

Water Services National Training Group

Grúpa Traenála Náisiúnta na Seirbhísí Uisce



Water Services Projects

PROJECT CONTROL SYSTEM (PCS) Training Manual

Version 1.0

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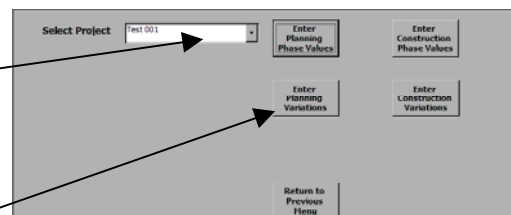
Introduction

The system is based on the Microsoft Access 2000 database. It is intended that the system will provide high level reporting on all Water Service Projects.

It is not intended that the system replace any of the current systems or procedures, but that it sits along side them to provide a consistent overview across all projects.

System Navigation

The system is navigated via a number of control panels that have drop down menu's for selecting project numbers and project phases.

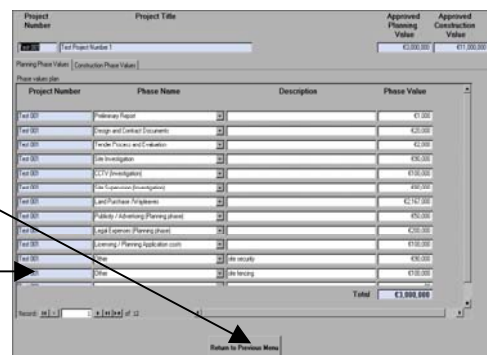


A screenshot of a control panel interface. It features a 'Select Project' dropdown menu with 'Test 001' selected. To the right are four buttons: 'Enter Planning Phase Values', 'Enter Construction Phase Values', 'Enter Planning Variations', and 'Enter Construction Variations'. At the bottom center is a 'Return to Previous Menu' button. Arrows from the text above point to the 'Enter Planning Phase Values' and 'Enter Planning Variations' buttons.

There are also selection buttons to carry out pre defined tasks.

On all screens there is a button to return you to the previous screen.

Any fields coloured blue are locked and do not allow data entry; these fields are automatically populated by the system.



A screenshot of a data entry screen. At the top, there are fields for 'Project Number' (Test 001) and 'Project Title' (Test Project 1). To the right are 'Approved Planning Value' (43,000.00) and 'Approved Construction Value' (477,000.00). Below these are tabs for 'Planning Phase Values' and 'Construction Phase Values'. The main area is a table with the following data:

Project Number	Phase Name	Description	Phase Value	
Test 001	Preliminary Report		41,000.00	
Test 001	Design and Contract Documents		420,000.00	
Test 001	Review Process and Construction		42,000.00	
Test 001	Site Investigation		600,000.00	
Test 001	2-D V (Investigation)		410,000.00	
Test 001	Site Construction Investigation		400,000.00	
Test 001	Land Use/Planning Application		62,742,000.00	
Test 001	Publicly Addressing Planning Process		400,000.00	
Test 001	Apply for Planning Permission		420,000.00	
Test 001	Joining Planning Application with		410,000.00	
Test 001	Site	Site survey	400,000.00	
Test 001	Site	Site testing	410,000.00	
			Total	1,100,000.00

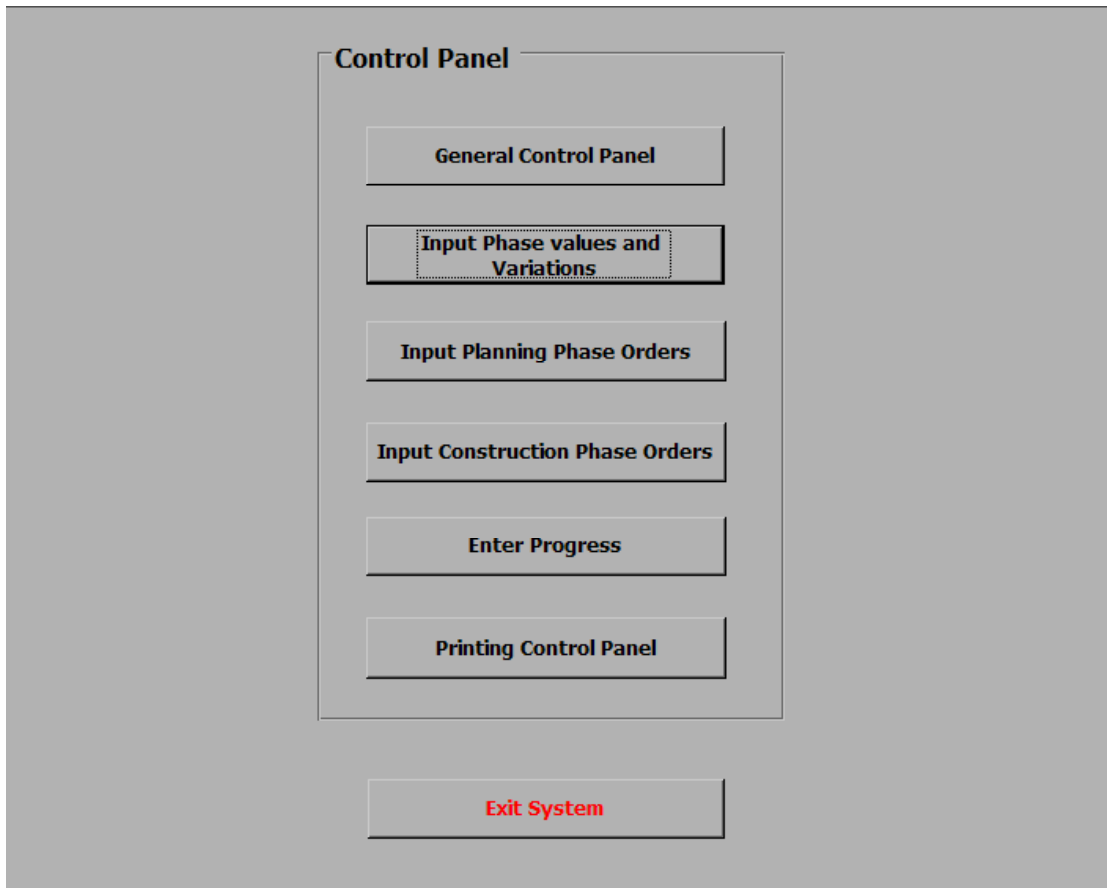
At the bottom, there is a 'Return to Previous Menu' button. Arrows from the text above point to the 'Return to Previous Menu' button and the 'Phase Value' column in the table.

On entering the system a welcome screen (figure 1 below) will be displayed for a few seconds, before displaying the main control panel (figure 2 below).

Figure 1 System start up screen



Figure 2 Main Control Panel



The main control panel has 6 options to take you into the system or a separate option to exit the system. Each of the options will be explained in the following sections.

General Control Panel

The control panel (see fig 3 below) has 9 options available.

The first 7 options allow you to enter the general details for the system to use. It will not be necessary to use the control panel apart from when you need to enter a new project.

The 7 options are:

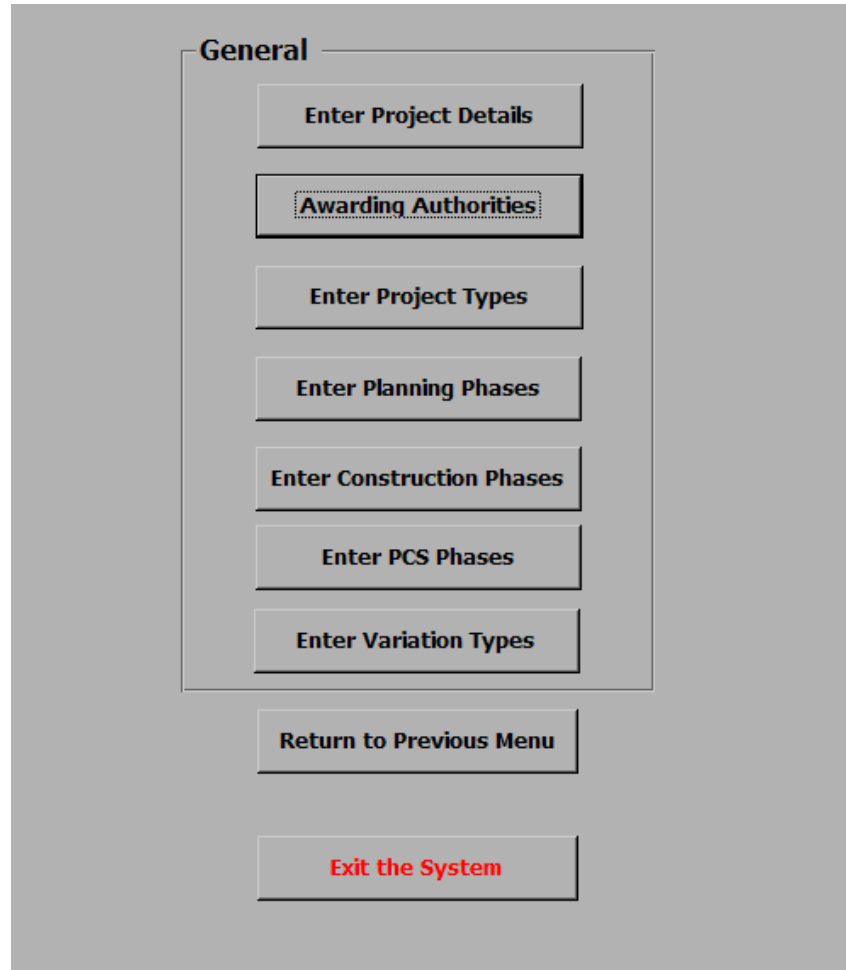
1. Enter Project Details
This holds the summary project information and is only required when a new project is set up.
2. Awarding Authorities
This holds a list of all the Awarding Authorities and is used as a look up table by the system
3. Enter project types
This holds a list of the different project types as defined by the Department and is used as a look up table by the system
4. Enter planning phases
This holds a list of the planning phases as defined by the Department on the WSIP forms and is used as a look up table by the system
5. Enter construction phases
This holds a list of the construction phases as defined by the Department on the WSIP forms and is used as a look up table by the system
6. Enter PCS phases
This holds a list of the project control phases as defined in the PCS procedures manual and is used as a look up table by the system
7. Enter variation types
This holds a list of the different variation types as defined by the Department and is used as a look up table by the system

Two further options outside the general panel are available:

1. Return to previous menu
This returns you to the main control panel.
2. Exit the system
This closes the database.

The first 7 options allow you to enter the general details for the system to use. It will not be necessary to use the control panel apart from when you need to enter a new project, top option on the control panel.

Figure 3 General Control Panel



Input Phase Values and Variations

The screen has 2 groups of options 1 for inputting Planning or Construction phase values the other for inputting Planning or Construction variations.

As with all the screens you have the option to return to the previous menu.

Figure 4 Phase values and variations menu

The screenshot shows a menu with the following elements:

- Select Project**: A dropdown menu.
- Enter Planning Phase Values**: A button.
- Enter Construction Phase Values**: A button.
- Enter Planning Variations**: A button.
- Enter Construction Variations**: A button.
- Return to Previous Menu**: A button.

If you select any of the 2 phase value options at the next screen you can switch between Planning and Construction, within the same project. (see figure 5).

Figure 5 Planning & Construction phase value input

The screenshot displays the following data:

Project Number	Project Title	Approved Planning Value	Approved Construction Value
Test 001	Test Project Number 1	€3,000,000	€11,000,000

Project Number	Phase Name	Description	Phase Value
Test 001	Preliminary Report		€1,000
Test 001	Design and Contract Documents		€20,000
Test 001	Tender Process and Evaluation		€2,000
Test 001	Site Investigation		€90,000
Test 001	CCTV (Investigation)		€100,000
Test 001	Site Supervision (Investigation)		€80,000
Test 001	Land Purchase /Wayleaves		€2,167,000
Test 001	Publicity / Advertising (Planning phase)		€50,000
Test 001	Legal Expenses (Planning phase)		€200,000
Test 001	Licensing / Planning Application costs		€100,000
Test 001	Other	site security	€90,000
Test 001	Other	site fencing	€100,000
Total			€3,000,000

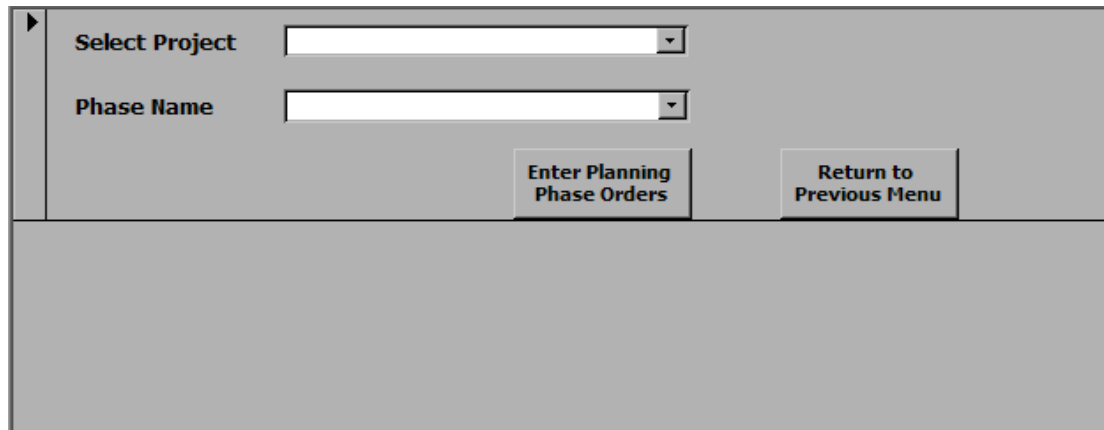
Record: 1 of 12

Return to Previous Menu

Planning or Construction Phase Orders

If you select either the Input Planning or Input Construction Phase Orders you will be taken to a further menu to select the Project number and the phase you wish to enter orders for. (see figure 6 below).

Figure 6 Project and phase select

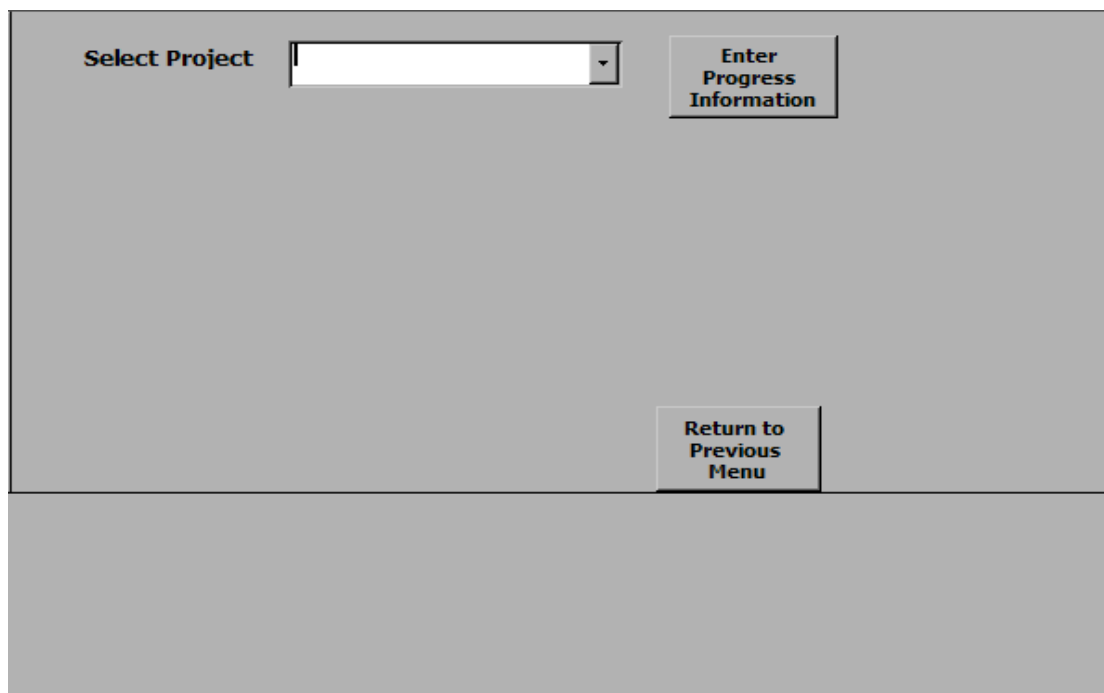


The screenshot shows a menu interface with a grey background. On the left side, there is a vertical bar with a right-pointing arrow. The main area contains two dropdown menus: 'Select Project' and 'Phase Name'. Below these menus are two buttons: 'Enter Planning Phase Orders' and 'Return to Previous Menu'.

Progress Control Panel

On selecting enter progress from the main control panel you are taken straight to the select project screen (see fig 7 over). At this screen you select the required project from the drop down menu and then press the enter progress button, if you need to return to the previous menu, there is a button on the screen as with all menu's.

Figure 7 Input Progress



The screenshot shows a screen with a grey background. At the top left, there is a 'Select Project' label followed by a dropdown menu. To the right of the dropdown menu is a button labeled 'Enter Progress Information'. At the bottom center, there is a button labeled 'Return to Previous Menu'.

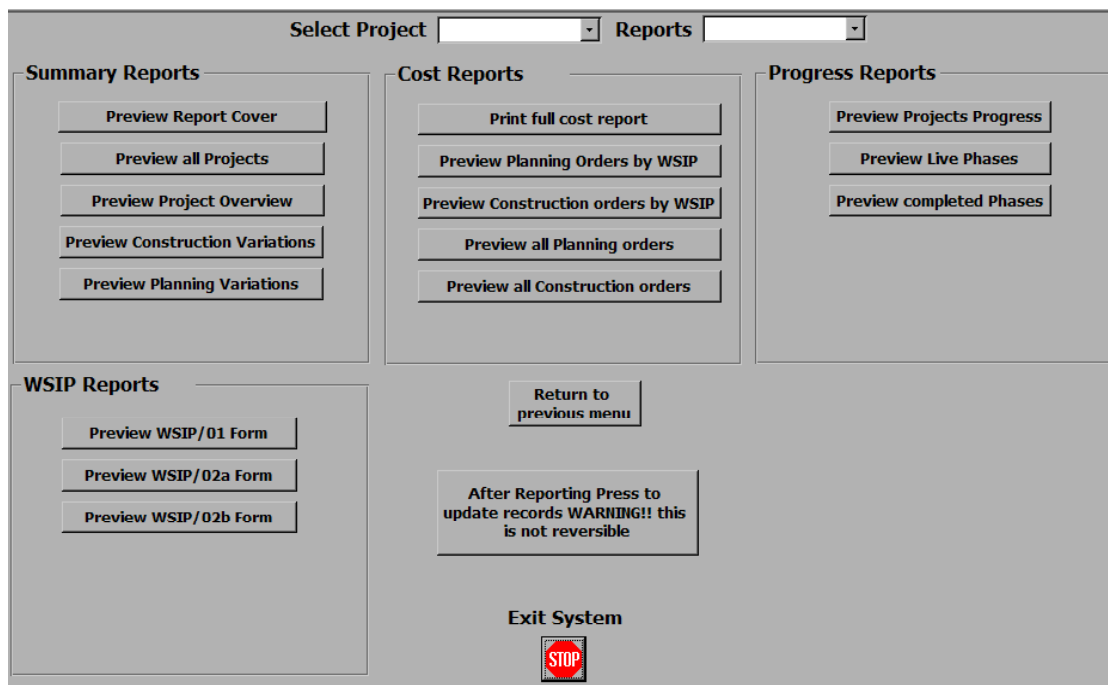
Printing Control Panel

Figure 8 below shows the layout of the control panel. The panel has 4 groups of buttons plus 2 drop down selection menus.

The 2 selection menus are for choosing the project and the report number to work on, when you select a report number the system will show a pop up box that indicates the last report number that was used.

Every report option button takes you into a print preview of the particular report, at that point you can either close the report, which will return you to the printing control panel or print the report. Each of the reports will be discussed in more detail in the Printing reports section later.

Figure 8 Printing Control Panel



Setting up a project

At the inception of a project it is the Project Leaders responsibility to set the system up, as with all of the Project Leaders duties the task may be delegated but the responsibility cannot.

To set up a project the following steps should be followed:

Enter Project Details

1. From the Main Control Panel select the General Control Panel Button.
2. From the General Control Panel select the Enter Project Details Button
3. Go down to the first empty line and input the required information:
 - a. Project number
 - b. Project title
 - c. Approved cost construction
 - d. Approved cost planning
 - e. Original planned start date
 - f. Original planned end date
 - g. Grant Value
 - h. Project type *this is selected from a drop down list*
 - i. Department reference
 - j. County *this is selected from a drop down list*
 - k. Project Leader
4. Click on the return to previous menu button this will take you back to the General Control Panel
5. Click on the return to previous menu button this will take you back to the Main Control Panel

Enter Phase Values

1. Select the Cost Data Input Control Panel Button
2. From the Cost Data Input Control Panel select the enter planning phase values or enter construction phase values buttons, this will take you to a screen to select the project from a drop down box
3. Once you have selected the project click on the Enter planning phase values or Enter construction phase values button
4. The screen has 2 tabs one for construction phase and one for the planning phase, when you are in the appropriate screen you can select the phase name from a drop down and enter the value. To further describe the item there is a free text box, this is useful when more than 1 item is against a phase such as "other". At the foot of the screen is a running total; this must never be greater than the approved funds shown at the top of the screen.
5. Once you have finished click on the Return to previous menu button, this will return you to the Cost Input Control Panel.
6. Click on the Return to Previous menu button will return you to the Control Panel.

Enter Progress phases

1. Select the Enter Progress Button, this will allow you to select the project to work on from the drop down menu. When you have selected the project click on the Enter Progress Information button.
2. You can now select the appropriate PCS phases for the project; these will have been defined in the Project Quality Plan (PQP). At this point you are only required to enter the start and end dates.
3. Clicking the Return to previous menu will take you back to the Control Panel.

Entering Periodic Reporting Data

At predetermined points in the Project, usually defined in the PQP reports will be required for the project, it is essential that the information in the reports is as up to date and as accurate as possible. This section lays out the steps to be followed in updating a cost report that has already had the project details set up.

The system will need a maximum of 3 sets of data:

1. Spend information
2. Variation data
3. Progress data

The process of entering each of these sets of data will now be detailed.

Entering Periodic Spend Information

1. From the Control Panel select Enter Cost Data Input Control Panel
2. At the next screen select either Enter Planning Phase Orders or Construction Phase Orders.
3. At the next screen you will be required to select the project and phase from 2 drop down menus, you will then need to click on the Enter Planning Phase Orders or Enter Construction Phase Orders dependant on which options you have previously selected.
4. You will then be able to input the following:
 - i. Order Number
 - ii. Order Value
 - iii. Order Date
 - iv. Recouped value
5. Once complete you can click on the return to previous menu button, which will return you to the Cost Input Control Panel.

Entering Variations

1. From the Control Panel select Enter Cost Data Input Control Panel
2. At the next screen select either Enter Planning Variations or Construction Variations.
3. You will then be able to input the following:
 - i. Select phase name from the drop down menu
 - ii. Order Number
 - iii. Variation Value
 - iv. Variation Date
 - v. Select Variation type from the drop down menu
 - vi. Certified value
 - vii. AFC
4. Once complete you can click on the return to previous menu button, which will return you to the Cost Input Control Panel.

Entering Periodic Progress Data

1. From the Control Panel select Enter Progress.
2. At the next screen select the Project from the drop down menu and click on the enter progress information.
3. You will then be able to input the following:
 - i. Progress to date (taken from the PCS sheets)
 - ii. Any completed phases & the Date completed
4. Once complete you can click on the return to previous menu button, this will take you back to the Control Panel.

Printing Reports

Reports are required to be printed periodically in line with the dates set out in the PQP. The system has all of the pre defined reports set up to run on the click of one of the option buttons.

Once the reporting is complete for a period and prior to inputting any further cost information the update records button should be clicked to save the previous report. Care should be taken as this process is not reversible.

Test project No. 1

Project Details

a. Project number	Test 001
b. Project title	Test Project Number 1
c. Approved cost construction	€1,000,000
d. Approved cost planning	€ 3,000,000
e. Original planned start date	1/5/2005
f. Original planned end date	1/7/2010
g. Grant Value	€ 1,000,000
h. Project type	Water Treatment
i. Department reference	001
j. County	North Tipperary County Council
k. Project Leader	Joe Bloggs

Planning Phase Values

1. Preliminary Report	€ 200,000
2. EIS	€ 150,000
3. Design & Contract Documents	€ 300,000
4. Tender Process & Evaluation	€ 100,000
5. Site Investigation	€ 209,000
6. CCTV (Investigation)	€
7. Modelling (Investigation)	€
8. Other (Investigation)	€
9. Site Supervision (Investigation)	€ 90,000
10. Land Purchase /Wayleaves	€1,800,000
11. Publicity / Advertising (Planning phase)	€ 1,000
12. Legal Expenses (Planning phase)	€ 120,000
13. Archaeological costs	€
14. Licensing / Planning Application costs	€ 30,000
15. Other	€

Construction Phase Values

1. Construction Contract No.1	€3,500,000
2. Construction Contract No.2	€2,000,000
3. Construction Contract No.3	€2,500,000
4. Construction Contract No.4	€
5. Construction Contract No.5	€
6. Construction Contract No.6	€
7. Construction Contract No.7	€
8. Direct Labour	€ 500,000
9. Site Supervision (Construction)	€ 900,000
10. Project Management	€1,020,000
11. Legal Expenses (construction)	€ 560,000
12. Archaeological costs (Construction)	€
13. Publicity / Advertising	€ 20,000
14. Other Costs (construction)	€
15. Special Contracts (Telemetry)	€
16. Special Contracts (GIS)	€
17. Special Contracts (Other)	€

WSIP /01

WSIP/01	
PAYMENT CLAIM FORM : EXPENDITURE WATER SERVICES CAPITAL PROJECTS	
Local Authority :	
Name of Project: Test Project Number 1	Project Ref Test 001
A: Financial Table	Department Use
1. Approved Cost of Project €14,000,000	Payment Approved
2. Approved Grant €1,000,000	
Local Authority	Proposed by :
3. Expenditure before this Claim €0	Date :
4. Expenditure this Claim €820	Certified by :
5. Total Expenditure (3 + 4) €820	Date :
6. Balance of Project (2 - 5) €999,180	Payment Sheet :
Department	
7. Recoupment before this Claim €0	Number :
8. Balance on Approved Grant (2 - 7) €1,000,000	Date :
B: Current Claim	
I hereby claim the sum of €820 in respect of the above Project Test Project Number 1	
Copies of relevant certificates of expenditure and payment schedule are enclosed.	
Prepared by :	Date :

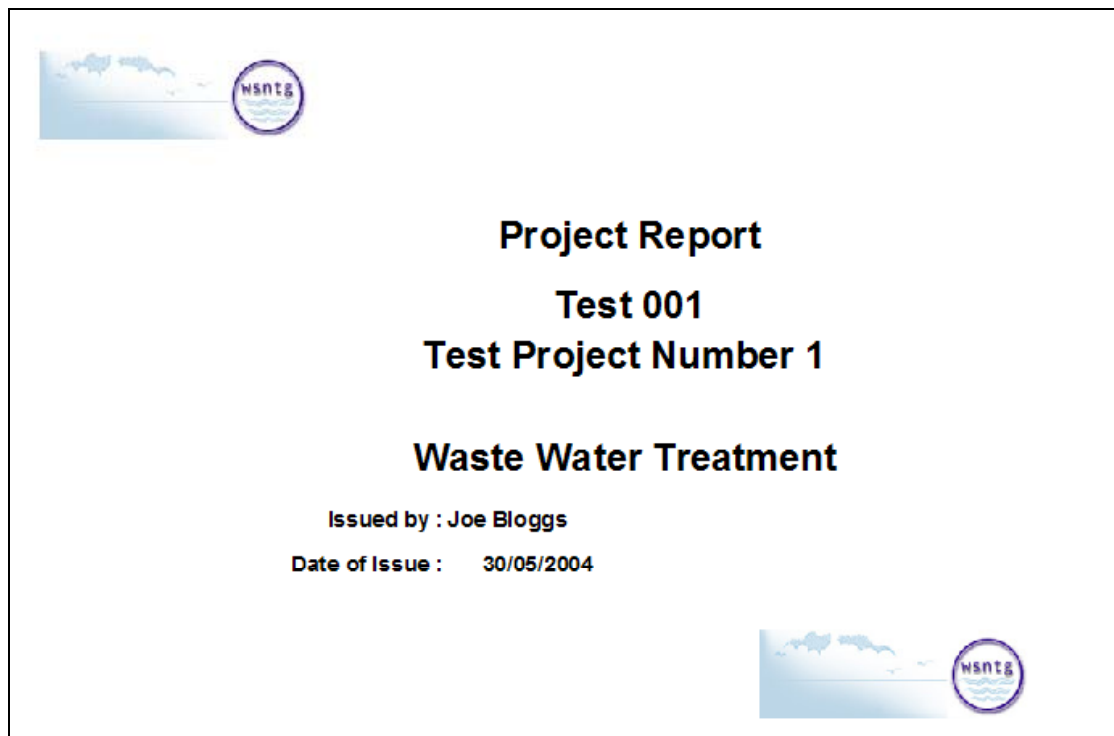
WSIP /02a

FORM WSIP/02A					
PAYMENT CLAIM FORM					
APPROVED COSTS AND EXPENDITURE DETAILS					
PLANNING COSTS					
PROJECT : Test Project Number 1			Claim Period:		
Category of Expenditure	DEPARTMENT		LOCAL AUTHORITY EXPENDITURE		
	Approved Costs	Recouped to date	Expenditure before this claim	Expenditure this claim	Total Expenditure
Preliminary Report	€200,000	€0	€0	€500	€500
EIS	€150,000	€0	€0	€20	€20
Design & Contract Documents	€300,000	€0	€0	€0	€0
Tender Process & Evaluation	€100,000	€0	€0	€0	€0
Site Investigation	€209,000	€0	€0	€0	€0
Site Supervision (Investigation)	€90,000	€0	€0	€0	€0
Land Purchase /Wayleaves	€1,800,000	€0	€0	€0	€0
Publicity / Advertising (Planning phase)	€1,000	€0	€0	€0	€0
Legal Expenses (Planning phase)	€120,000	€0	€0	€0	€0
Licensing / Planning Application costs	€30,000	€0	€0	€0	€0
Totals	€3,000,000	€0	€0	€520	€520

WSIP /02b

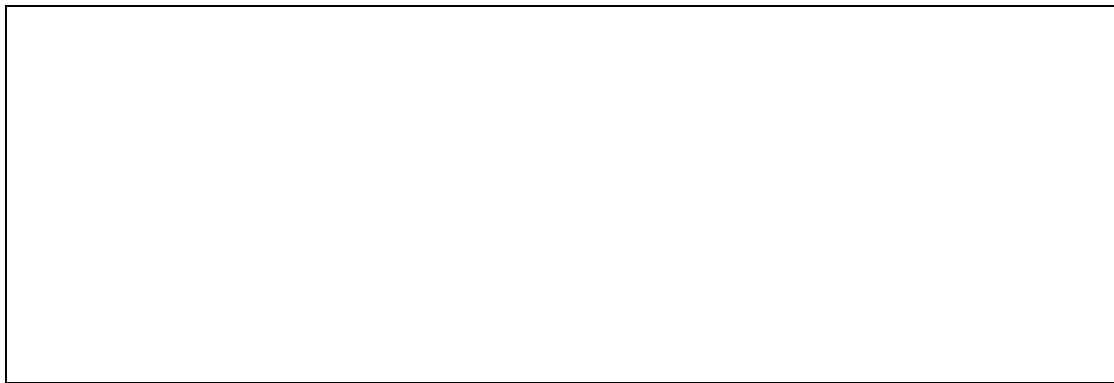
FORM WSIP/02B					
PAYMENT CLAIM FORM					
APPROVED COSTS AND EXPENDITURE DETAILS					
CONSTRUCTION COSTS					
PROJECT : Test Project Number 1			Claim Period:		
Category of Expenditure Construction	DEPARTMENT		LOCAL AUTHORITY EXPENDITURE		
	Approved Costs	Recouped to date	Expenditure before this claim	Expenditure this claim	Total Expenditure
Construction Contracts					
Construction Contract No.1	€3,500,000	€0	€0	€300	€300
Construction Contract No.2	€2,000,000	€0	€0	€0	€0
Construction Contract No.3	€2,500,000	€0	€0	€0	€0
Construction Contract No.4	€0	€0	€0	€0	€0
Construction Contract No.5	€0	€0	€0	€0	€0
Construction Contract No.6	€0	€0	€0	€0	€0
Construction Contract No.7	€0	€0	€0	€0	€0
Direct Labour	€500,000	€0	€0	€0	€0
Site Supervision (Construction)	€900,000	€0	€0	€0	€0
Project Management	€1,020,000	€0	€0	€0	€0
Legal Expenses (construction)	€560,000	€0	€0	€0	€0
Archaeological costs (Construction)	€0	€0	€0	€0	€0
Publicity / Advertising	€20,000	€0	€0	€0	€0
Other Costs (construction)	€0	€0	€0	€0	€0
Special Contracts (Telemetry)	€0	€0	€0	€0	€0
Special Contracts (GIS)	€0	€0	€0	€0	€0
Special Contracts (Other)	€0	€0	€0	€0	€0
Totals	€11,000,000	€0	€0	€300	€300

Report Cover



Overview

<u>Project Overview</u>	
Project Reference	Test 001
Project Title	Test Project Number 1
Project Type	Waste Water Treatment
Project Start Date	01/05/2005
Project End Date	01/07/2010
Original Duration in weeks	269
Approved Cost	€14,000,000
Approved Grant	€1,000,000



Construction Variations

Construction Variations for Project

Variation Type	Count	Value	AFC	Certified
Approved				
Requested				
Anticipated				
Ineligible expenditure				
Totals				



Planning Variations

Planning Variations for Project				
Variation Type	Count	Value	AFC	Certified
Approved				
Requested				
Anticipated				
Ineligible expenditure				
Totals				

Progress Report

<i>Project Level progress report for Test Project Number 1</i>							
PCS Phase	Planned		Duration (Weeks)	Time Burnt (Weeks)	% Burnt	Progress (%)	
	start date	end date					
Project Quality Plan & System Set up	01/05/2005	08/05/2005	1	not started	0%	100	
Consultant's Brief	08/05/2005	22/05/2005	2	not started	0%	10	
Appointment of Consultant's	22/05/2005	29/05/2005	1	not started	0%	0	
Appointment of Consultant's	29/05/2005	06/06/2005	1	not started	0%	0	
Statutory Processes - Wayleaves Report	01/07/2005	01/01/2006	27	not started	0%	0	
Statutory Processes - Planning Permission	01/08/2005	01/10/2005	8	not started	0%	0	
Certificate of Completion of Planning	01/01/2006	08/01/2006	1	not started	0%	0	

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Incomplete Phase report

<i>Progress Report incomplete phases for: Test Project Number 1</i>		
PCS Phase Name	Planned	
	Start Date	End Date
Consultant's Brief	08/05/2005	22/05/2005
Appointment of Consultants	22/05/2005	29/05/2005
Appointment of Consultants	29/05/2005	06/06/2005
Statutory Processes - Planning Permission	01/08/2005	01/10/2005
Statutory Processes - Wayleaves Report	01/07/2005	01/01/2006
Certificate of Completion of Planning	01/01/2006	08/01/2006