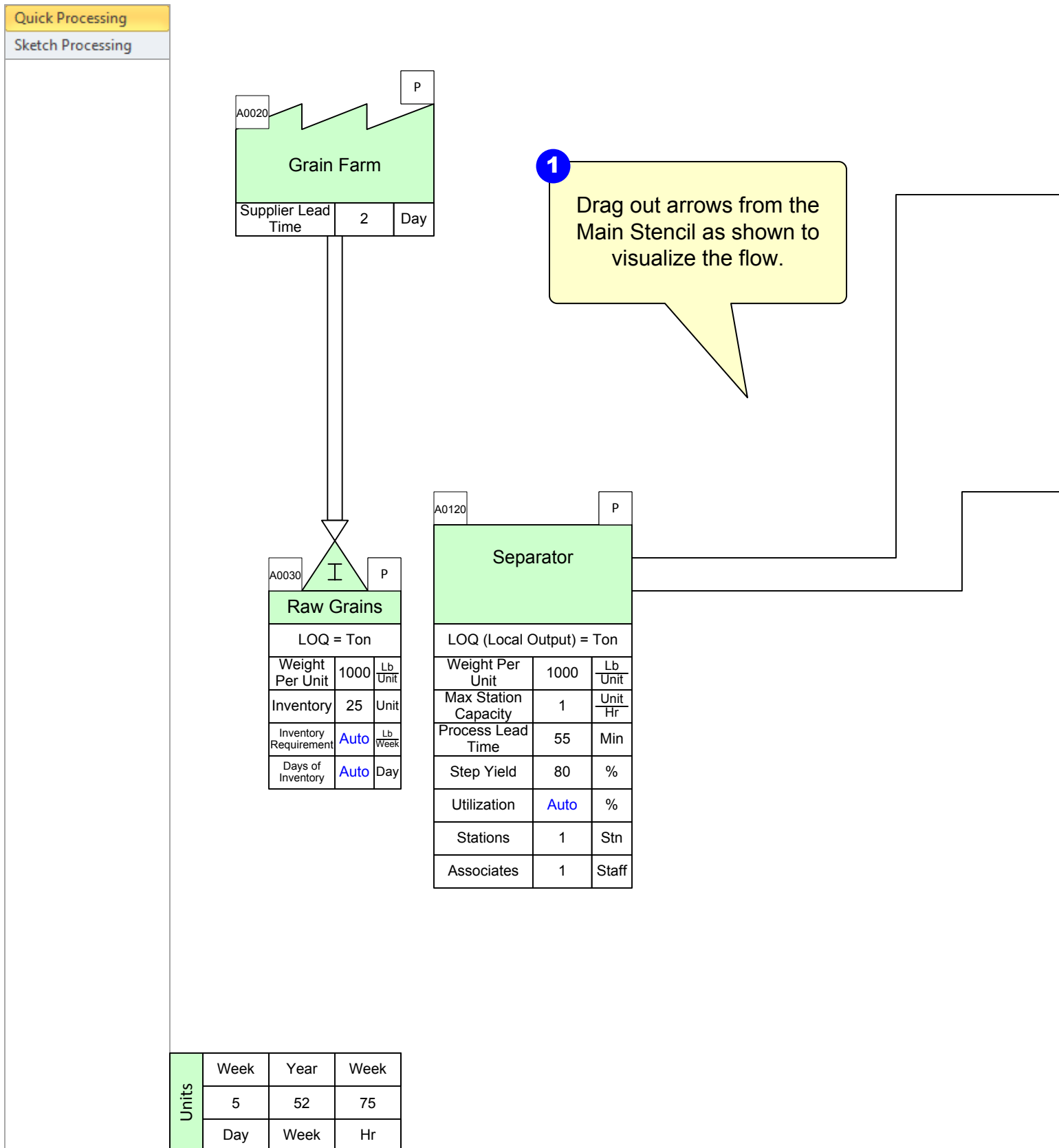


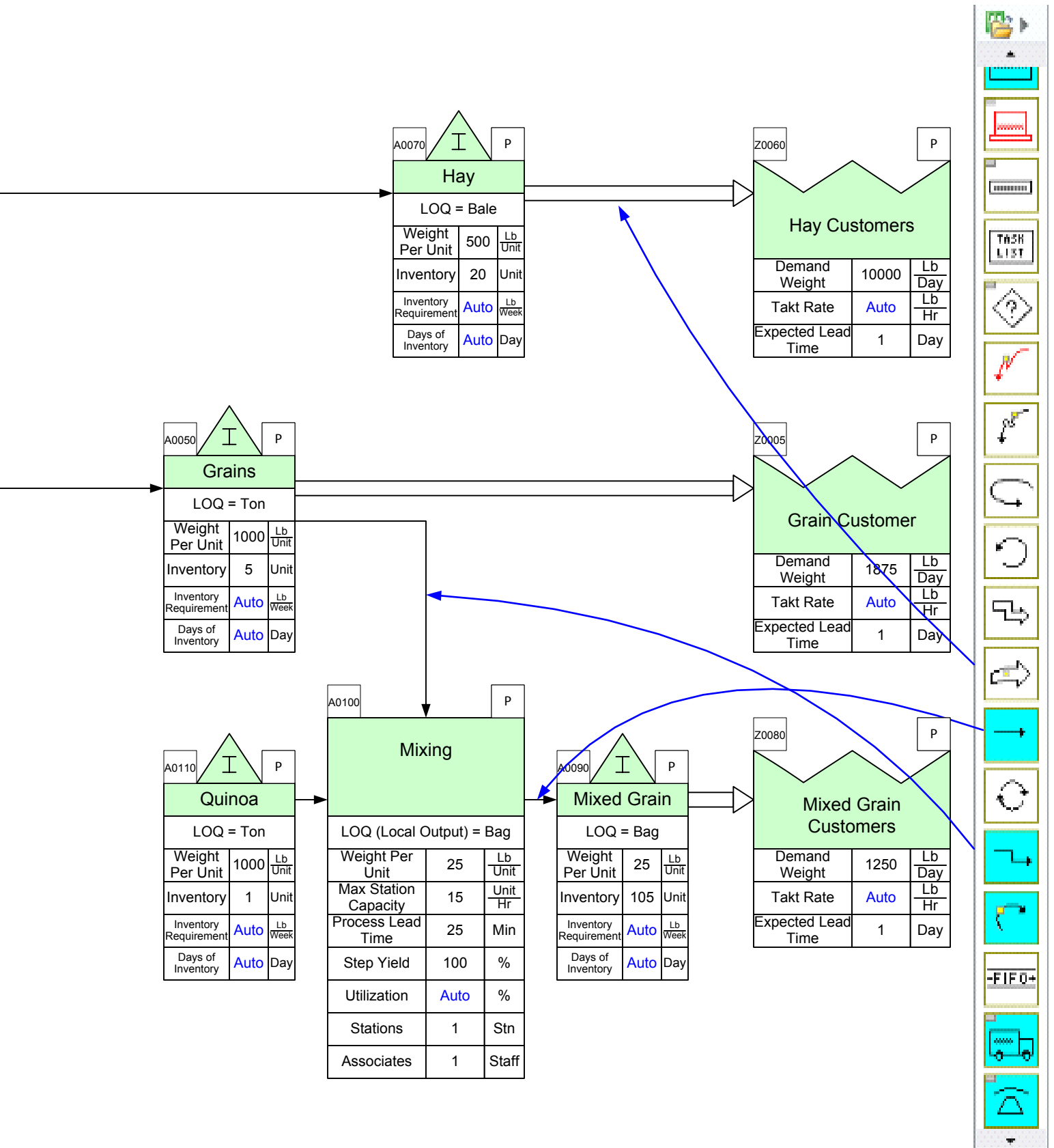
**1**

Drag out a Customer Center, Activity Center, and two Inventory Centers for the Mixed Grains flow.



## Step 7: Add Arrows





## Step 8: Sequence Path 1

Quick Processing  
Sketch Processing

2

Click the Sequence  
button.



Sequence

1

Hold down the Shift key  
and select the green  
shapes in the order shown.  
This will be path 1.

A0020 P

G **A** m

Supplier Lead Time	2	Day
--------------------	---	-----

A0030 P

R **B** s

LOQ = Ton

Weight Per Unit	1000	Lb Unit
Inventory	25	Unit
Inventory Requirement	Auto	Lb Week
Days of Inventory	Auto	Day

A0130 P

S **C** eparator

LOQ (Local Output) = Ton

Weight Per Unit	1000	Lb Unit
Max Station Capacity	1	Unit Hr
Process Lead Time	55	Min
Step Yield	80	%
Utilization	Auto	%
Stations	1	Stn
Associates	1	Staff

Units	Week	Year	Week
	5	52	75
	Day	Week	Hr





## Step 9: Sequence Path 2

2

Again, hold down the Shift key, select the shapes in order for Path 2, then click the Sequence button.



Sequence

1

These sequence arrows show the first path with the data attached.

Quick Processing

Sketch Processing

A0020

P

Grain Farm

Supplier Lead Time	2	Day
--------------------	---	-----

Flow	100	%
------	-----	---

A0030

I

P

Raw Grains

LOQ = Ton

Weight Per Unit	1000	Lb Unit
Inventory	25	Unit
Inventory Requirement	Auto	Lb Week
Days of Inventory	Auto	Day

A0040

P

Separator

LOQ (Local Output) = Ton

Weight Per Unit	1000	Lb Unit
Max Station Capacity	1	Unit Hr
Process Lead Time	55	Min
Step Yield	80	%
Utilization	Auto	%
Stations	1	Stn
Associates	1	Staff


Flow	100	%
------	-----	---

Units	Week	Year	Week
	5	52	75
	Day	Week	Hr

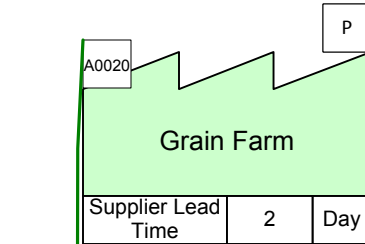


## Step 10: Sequence Path 3

2

Again, hold down the Shift key, select the shapes in order for Path 3, then click the Sequence button.  Sequence

Quick Processing  
Sketch Processing

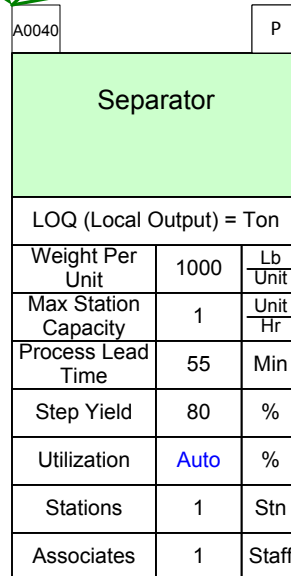
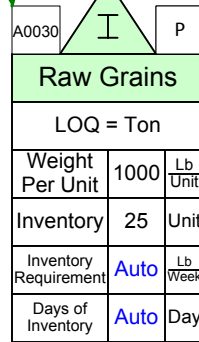


Flow 100 %

Flow 100 %

Flow 100 %

Flow 100 %



1

The sequence arrows with data attached are now shown for paths 1 and 2.

Units	Week	Year	Week
	5	52	75
	Day	Week	Hr



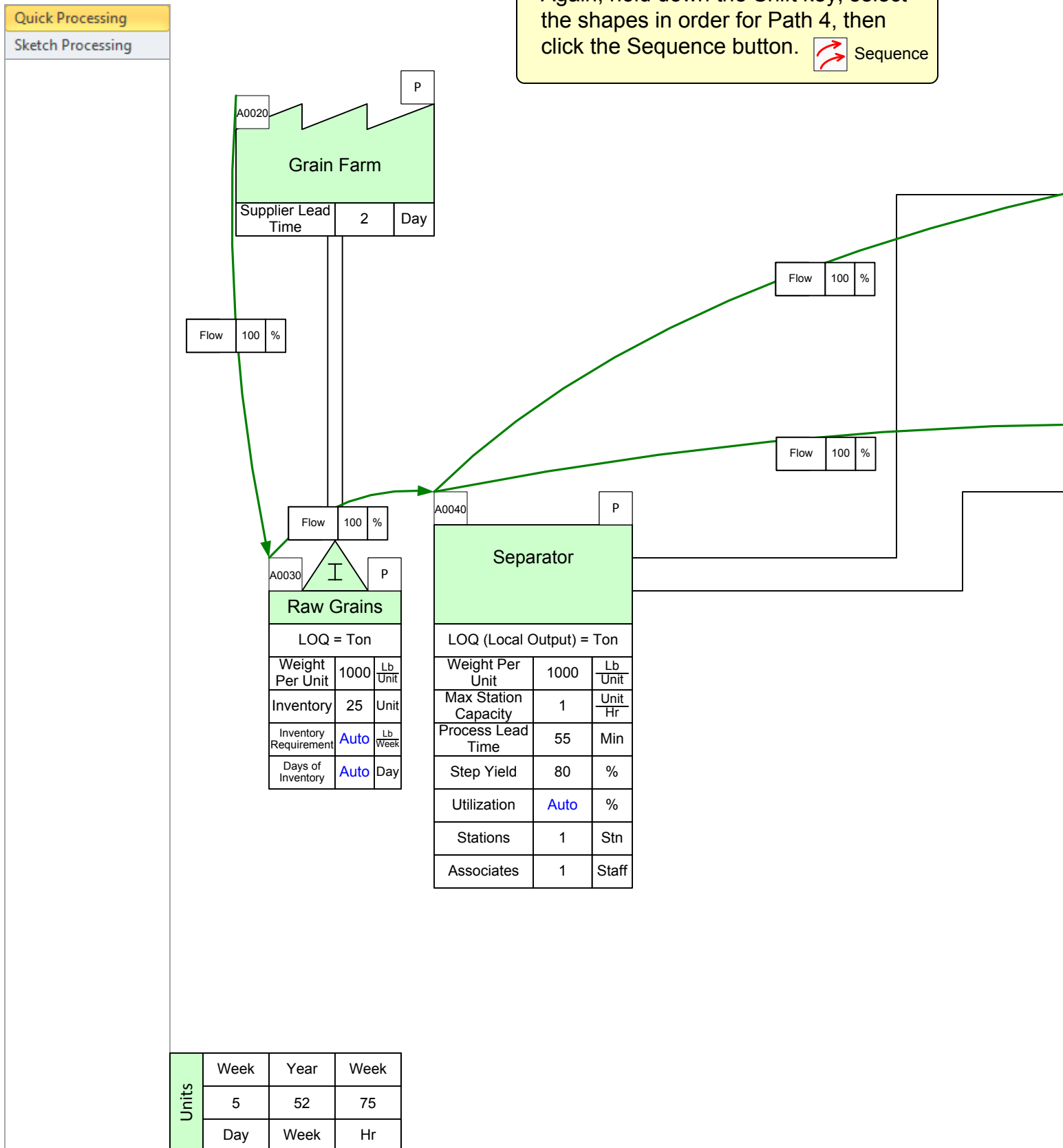
### Step 11: Sequence Path 4

2

Again, hold down the Shift key, select the shapes in order for Path 4, then click the Sequence button.



Sequence






# Step 12: Create Path Numbers Based on Sequence Arrows

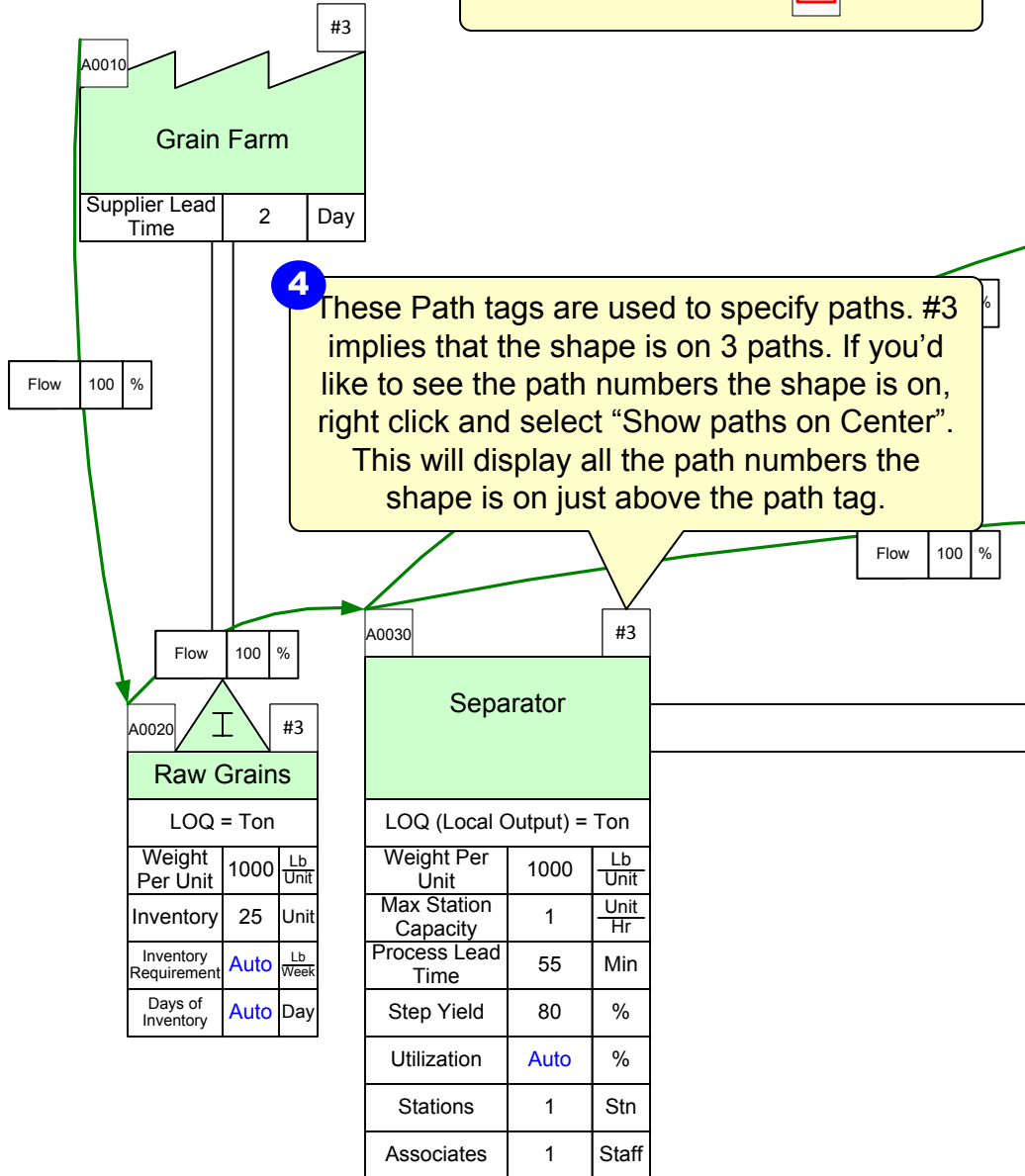
Quick Processing  
Sketch Processing

2

Click Auto Path to automatically generate path numbers based on the sequence arrows.  Auto Path

4

These Path tags are used to specify paths. #3 implies that the shape is on 3 paths. If you'd like to see the path numbers the shape is on, right click and select "Show paths on Center". This will display all the path numbers the shape is on just above the path tag.



NOTE: Your path numbers may be different than shown but the calculations will still be correct.


Units	Week	Year	Week
	5	52	75
	Day	Week	Hr





# Step 13: Update Sequence Data

3

The Sequence Arrows can be hidden or shown by clicking the Show Sequence button. To simplify the map, the arrows will now be hidden.  Show Seq.

Quick Processing

Sketch Processing

A0010

#3

Grain Farm

Supplier Lead Time

2

Day

Flow

100

%

Flow

100

%

A0020

#3

Raw Grains

LOQ = Ton

Weight Per Unit

1000

Lb Unit

Inventory

25

Unit

Inventory Requirement

Auto

Lb Week

Days of Inventory

Auto

Day

A0030

#3

Separator

LOQ (Local Output) = Ton

Weight Per Unit

1000

Lb Unit

Max Station Capacity

1

Unit Hr

Process Lead Time

55

Min

Step Yield

80

%

Utilization

Auto

%

Stations

1

Stn

Associates

1

Staff

Flow

100

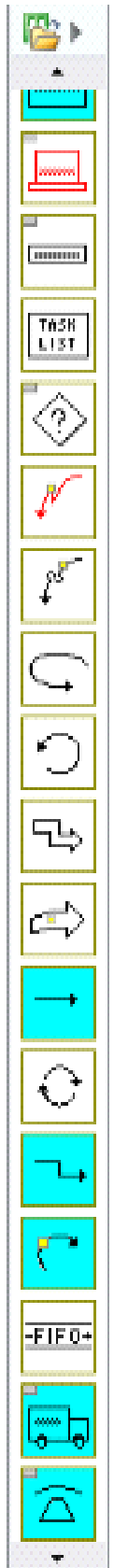
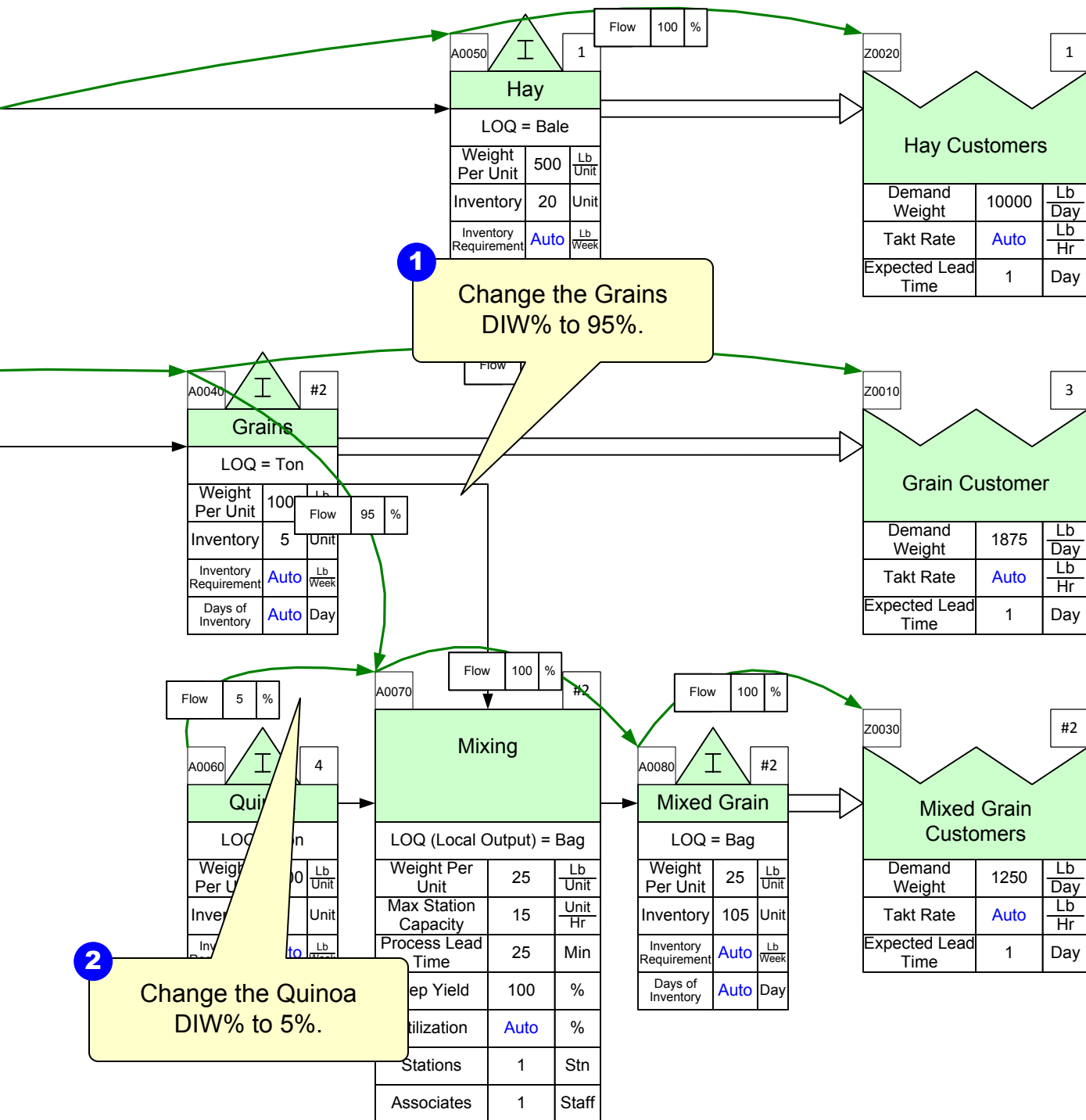
%

Flow

100

%

Units	Week	Year	Week
	5	52	75
	Day	Week	Hr



# Step 14: Add-Ons

Quick Processing

Sketch Processing

Activity Center

Activity Scrap

Activity Setup

Week	Year	Week
5	52	75
Day	Week	Hr

A0010

#3

Grain Farm

Supplier Lead Time

2

Day

Flow	100	%
------	-----	---

Flow

100

%

A0020

#3

Raw Grains

LOQ = Ton

Weight Per Unit	1000	Lb Unit
Inventory	25	Unit
Inventory Requirement	Auto	Lb Week
Days of Inventory	Auto	Day

1 Note how all these yellow add-on names start with the word "Activity." Yellow Add-ons that follow a green Center can only be used with that Center. So, these "Activity..." add-ons can be used only with the Activity Center.

A0030

#3

Separator

LOQ (Local Output) = Ton

Weight Per Unit	1000	Lb Unit
Max Station Capacity	1	Unit Hr
Process Lead Time	55	Min
Step Yield	80	%
Utilization	Auto	%
Stations	1	Stn
Setups	1	StUp Day
Time Per Setup	40	Min StUp
Associates	1	Staff

2 Enter the setup time for the "Separator" activity.



# Step 15: Add Arrow Data

Quick Processing

Sketch Processing




Sequence Center



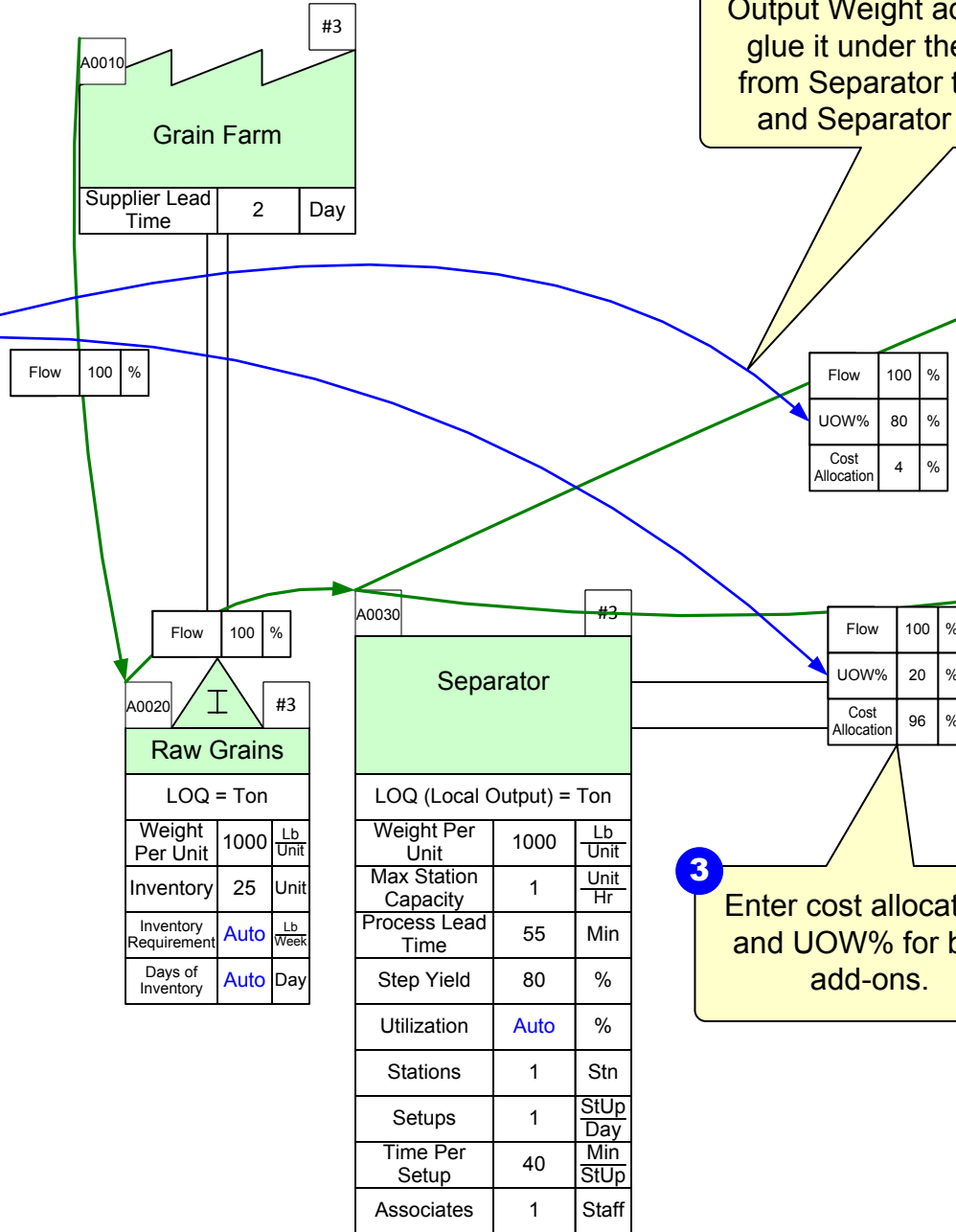
Sequence Output Weight

Week	Year	Week
5	52	75
Day	Week	Hr

**1** Click the Show Seq button on the toolbar to show the Sequence Arrows again.  Show Seq.

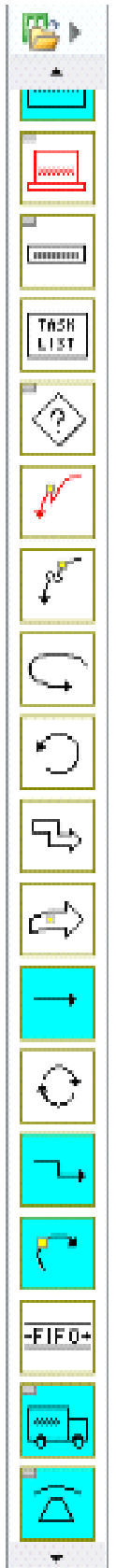
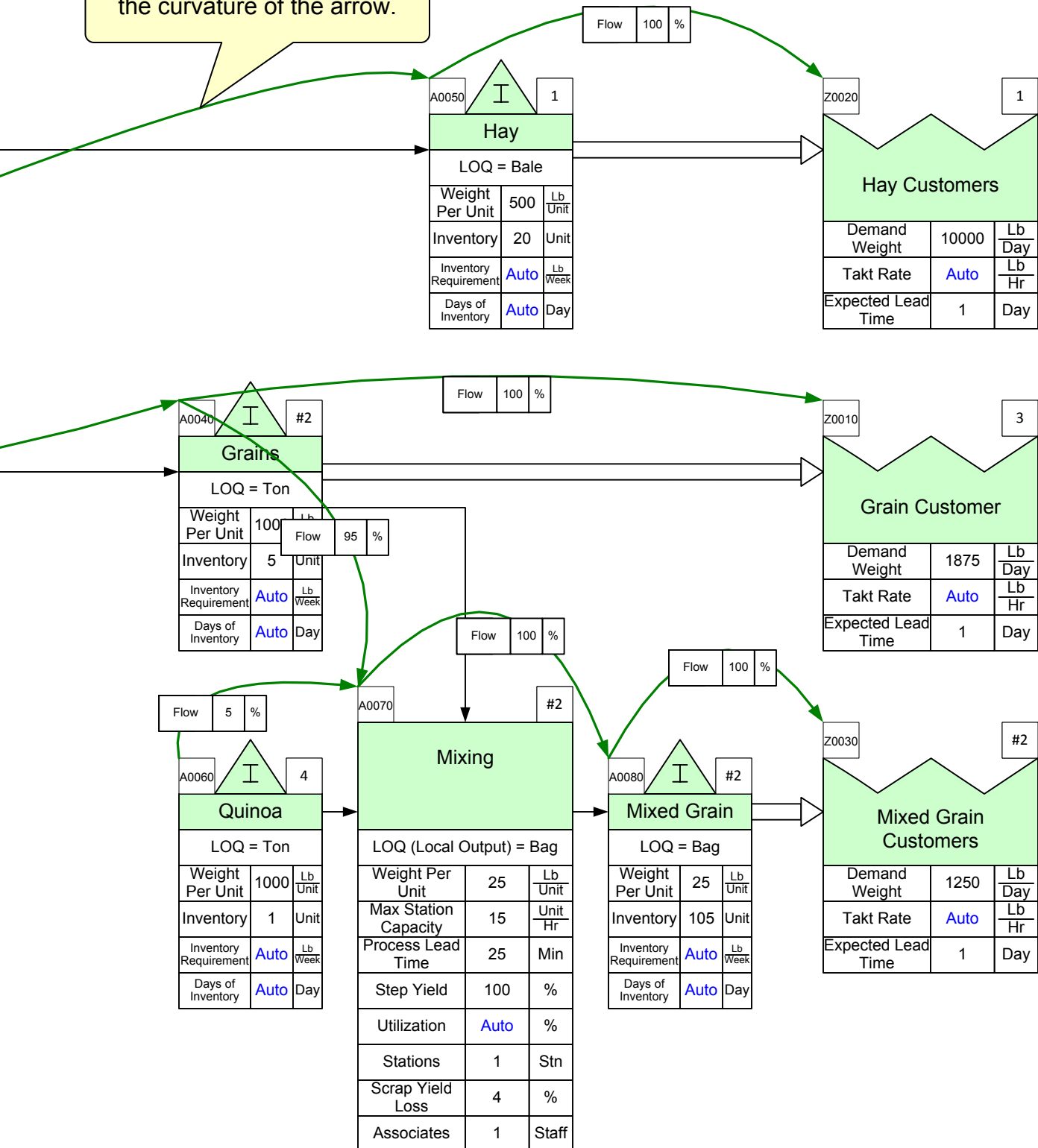
**2** Drag out a Sequence Output Weight add-on and glue it under the Flow% from Separator to Grains and Separator to Hay.

**3** Enter cost allocations and UOW% for both add-ons.

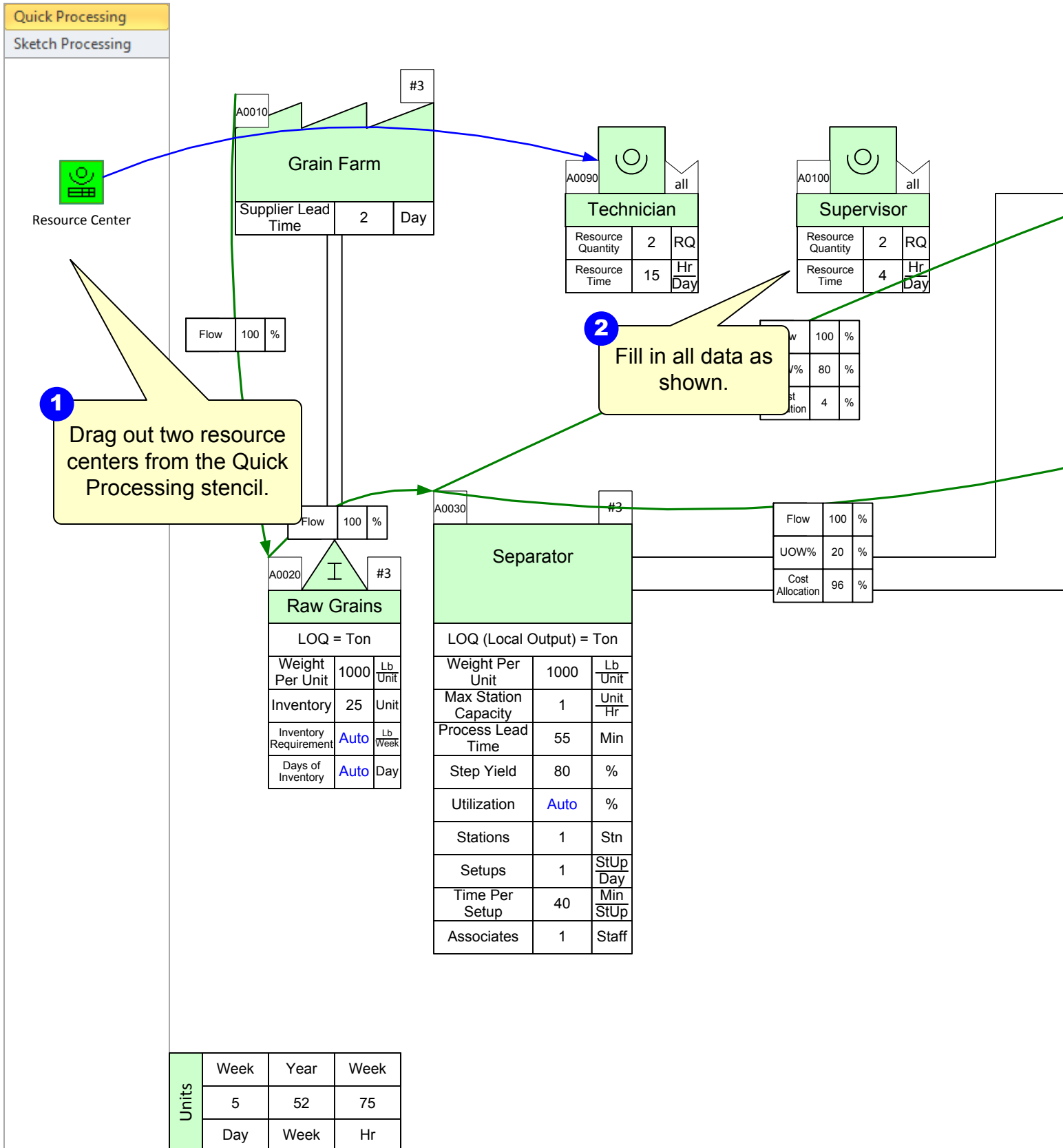


4

To tidy up, select each Sequence Arrow and use its yellow diamond to change the curvature of the arrow.



# Step 16: Add Resource Centers







# Step 17: Add Resource Pipes

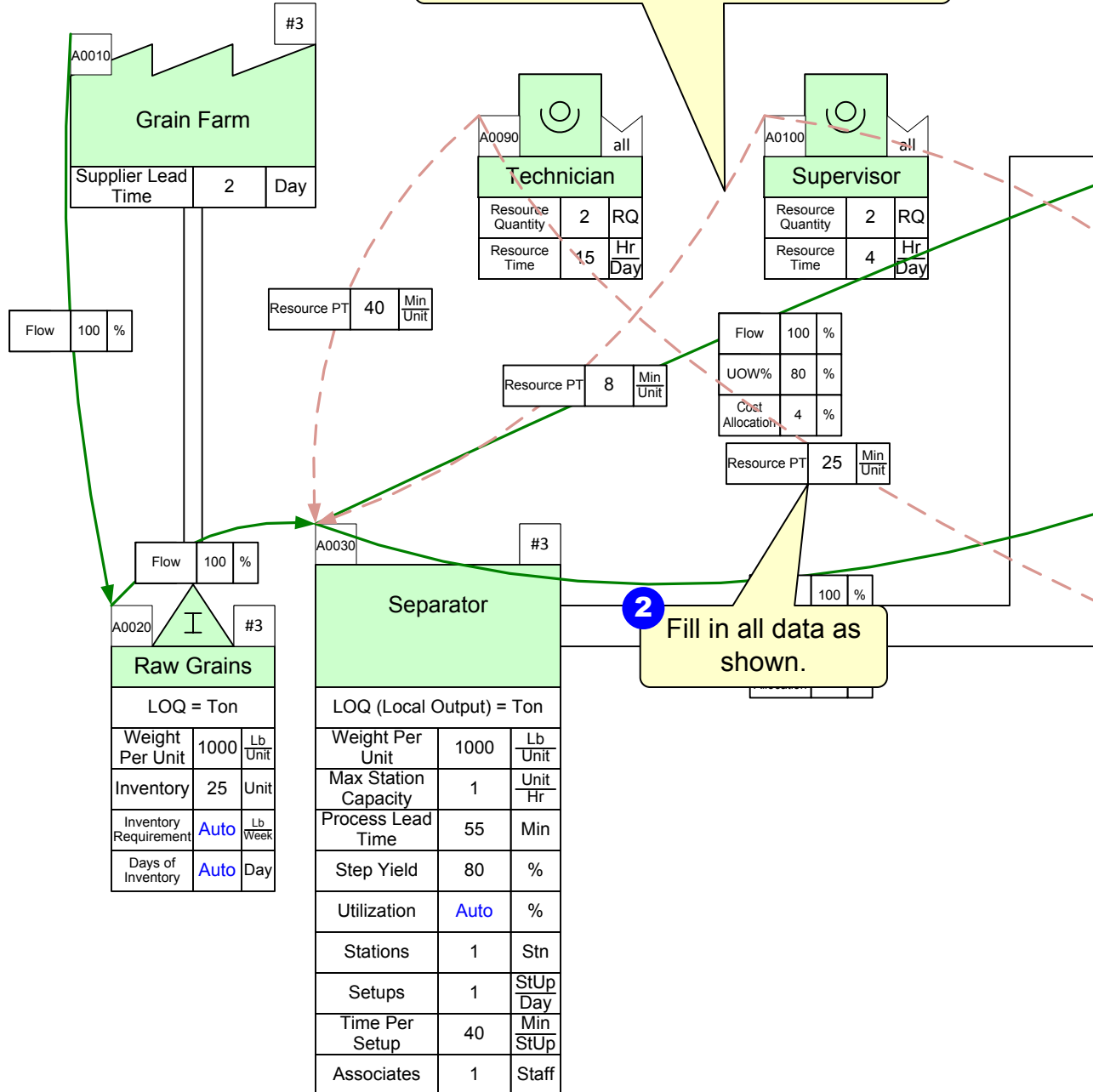
1

To add Resource Pipes, hold down the SHIFT key and select the Resource Center and then the Activity(s) that it is being piped into, then click the Auto Pipe button.

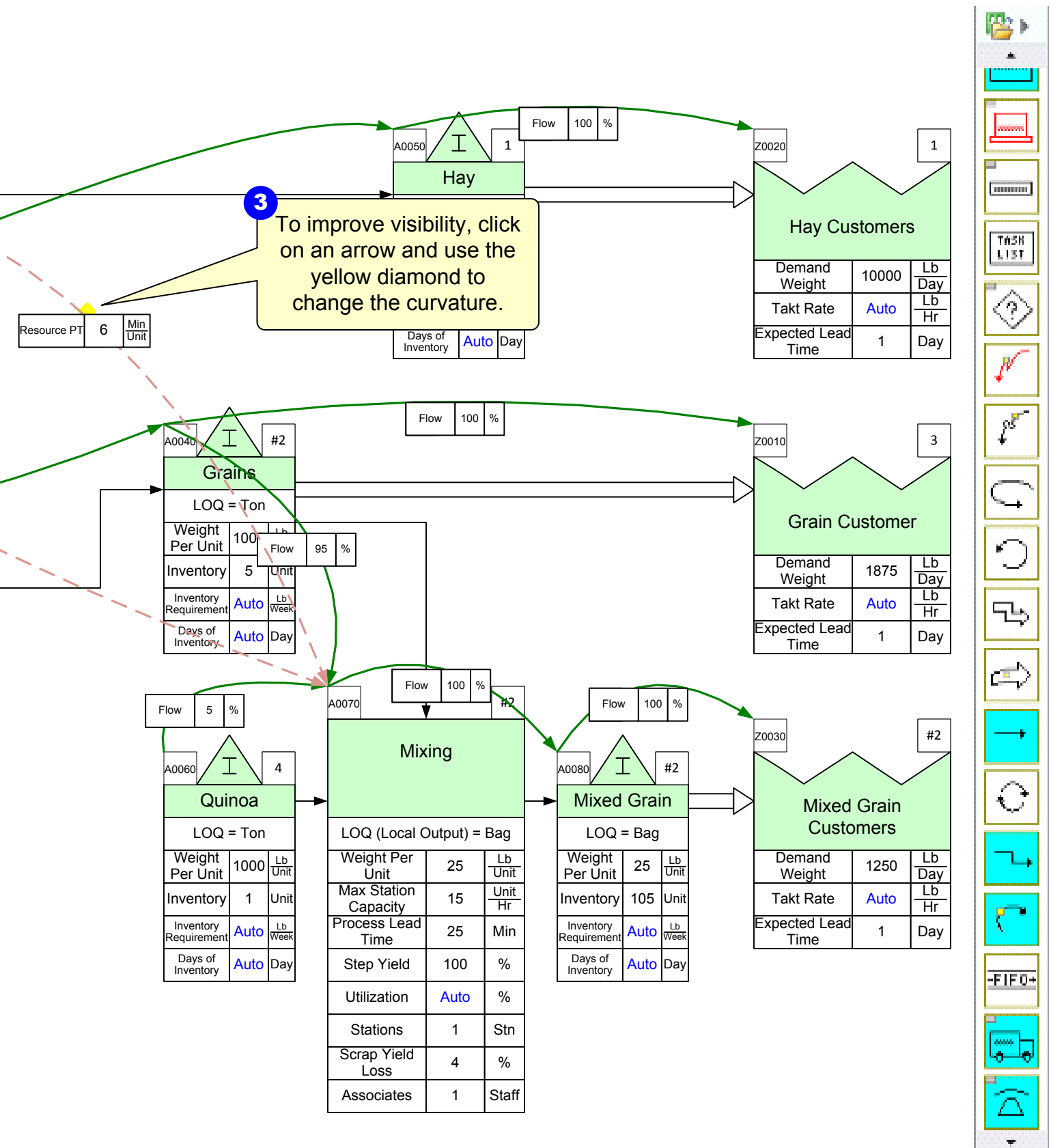


Auto Pipe

Quick Processing  
Sketch Processing

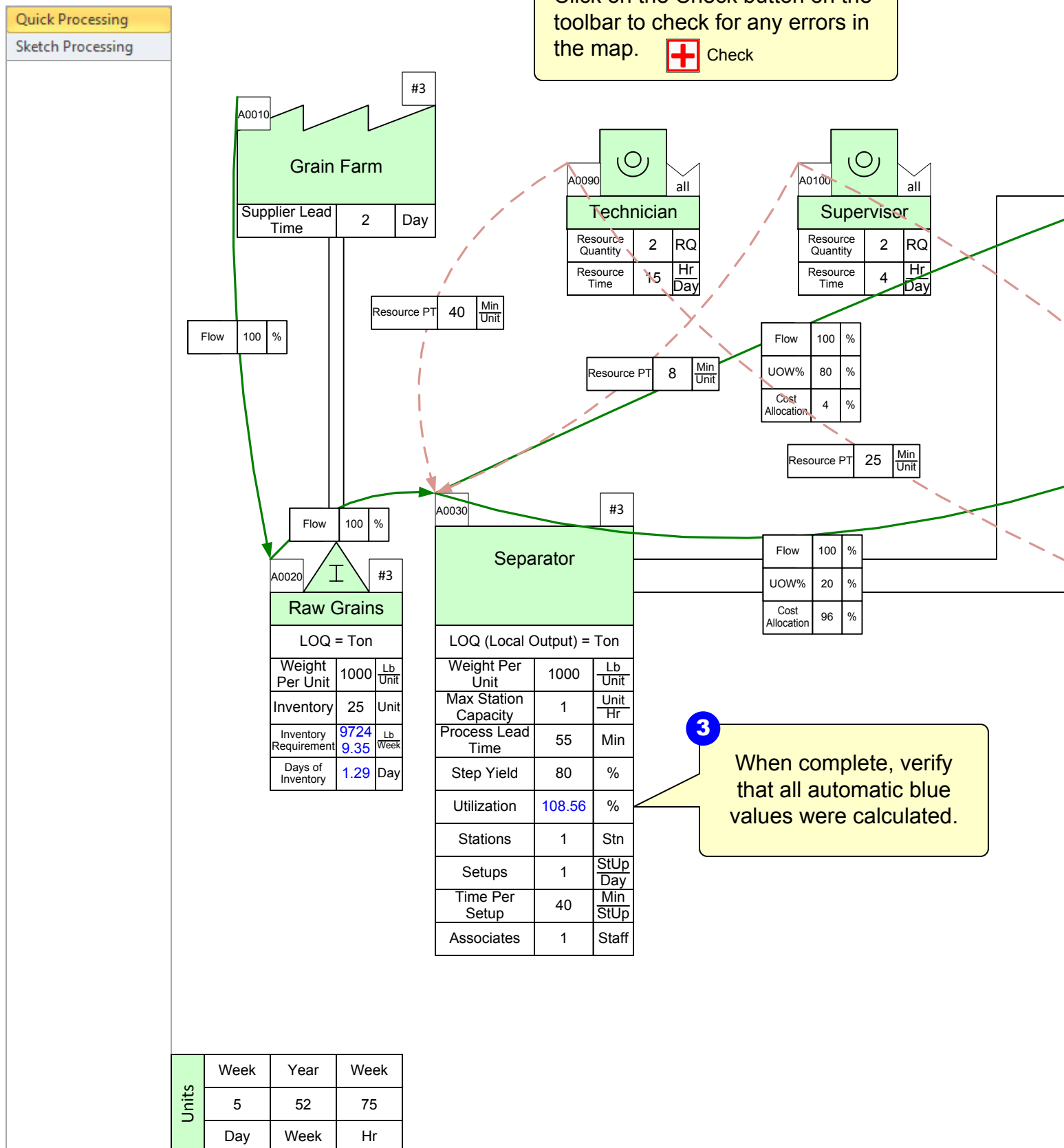


Units	Week	Year	Week
	5	52	75
	Day	Week	Hr



## Step 18: Solve the model

**1** Click on the Check button on the toolbar to check for any errors in the map.

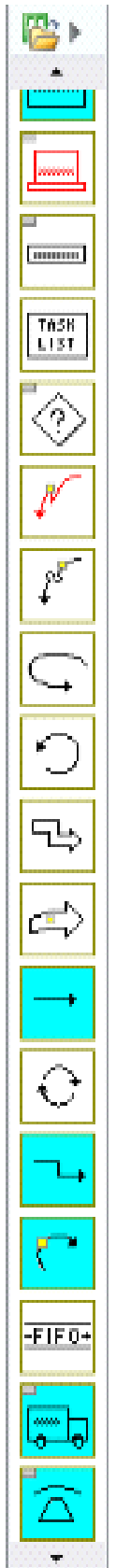
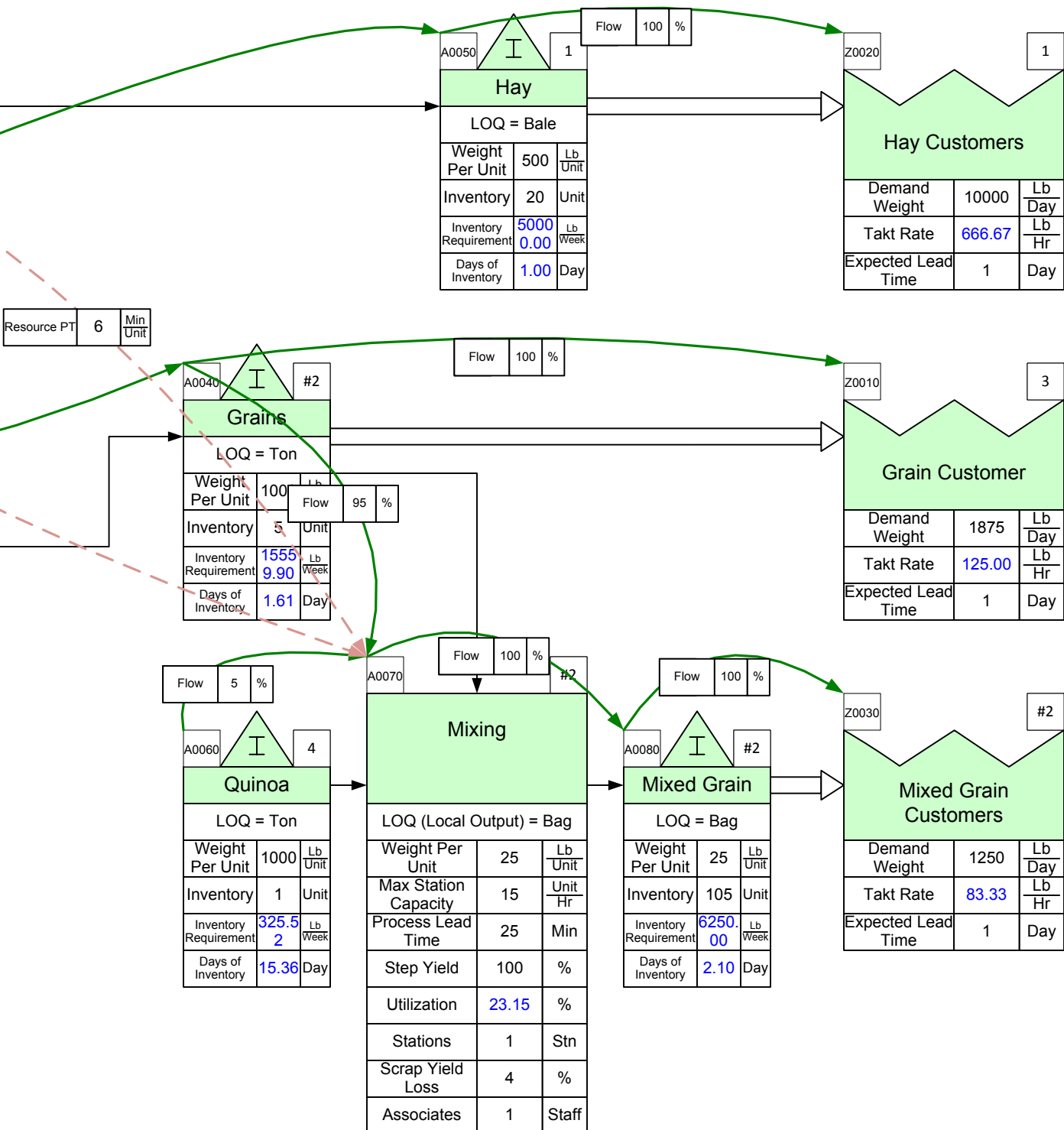


2

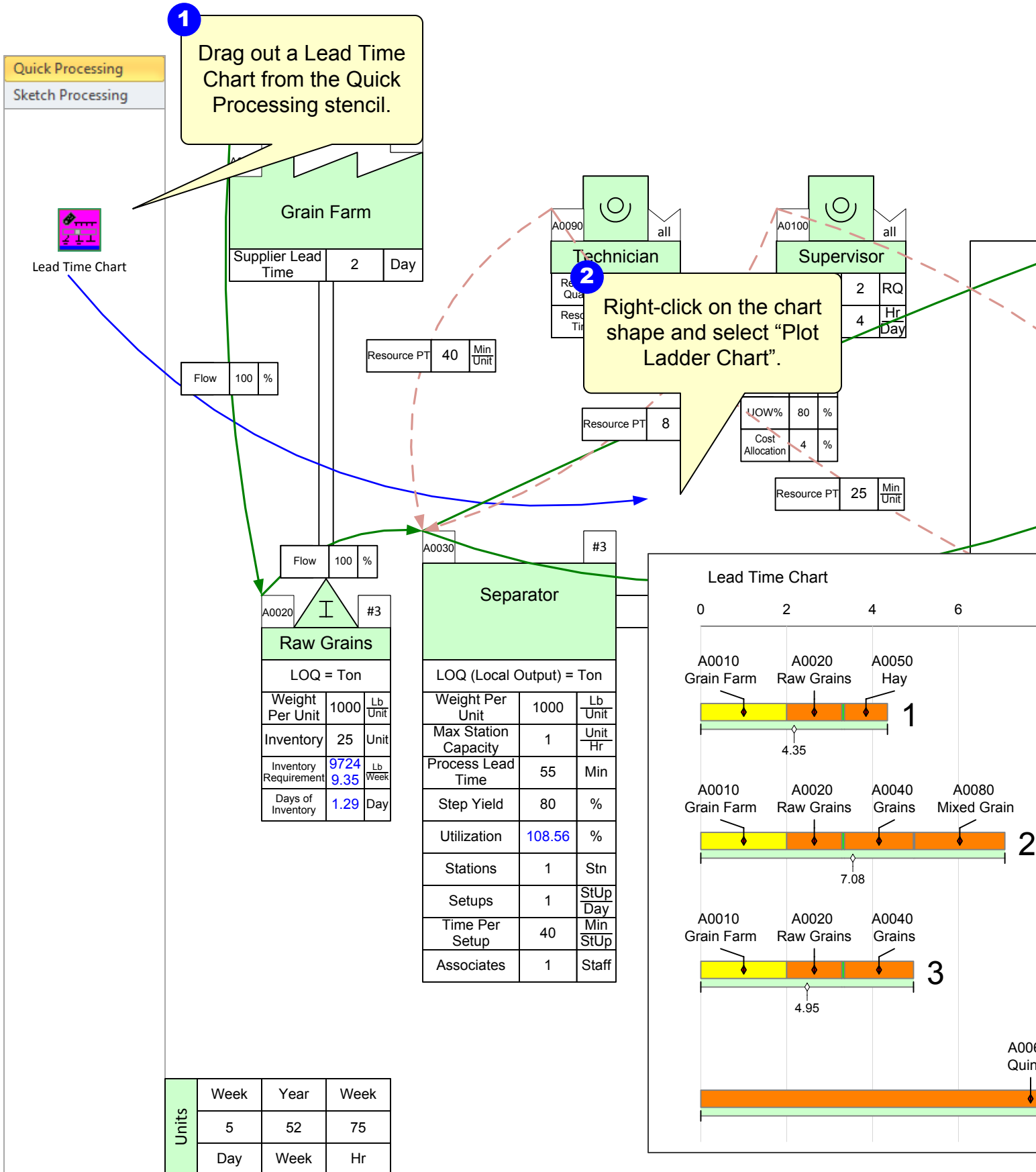
After addressing any errors, click the Solve button on the toolbar to solve the map.

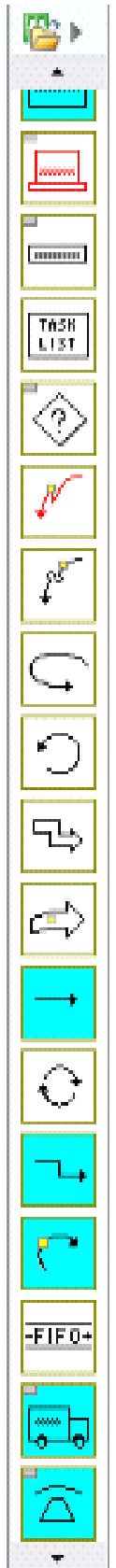
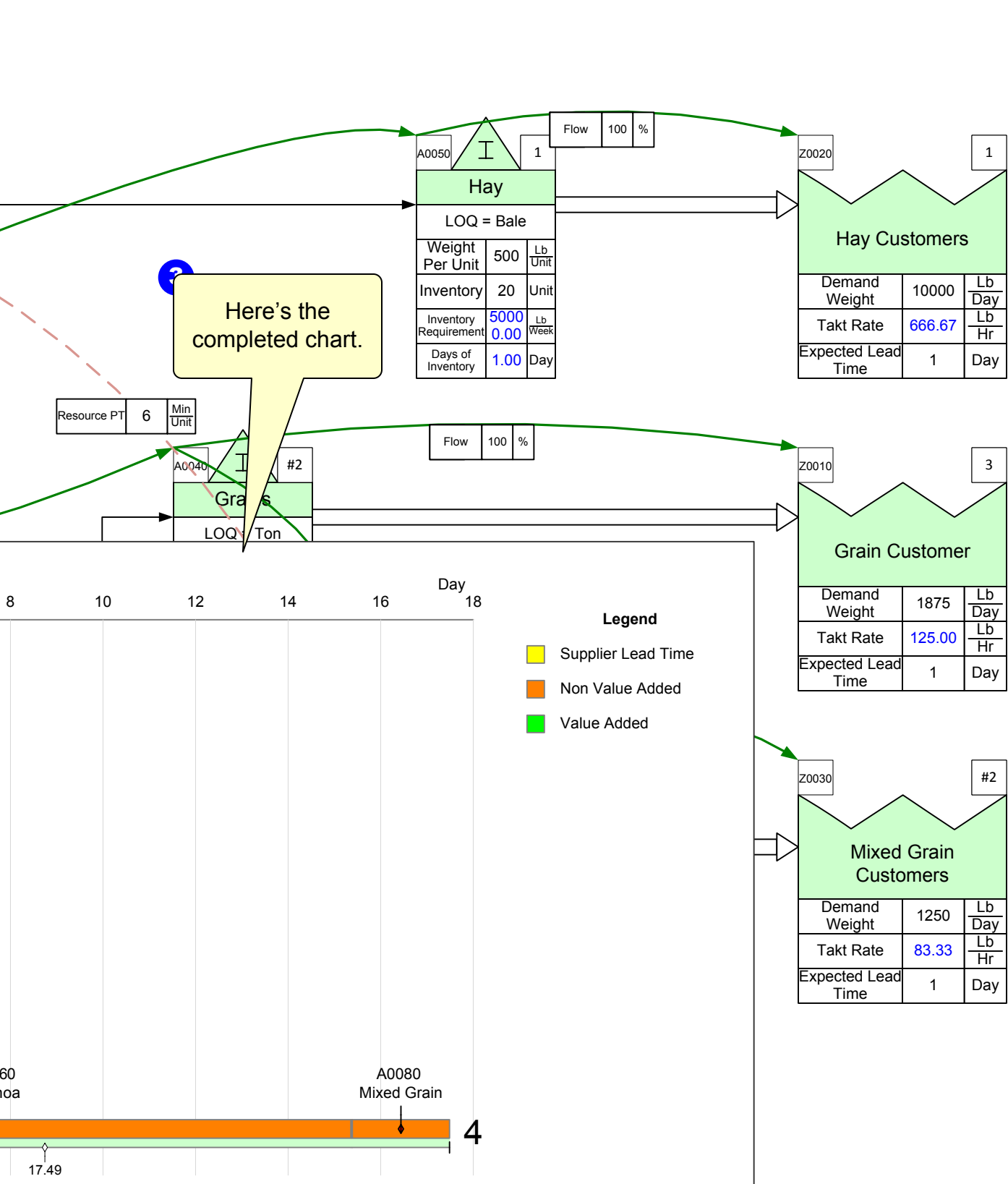


Solve

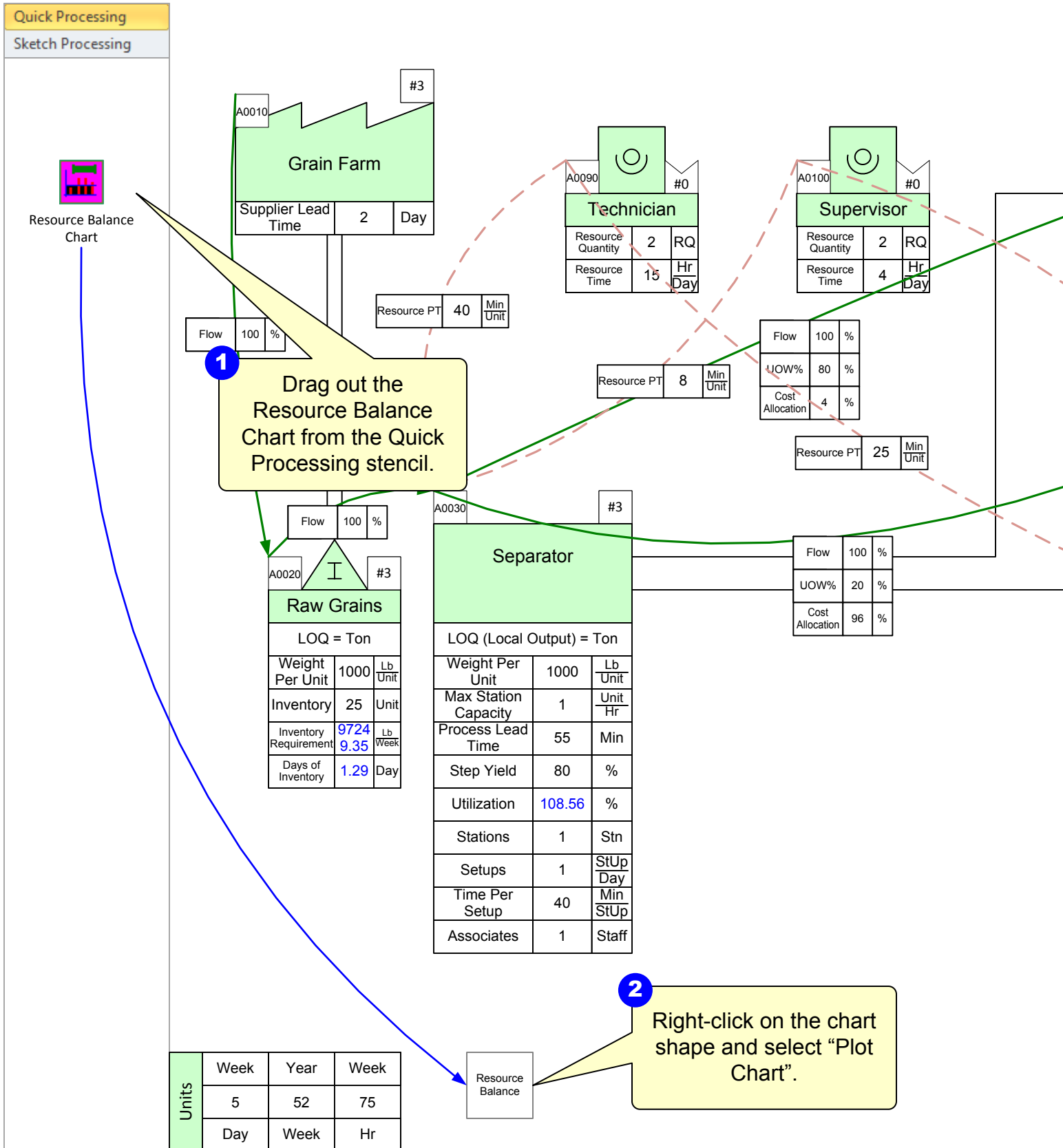


# Step 19: Add Lead Time Chart

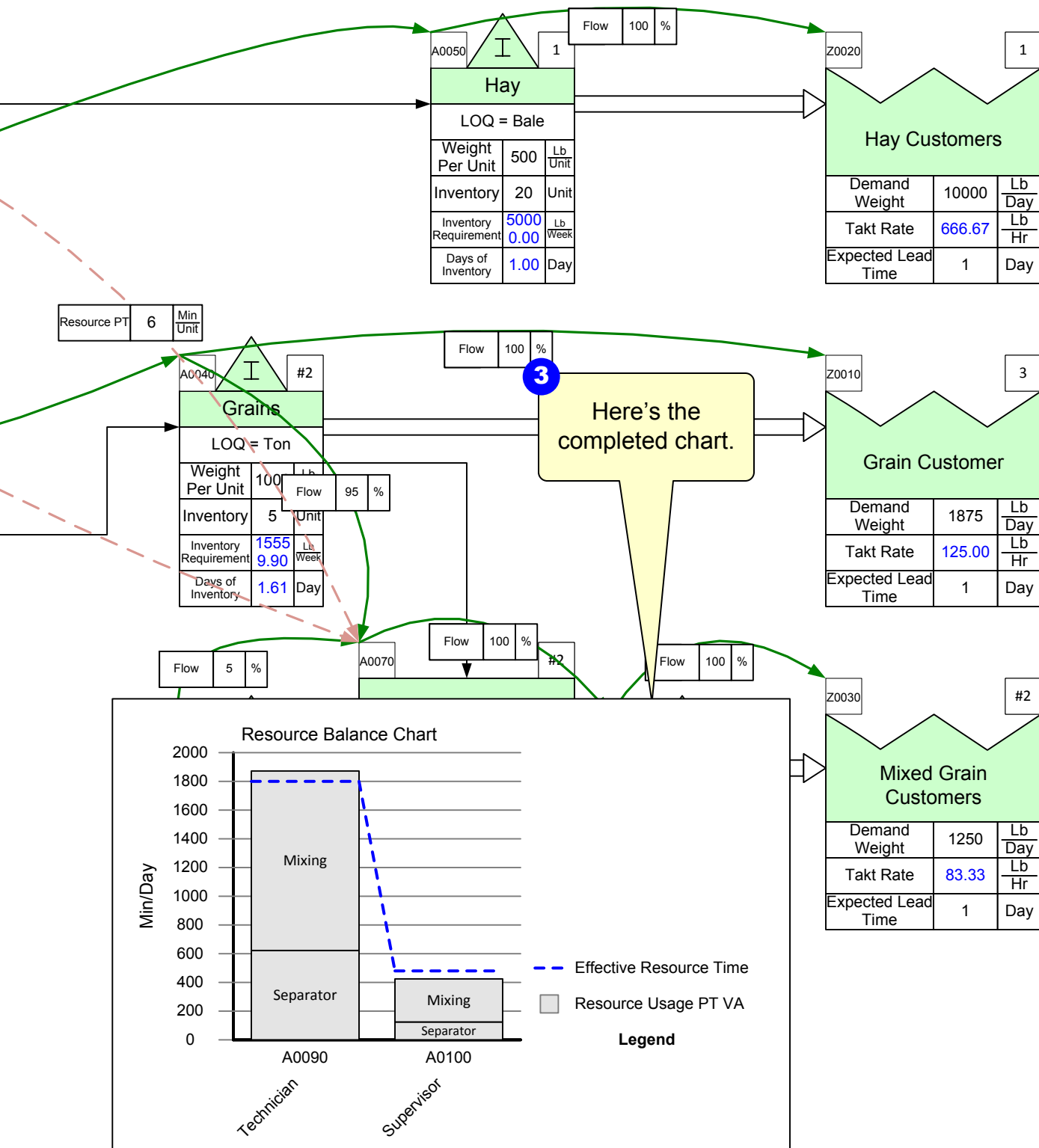




# Step 20: Add Resource Balance Chart





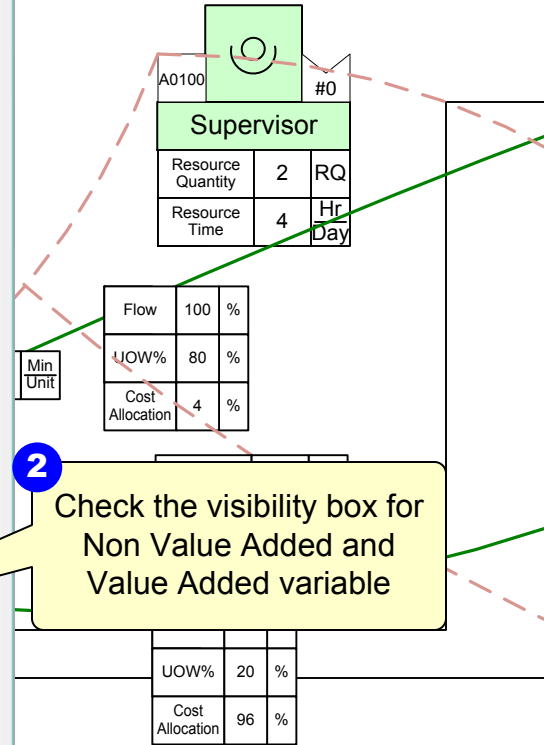


## Step 21: Making VA/NVA Timeline Visible

**Variable Visibility**

Center/Addon Name	Variable Name(s)	Visibility	Show in List Vars
		<input type="checkbox"/> All	<input checked="" type="checkbox"/> All
	Planned Setup Time	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Required Input Weight	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Step Yield Loss	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Max Station Capacity	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	OEE Availability	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Operating Time	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Process Lead Time	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Required Output Weight	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Required Unit Wt	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Stations	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Step Yield	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Utilization	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Value Added	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Weight Per Unit	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Default Variable Visibility   Hide Auto Variables   Cancel   OK



Inventory	9724	Lb
Requirement	9.35	Week
Days of Inventory	1.29	Day

Capacity		Hr
Process Lead Time	55	Min
Step Yield	80	%
Utilization	108.56	%
Stations	1	Stn
Setups	1	StUp Day
Time Per Setup	40	Min StUp
Associates	1	Staff

19.28	Hr
55.00	Min

Units	Week	Year	Week
	5	52	75
	Day	Week	Hr

**3** Once you click OK, the timeline will appear under the appropriate centers.

1

If you would like to make the VA/  
NVA timeline visible, first click the  
Views button.



Views

