

Section 27 - Area Allowables

The area allowables module allows you to isolate sections or areas of a contract for measurement and control purposes. Areas provide a location based control structure within a construction project.

Each area has an area bill that may contain main bill items, new items that provide a more detailed breakdown of a single main bill item or a combination of both.

In certain cases measurement information from the area bills can be used to update the main certificate.

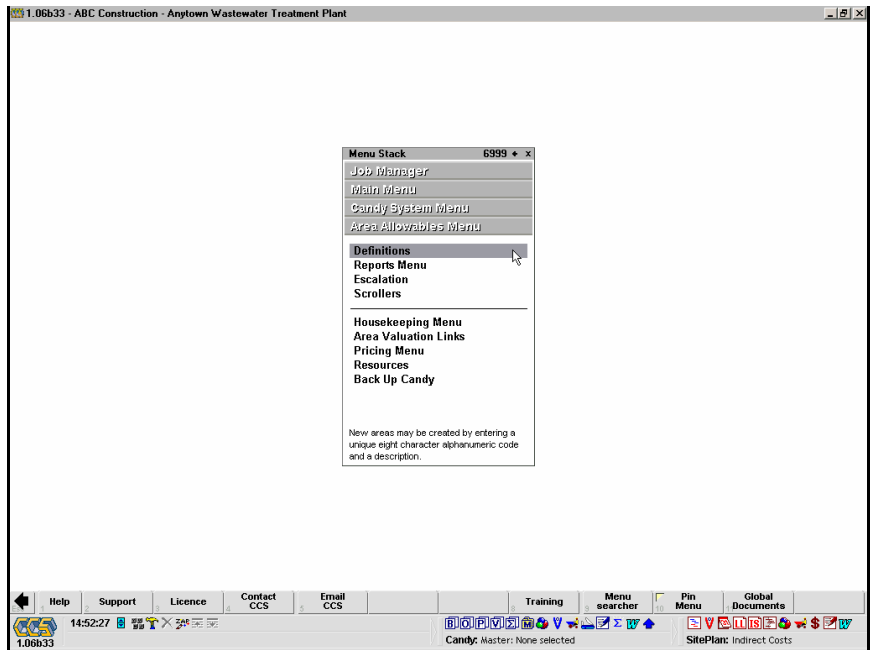
Area certificates and consolidated area certificates can be produced.

This section of the Candy manual contains the following topics:

- Defining area bills - Sheet 27.01
- Creating area bills - Sheet 27.01 to 27.04
- Area progress - Sheet 27.04 to 27.06
- Area reporting - Sheet 27.06 to 27.07

Area Allowables


From the **CCS Menu** follow the path **Candy System** to **Area Allowables** and select **Definitions**.

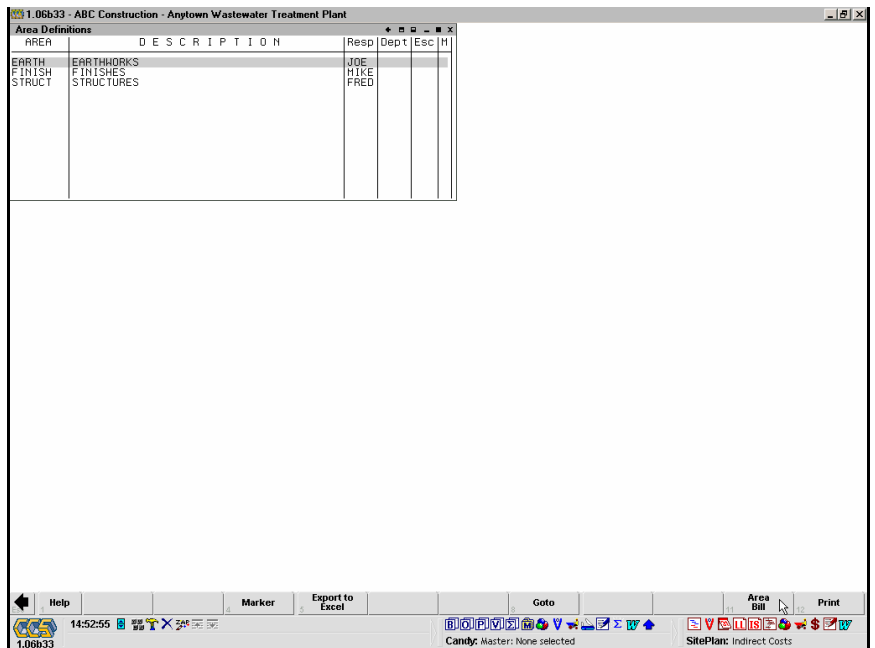


Definitions

New areas may be created by entering a unique alphanumeric code, of up to eight characters.

Resp(onsibility) codes and **Dep**(artment) codes can be assigned to areas.

Create a new area bill and use the  softkey.



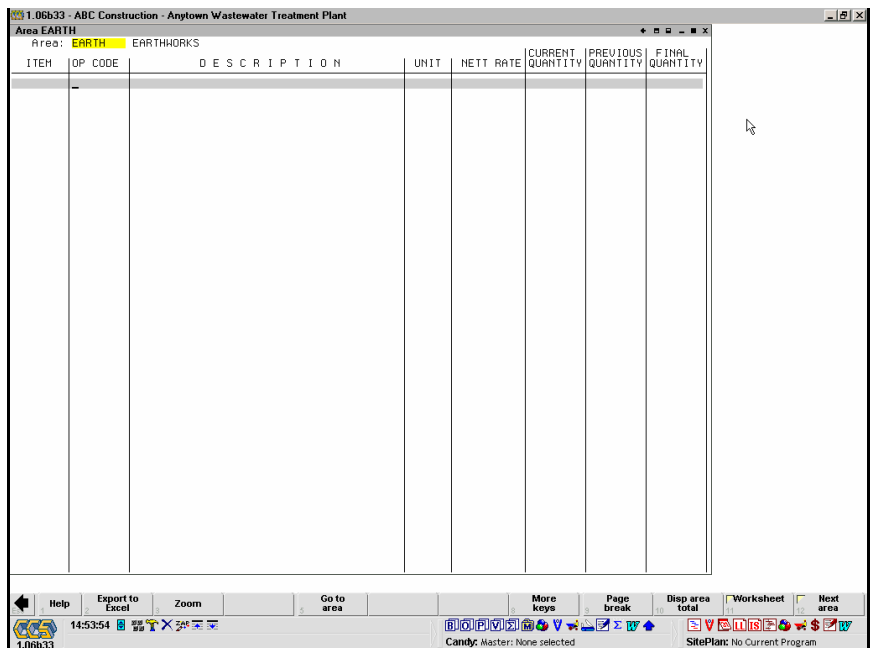
Area Bill

While the Area bills are independent of the Main or Clients bill, the Op Codes, Worksheets and Resources are common to both.

The Area Code and Description are displayed on the top left of the document.

The layout of the Area bill is taken from the top entry of the **Area Scroller**.

*Note: Refer to **Candy Manual Section 7 - Scrollers** for more information about setting up user defined area bill layouts.*



Creating Area Bills

The area bill can be compiled by entering Op Codes.

The Op Codes used may already exist, together with their worksheets, or new Op Codes may be introduced and resources allocated to them in the normal manner.

Op Codes may also be copied onto an area bill, either from the Current Job bill or the Master Job bill, by the following methods. Refer to the following sheets in **Candy Manual Section 2 - Bill Creation** for further information.

- **Recall stack** - Sheets 2.04 to 2.05.
- **Drag and drop** - Sheets 2.05 to 2.06
- **Alternate documents** - Sheet 2.06

ITEM	OP CODE	DESCRIPTION	UNIT	NETT RATE	CURRENT QUANTITY	PREVIOUS QUANTITY	FINAL QUANTITY
A	E101	Dig big hole	M3		0	0	0

Controlling Lump Sum Items

Area bills could be introduced where a single bill item, such as a lump sum for sliding, needs to be broken down into further items to allow perhaps measurement and payment for a subcontractor.

Since the system does not provide for an item for item relationship, the measurements cannot update the main certificate. Since only one item is involved, it is simply a matter of entering the required percentage in the main bill to achieve the value reflected by the area certificate.

ITEM	OP CODE	DESCRIPTION	UNIT	NETT RATE	CURRENT QUANTITY	PREVIOUS QUANTITY	FINAL QUANTITY
	*SECT2	SECTION 2: VENTILATION SHAFT	LEVEL		1		
	*SCH11	SCHEDULE NO. 1: FAN FOUNDATION	LEVEL		2		
	*E	EARTHWORKS	LEVEL		3		
A	E1133	Clear and strip site	M2	1.85	0	0	0
B	E20021	Excavate in bulk, Class A material and dispose within 2km freehaul distance	M3	16.87	0	0	0
C	E42111	Excavation in foundations no 2m deep	M3	14.17	0	0	0
D	E52003	Excavate for working space in Class A material and backfill and compact to 95% mod. AASHTO.	M3	12.37	0	0	0
E	9E30013	Excavate in class A material for trenches and use for backfill, compact, and dispose of surplus material	M3	34.15	0	0	0
F	E603	Extra over all excavations in Class A material for Class B material	M3	115.77	0	0	0
G	E02245	Filling under floors and around foundations in layers of 150mm, compacted to 95% mod AASHTO	M3	16.29	0	0	0
H	E670	Overhaul	M3.km	0.80	0	0	0
I	E8110	Dewatering of excavations	SUM	0	0	0	0
J	E670a	Stockpile excavated material on site	M3.km	0.20	0	0	0
	*SECT3	SECTION 3: SUBSTATION AND YARD	LEVEL		1		
	*SCH21	SCHEDULE NO. 1: SUBSTATION	LEVEL		2		
	*E	EARTHWORKS	LEVEL		3		
A	E1133a	Clear and strip site	M2	1.85	0	0	0
B	9E30013a	Excavate in class A material for trenches and use for backfill, compact, and dispose of surplus material	M3	34.15	0	0	0
C	E42111a	Excavation in foundations no 2m deep	M3	14.17	0	0	0
D	E603a	Extra over all excavations in Class A	M3	115.77	0	0	0

Consolidated Client's Bill

An example of this may be an industrial complex consisting of three factories where the main bill has **Not** been separated into the different structures.

These area bills can be produced by copying the main bill into the area.

Create a new area on the **Area Definitions** document as you did previously.

From the **CCS Menu** follow the path **Candy System to Area Allowables to Housekeeping** and select **Copy Bill to Area**.

AREA	DESCRIPTION	Resp	Dept	Esc	H
FACT1	FACTORY ONE	MIKE			



Creating Area Bills

A selector is displayed with various options :

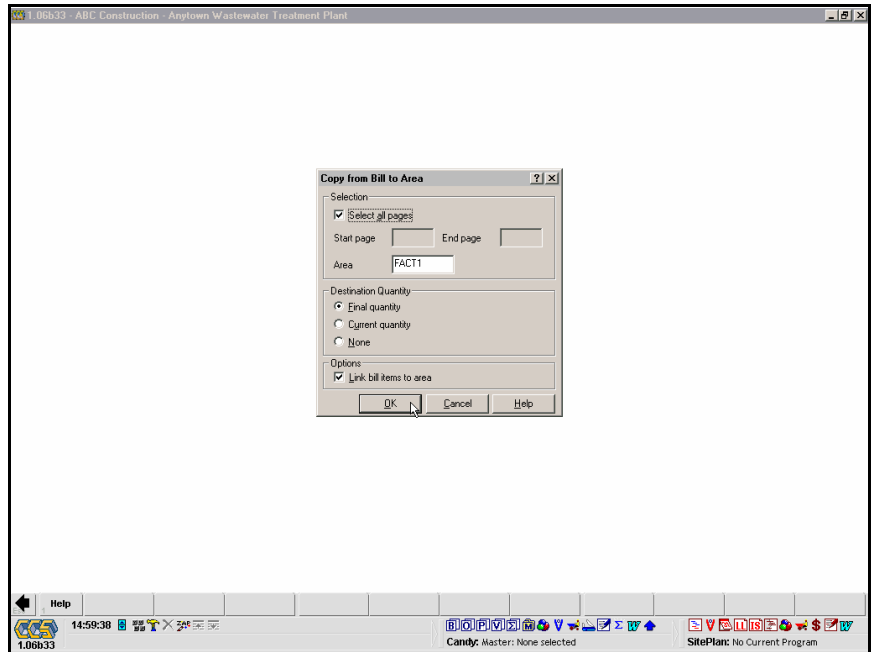
Selection

- **Page range** - Specify which Consolidated or Main bill pages must be copied into the area.
- **Area** – Enter the area code to which the pages must be copied.

Destination Quantity - The Billed quantity can be copied into the area bill's Final or Current Quantity Column, or not copied at all.

Link Bill Items To Area - Select this option to ensure that the **Same** page references to the main bill are introduced into the area.

Select the required options and use the **OK** button to continue.

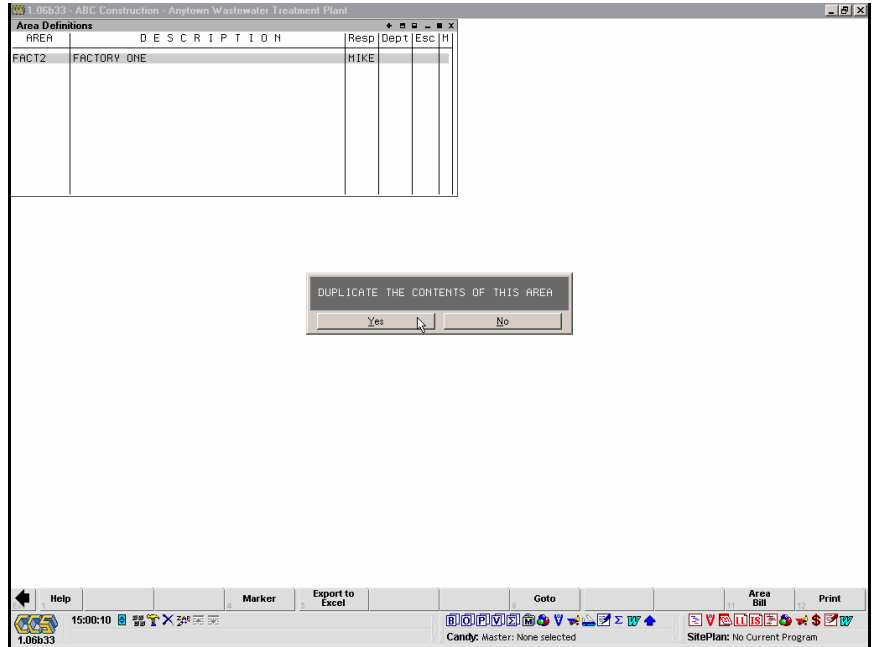


Further area bills can then be introduced by copying the first area.

On the Area Definitions document, overtype an existing area code with another code and use Enter.

A message is displayed which confirms what you are about to do.

Use the **Yes** button to continue.



Area **Fact1** has been copied to area **Fact2** on the area definitions list.

The Final Quantity within each of the areas would need to be adjusted to reflect each area's Final Quantity.

AREA	D E S C R I P T I O N	Resp	Dept	Esc	H
FACT1	FACTORY ONE	HIKE			
FACT2	FACTORY ONE	HIKE			

Separate Section Areas

Different sections of the main bill are copied to the areas, and parts of these sections are common in various areas. In this example, common items result from pages 5 and 6.

Updates to certificates need to be examined in terms of the **First** occurrence of the **Op Code** in order to appreciate how quantities are accumulated.

Case 1 - Op Code (E100) occurs on page 2 and again on page 7. In area bill 1 E100 = 100m³, and in area bill 2, E100 = 50m³. After updating, the main bill shows E100 = 100m³ (page 2) and E100 = 50 m³ (page 7)

Case 2 - Op Code (E100) occurs on page 5 and again on page 6. In area bill 1 E100 = 100m³, and in area bill 2, E100 = 50m³. After updating, only the first E100 (i.e. on page 5) in the main bill has 150m³, the second (on page 6) has E100 = 0.

Case 3 - Op Code (E100) occurs only on page 6. In area bill 1, E100 = 100m³, and in area bill 2, E100 = 50m³. After updating E100 in the main bill has 150m³.

Case 4 - Op Code (E100) occurs only on page 8. In area bill 1, E100 has manually been inserted and the quantity calculated as E100 = 100m³, and in area bill 2, E100 = 50m³. After updating E100 in the main bill has a quantity of 50m³.

Note: An error report advises that 100m³ has not been allocated.

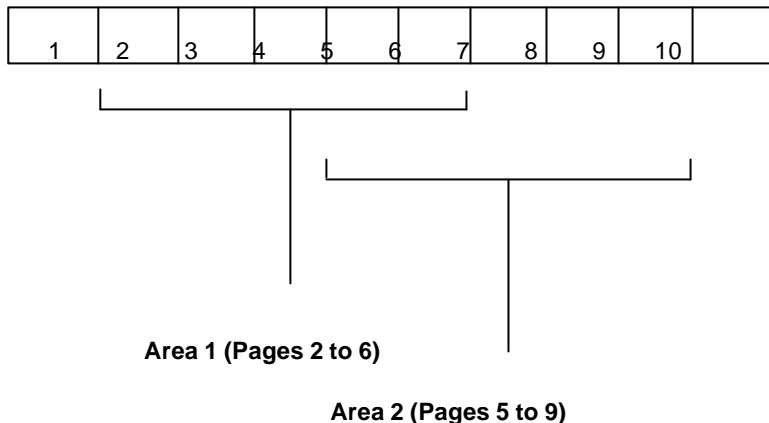
Area Progress

Progress can be entered in the **Current Quantity** column in the area bill.

The **Final Quantity** can also be adjusted.

Note: Once having completed the areas progress quantities, no problems would be encountered with an update of the main bill quantities, unless new items had been inserted in any of the area bills.

Main Bill Pages




ITEM	OP CODE	DESCRIPTION	UNIT	NETT RATE	CURRENT QUANTITY	PREVIOUS QUANTITY	FINAL QUANTITY
	XC	CONCRETE, FORMWORK & REINFORCING	LEVEL		3		
	XC1	CONCRETE	LEVEL		4		
K	C2212	C10 Concrete in blinding 50mm thick	m2	16.59	100	0	169.5
L	C341	C20 Concrete in foundations	m3	244.51	0	0	195
M	C3520	C25 Concrete in walls	m3	266.66	0	0	31.5
N	C3500	C25 Concrete in ground slabs	m3	252.95	0	0	10.5
D	C950	Wood float finish	m2	6.45	0	0	136.5
	XF	FORMWORK	LEVEL		4		
A	F2154	Vertical formwork to sides of foundations	m2	51.35	0	0	331.5
B	F2200	Vertical formwork to walls	m2	42.67	0	0	177
C	F243	Formwork to sides and soffits of beams	m2	75.74	0	0	15
D	F7301	Formwork not exceeding 150mm high	m	29.85	0	0	3
	XR	REINFORCEMENT	LEVEL		4		
E	R240	16mm dia. HTS reinforcement	t	1,179.02	0	0	11.46
F	R228	E/O 16mm HTS for bars of dia 16mm	t	204.17	0	0	2.46
G	R268	E/O 16mm HTS for bars of dia 25mm	t	-102.09	0	0	9
H	R3150	Welded Mesh reinforcement Ref 395	m2	11.38	0	0	40.5
	XH2	H.D. BOLTS AND MISCELLANEOUS METALWORK	LEVEL		4		
	XH21	Supply, place and cast into position, hot dip galvanised H.D. bolts	LEVEL		0		
I	M24636	M20 HD bolts in lengths ex. 750mm and and ne 1000mm overall length	No.	52.98	0	0	48
J	M24656	M30 HD bolts in lengths ex. 1250mm and ne 1500mm overall length	kg	15.25	0	0	9.66
	XH22	The following in galvanised mild steel	LEVEL		0		
K	M4422	6mm thick chequer plate duct covers cut	m2	260.42	0	0	16.5

Progressing Area By Percentages

Areas may be progressed on a percentage basis.

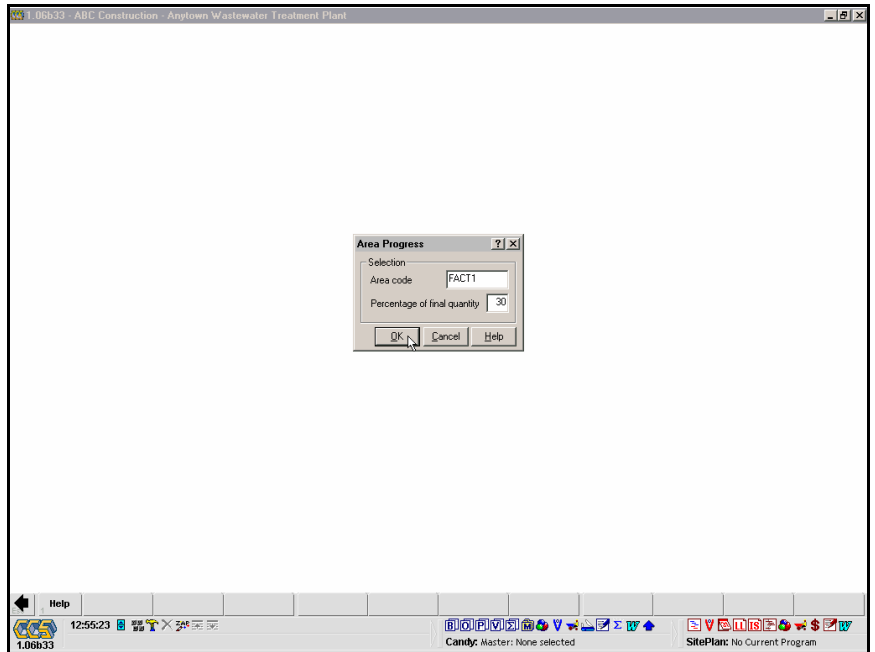
From the **Area Allowables Housekeeping** menu select **Percentage Current Qty Update**.

A selector is displayed on which you may specify the **Area Code** and the **% of Final Quantity**.

Enter the required data and use the  button.

Note: This calculates the Current Quantity, rounded to one decimal place, by taking a percentage of the areas Final Quantity.

The selector is not a sieve and only one area can be updated at a time.



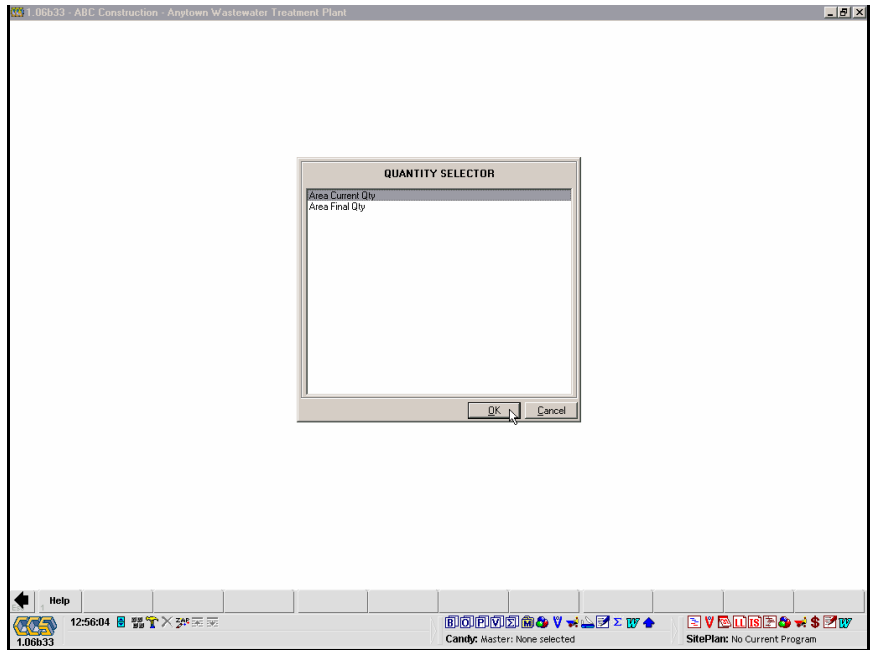
Consolidated Bill Update

Once the progress has been entered in the areas, the main bill's progress can be updated from the areas.

From the **CCS Menu** follow the path **Candy System** to **Area Allowables** to **Area Valuation Links** and select **Area To Valuation Update**.

A Quantity Selector is displayed, on which you may select the **Area Quantity** that you wish to use to update the main bill.

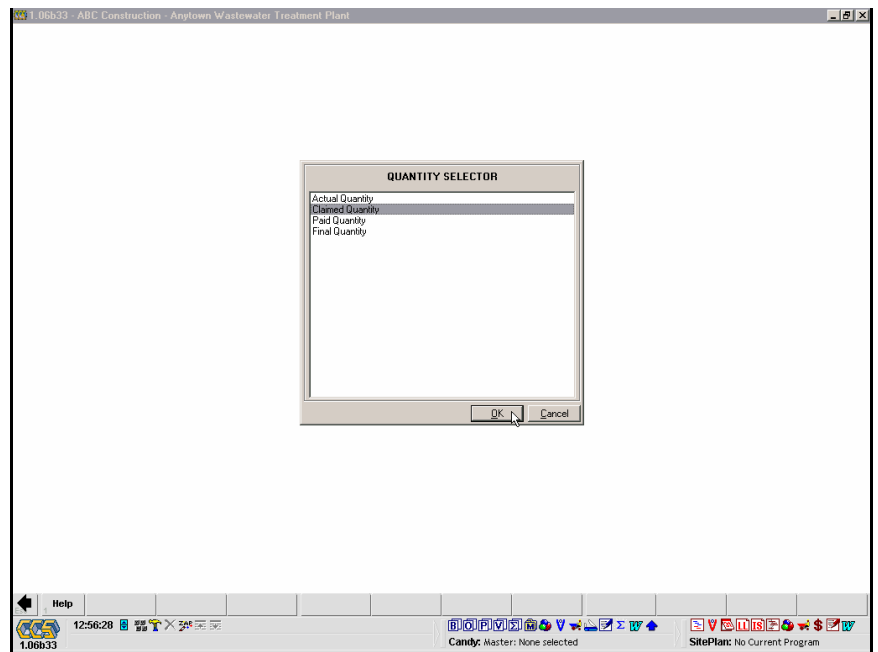
Use the  button to continue.



A further Quantity Selector is displayed, on which you may select the **Main Bill Quantity** that you wish to update from the area bill.

Use the button to continue.

Note: A number of link check reports can be printed to identify items introduced into an area bill, not yet in the main bill.




Next Valuation

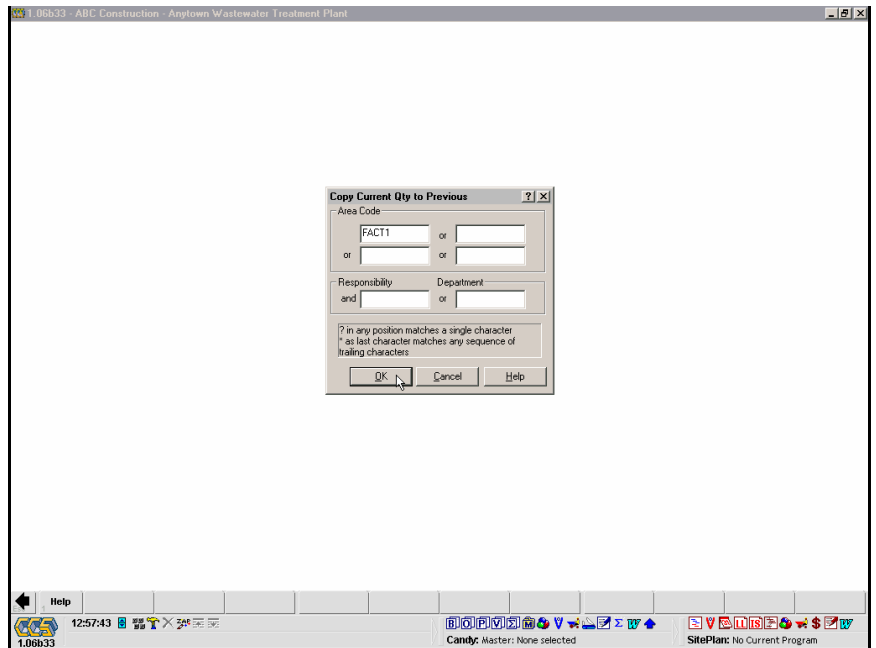
When entering the next payment period, the **Current Qty** in the area bills must be transferred to the **Previous Qty**.

From the **Area Allowables Housekeeping** menu select **Copy Current To Previous Qty**.

A selector is displayed on which you can enter specific area codes.

Areas can be Progressed individually, or leaving the sieve blank copies the **Current Qty** to the **Previous Qty** for all the areas.

Enter the required data and use the  button to continue.

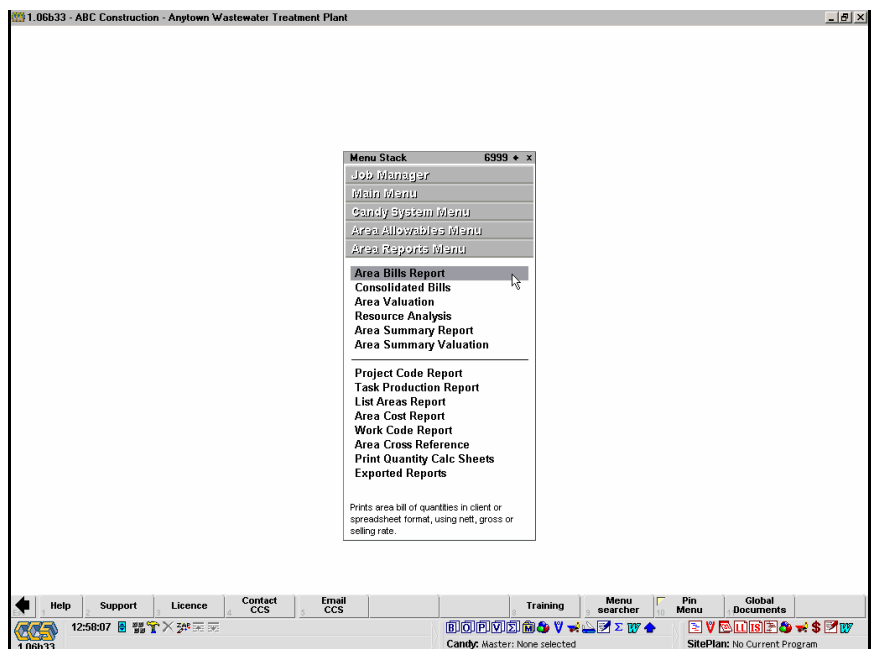


Area Reporting

A comprehensive set of reports is available from the system.

From the **CCS Menu** follow the path **Candy System** to **Area Allowables** to **Reports**.

- **Area Bills Report** - Prints area bill of quantities in client or spreadsheet format, using **Nett**, **Gross** or **Selling** rate. Options to omit **Zero Qty** items or print a **Summary** page.
- **Consolidated Bills** - Prints spreadsheet bill analysis of items in **All** areas, using both **Progress** and **Final Qty**. Options to select by **Trade** or print a **Summary** page.



- **Area Valuation** - Prints certificate in **Building** format. Optional use of **Nett**, **Gross** or **Selling**, **Current** or **Final Qty**, **Summary** page, **Omit Zero Qty**.
- **Resource Analysis** - Prints detailed resource analysis, using **Progress Qty**, **Final** or **Qty To Completion**. Optional **Levels**, **Trades**.
- **Area Summary Report** - Lists total nett value based on **Progress Qty** and **Final Qty** in spreadsheet format.
- **Area Summary Valuation** - Lists one line certificate total for each area. Optional by **Gross** or **Fixed Selling**.
- **Project Code Report** - This report analyses and prints bill items for a selected area sorted and/or summarised into project codes. Refer to **Candy Manual Section 15 - Operational Costing** for more information about Project Codes.
- **Task Production Report** - This report analyses and prints production rates for a selected area, for selected task codes. Refer to **Candy Manual Section 24 - Production Rates** for more information about Production Rates.
- **List Areas Report** - Listing of the area definition document.
- **Area Cost Report** - Resource **Type** analysis by **Work Code** using both **Progress Qty** and **Final Qty**.
- **Work Code Report** - Spreadsheet format analysis by selected **Work Codes** using only **Progress Qty**.
- **Area Cross Reference** - Lists for all areas, **Area** and **Page No** for each **Op Code** used in that area.
- **Print Quantity Calculation Sheets** - This report prints **Quantity Calculation Sheets** that have been used against items on selected areas.

Area Bill Report Selector

From the **Reports** menu select **Area Bills Report**.

Most of the reports available in the **Area Reports Menu** are preceded by a selector, on which various options are available for a specific report.

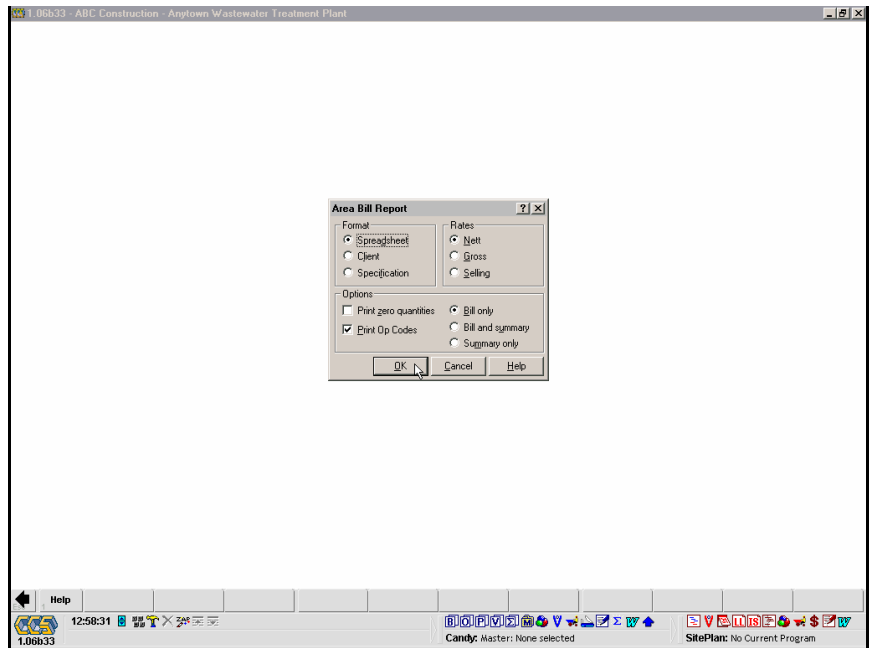
In this example, the following options are available for an **Area Bill Report** :

Format - Spreadsheet or **Client** format prints bill with or without a **Resource Type** split.

Rates - The report can be based on **Nett**, **Gross** or **Selling** rates.

Options :

- **Print zero quantities** - Select this option to include items with a zero quantity.
- **Print Op Codes** - Select this option to print the Op Code for each item.
- **Bill only** - Select this option to print only bill items.
- **Bill and summary** - Select this option to print bill items and a section summary.
- **Summary only** - Select this option to print a section summary only.



Area Sieves

All the reports available in the **Area Reports Menu** are preceded by a sieving mechanism that enables information to be extracted according to the coding systems used.

Data is only printed and totalled if it passes the sieve by virtue of its codes matching those specified in the sieve or that portion of the sieve being blank.

The **Or** implies that a match in any of those blocks permits a pass, whereas **And** requires a further match to be obtained before a pass is achieved.

So, for example, if an **Area Code** does not comply with the characters specified in top 2 blocks but matches those in the third block it passes, provided it matches either of the last two blocks if they are not blank. Everything passes a blank sieve.

Generally, codes should contain the same number of characters.

