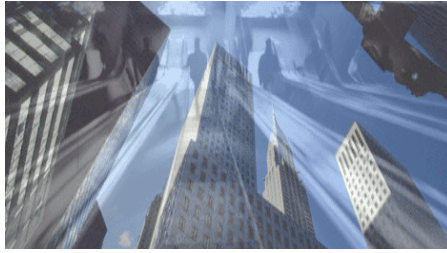


ARCH 441
Architectural Project Management



Reading Assignment

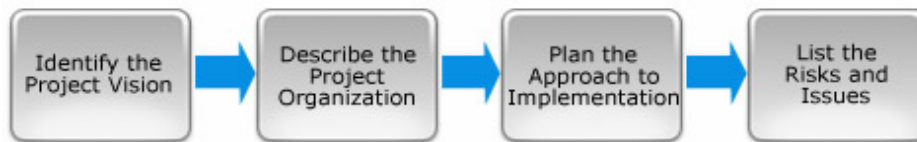
“ Project Charter ”

Establish the Project Charter

To formally define a new project, you need to document its Project Charter. The Project Charter states the boundaries for undertaking the project by describing its scope, organization and proposed implementation approach. Specifically, it defines the:

- Project vision, objectives, scope and deliverables (i.e. what you have to achieve)
- Project stakeholders, roles and responsibilities (i.e. who will take part in it)
- Proposed approach towards implementing the project (i.e. how it will be undertaken)

The following diagram depicts the steps involved in creating a Project Charter:



In some organizations, a Project Charter may also be referred to as a "TOR": "Term of reference" or "Project Definition Report" (PDR). Once the Project Charter has been documented, it is presented to an identified Business Sponsor for approval.

Identify the Project Vision

The first step in establishing the project's Project Charter is to define the project vision. The vision encapsulates the purpose of the project in a brief sentence and is the defined end goal for the project team. In addition to the vision, you should also describe the objectives, scope and key deliverables, to provide the stakeholders with a clear and unanimous view of the project direction. The following sections explain in more detail how to set a clear project direction.

Vision

To ensure that all stakeholders are working towards a common goal, you will define a short, concise and achievable project vision. Some examples of vision statements include:

- "To procure and relocate to new work premises with capacity for 50 additional staff"
- "To implement a robust, reliable financial management system within the business"
- "To install a new telecommunications infrastructure between customer locations"

Objectives

Based on the vision, list three to five objectives to be achieved by the project. Each objective should be Specific, Measurable, Achievable, Realistic and Time-bound (SMART). For example:

- "To deliver new financial accounts payable and receivable processes, reducing processing timescales by at least 30%"
- "To build and relocate to brand new work premises with 50% more space, 30 more parking spaces and 20% fewer operational costs than the existing premises"
- "To relocate the existing technology infrastructure at the new building premises within two days elapsed time and with no impact on customer service delivery"
- "To provide a new customer complaints service to enable customers to issue complaints online and receive a direct response from the company within 24 hours"
- "To install new accounts payable and receivable and payroll system modules within the existing accounting system, thereby achieving 99.5% system up-time"

Scope

With a clear view of the Vision and Objectives of the project, it's time to create a comprehensive description of the project scope. The scope defines the formal boundaries of the project by describing the elements of the outcome - how the business will be changed or altered by project delivery.

For instance, if the purpose of the project was to deliver a new Financial Management System, then the project would likely result in new roles and responsibilities, system functionality, data, financial processes and reporting procedures. These changes within the business define the true scope of the project. Don't fall into the trap many Project Managers fall into, using this section to define the scope of the internal workings of the project (such as the phases, activities and tasks). Scope actually describes the project outcome.

To ensure that all of the stakeholders have a clear understanding of the intended project outcome, you need to identify the elements of the business that will be / will not be affected by the delivery of the project. For instance, projects may result in changes to the following aspects of the business:

- Structure (i.e. the functions of departments and reporting lines between departments)
- Roles (i.e. the roles and responsibilities of departments and staff)
- Competencies (i.e. the skills required to undertake the changed roles)
- Processes (i.e. the operational processes and procedures within the company)
- Products (i.e. the products and services which are offered to customers)
- Systems (i.e. the technology platform and system applications used within the business)
- Data (i.e. the information and data stored within and used by the business)

In addition to defining the scope of the changes within the business, you also need to define the scope of the actual solution delivered by the project. You can achieve this by describing the makeup, purpose and features of each of the components of the solution. Whether the project results in the delivery of a new business process, a new product or service, a building, telecommunications infrastructure or other asset, you need to provide a detailed description of the project outcome.

Creating an accurate and robust definition of the project's scope is a key step in delivering a successful project. It helps you to manage requests for change throughout the Project Lifecycle. It also ensures that the project team and the customer share a common understanding of what the project will deliver.

Deliverables

Now that you have defined the project scope, you need to describe each of the deliverables that the project will produce. Create a list of project deliverables within the following table by itemizing and describing their components:

Deliverable	Components	Description
List each of the key deliverables to be produced by the project.	For each deliverable, itemize the major components to provide a complete view of the deliverable's composition.	Create a detailed description of each deliverable and its components.

Initiation: Project Charter Deliverables Table

Describe the Project Organization

By defining the vision, objectives, scope and deliverables, you now have a solid view of the purpose of the project and the outcome to be achieved. The next step is to identify the inner workings of the project by listing the customers, stakeholders, roles, responsibilities and structure.

Customers

Identify the project customer(s). A *customer* is a person or entity that is responsible for accepting the deliverables when the project is complete. Whether your project is delivering to one customer in one organization or multiple customers across multiple organizations, you need to explicitly list the customer entity (i.e. the organization, department or team) and name

customer representatives, using the following table:

Customer Entity	Customer Representative
List the customer entities here, such as organizations, departments or teams.	Identify the customer representative who will act as the contact point for the customer group.

Initiation: Project Charter Organization Table

The success of the project will be primarily based on whether or not the deliverables produced match the requirements of the customers identified in this table.

Stakeholders

Next, you need to identify the project stakeholders. A *stakeholder* is a person or entity outside the project with a specific **key interest** or stake in the project. For example, a Financial Controller will be interested in the financial implications of the project, and a CEO will be interested in whether the project helps achieve the company vision. Examples of other project stakeholders include: company executives, legislative and regulatory bodies and team members. Use the following table to list the key stakeholders for the project:

Stakeholder / Group	Stakeholder Interest
List each of the stakeholder groups, roles and individuals to describe those entities with a key interest in the project.	Describe the specific interest each stakeholder has in the success of the project.

Initiation: Project Charter Stakeholders Table

Roles

Now that you have identified who has a vested stake in the success of the project, you need to list the key roles involved in delivering the project. Examples of key roles include the Project Sponsor, Project Board and Project Manager. Once you have identified these roles, describe the resource likely to fill them by listing their names, organizations, and details of their assignment where possible.

Role	Resource Name	Organization	Assignment Status	Assignment Date
List each of the key roles involved in delivering the project.	Where possible, list the names of the people who will these roles.	Identify the Company in which the person works.	State whether the person is assigned or unassigned to the project at this point.	List the date on which the person was assigned or will be assigned to the project.

Initiation: Project Charter Roles Table

Note. At this stage, you only need to list the key roles that will carry the majority of responsibility within the project. You do not need to define all the resources involved in the project. This step comes later when you create a **Resource Plan**.

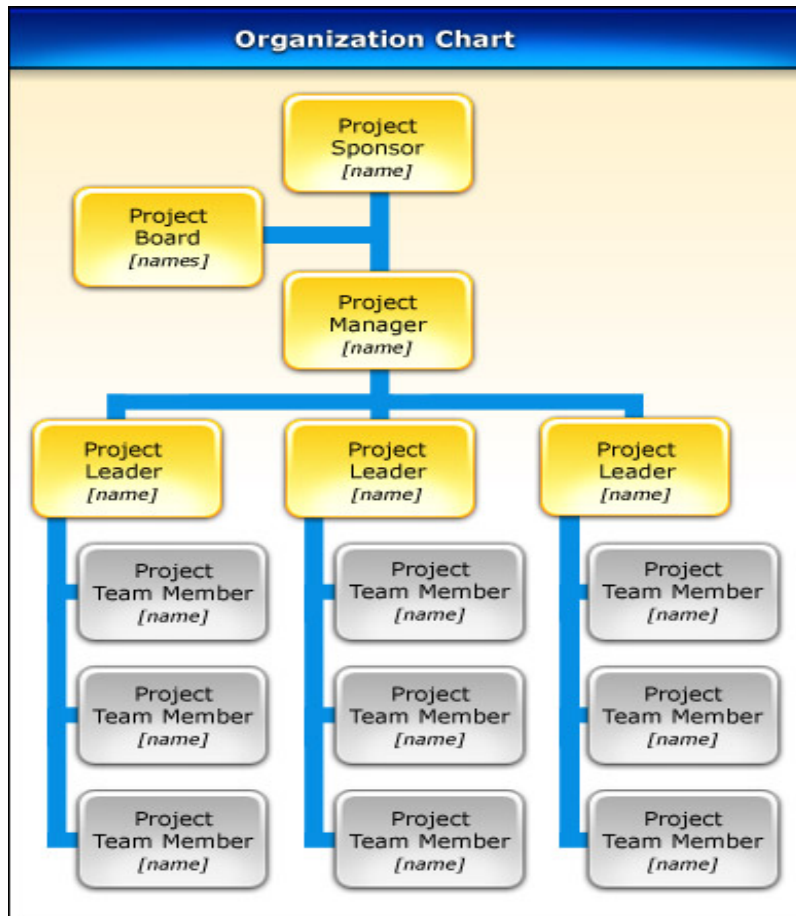
Responsibilities

It is critical that responsibilities for each of the key roles are agreed upon early in the Project Lifecycle. Summarize each of the primary responsibilities of each role listed in the table above. Note. You only need to provide a summarized list of the

responsibilities at this stage; you will define a detailed list when you create project **Job Descriptions**.

Structure

Once you have a clear view of the key roles involved in undertaking the project, you can depict the reporting lines between each of those roles with a Project Organization Chart, like the following example:



Initiation: Project Charter Project Organization Chart

Plan the Approach to Implementation

You're almost there! You now have a complete understanding of what the project will need to achieve and how it will be organized to achieve it. The final step in creating a Project Charter is to describe the overall approach towards implementing the project.

Approach

Summarize the approach required to initiate, plan, execute and close the project, using the following table:

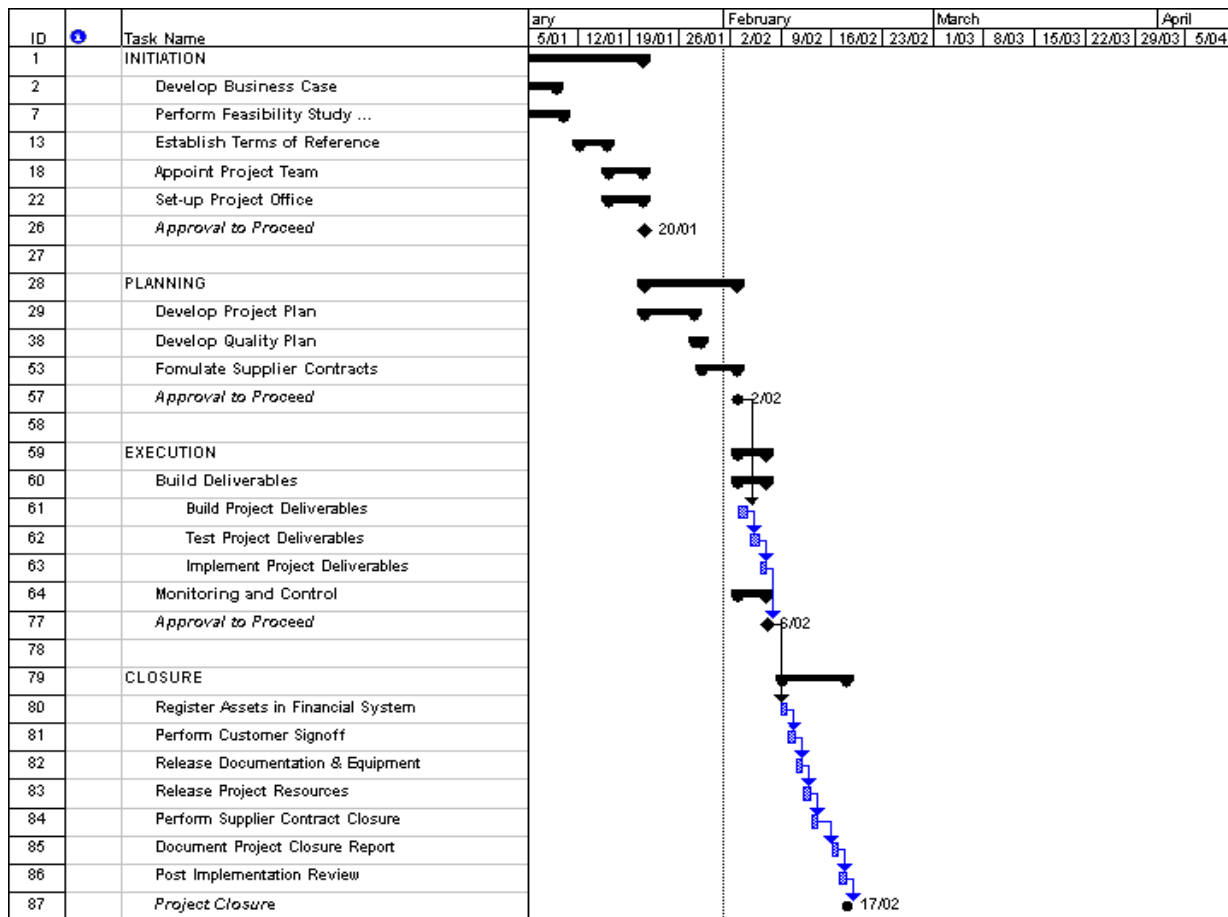
Phase	Overall Approach
Initiation	Describe how the project will be further defined, the project team appointed and the Project Office established.
Planning	Define the project planning process to ensure that the phases, activities and tasks are undertaken in a coordinated way.
Execution	List the generic activities required to construct and implement each of the project deliverables.

Closure Identify the steps required to release the deliverables to the business, close the Project Office, reallocate project staff, terminate supplier contracts and perform a Post Implementation Review (PIR).

Initiation: Project Charter Approach Table

Implementation Plan

To provide the Customer and Project Stakeholders with confidence that the project implementation has been well thought through, create a generic Implementation Plan listing the phases, activities and timeframes involved in undertaking the project. An example of an Implementation Plan is provided below:



Initiation: Project Charter Project Plan Table

Milestones

In addition to the Implementation Plan, List any important project *milestones* and describe why they are critical to the project. A milestone is defined as an important event within the project, such as the achievement of a key project deliverable, or an external event that impacts the project. Milestones are typically used to inform Project Stakeholders of the key project delivery dates. For instance, the key milestones for a construction project might be:

- 1 Foundations laid and framing complete
- 2 Roof built and external structure complete
- 3 Electrical and plumbing finished
- 4 Internal fit-out and landscaping complete

5 Customer acceptance gained and keys handed over

Milestone	Date	Description
List each of the key project milestones.	Identify the dates within which each milestone must be completed.	Describe each project milestone and explain why the milestone date is critical to the project

Initiation: Project Charter Project Milestones Table

Dependencies

List any external dependencies and their criticality to the project. An external dependency is defined as an internal project activity that is likely to impact or be impacted by an activity or event external to the project. List and describe the key external dependencies within the following table:

Project Activity	Impacts On	Impacted by	Criticality	Date
Identify the project activity or event that has an external dependency.	List the external activity or event which will "impact on" the project	List the external activity or event which will be "impacted by" the project	Rate the criticality level of the external dependency as Low, Medium or High.	Specify any relevant dates of the dependency, such as the start and end dates.

Initiation: Project Charter Project Dependencies Table

Note: A detailed **Project Plan** will be completed during the **Planning** phase of the project.

Resource Plan

Summarize the resources involved in undertaking the project, by listing the roles, start dates, end dates and effort required.

Role	Start Date	End Date	% Effort
List each of the key roles within the project.	Specify the date by which each role is required.	Specify the date until which each role is required.	Specify the % of total project time that each role will be needed.

Initiation: Project Charter Resource Plan Table

Note: A detailed **Resource Plan** will be completed during the **Planning** phase of the project.

Financial Plan

Summarize the financial resources required to undertake the project by completing the following table:

Expenditure Category	Expenditure Item	Expenditure Value
List the categories of financial expenditure, such as suppliers, equipment and materials expense.	For each category, list the major items of expenditure such as salaries, training and contractor costs.	For each item listed, estimate the approximate amount of financial expenditure required.

Initiation: Project Charter Financial Plan Table

Note: A detailed **Financial Plan** will be completed during the **Planning** phase of the project.

Quality Plan

Using the following table, briefly describe the management processes required to ensure project success.

Process	Description
Time Management	Outline how Time Management will be undertaken on this project.
Cost Management	Outline how Cost Management will be undertaken on this project.
Quality Management	Outline how Quality Management will be undertaken on this project.
Change Management	Outline how Change Management will be undertaken on this project.
Risk Management	Outline how Risk Management will be undertaken on this project.
Issue Management	Outline how Issue Management will be undertaken on this project.
Procurement Management	Outline how Procurement Management will be undertaken on this project.
Acceptance Management	Outline how Acceptance Management will be undertaken on this project.
Communications Management	Outline how Communications Management will be undertaken on this project.

Initiation: Project Charter Quality Plan Table

Note: A detailed **Quality Plan** will be completed during the **Planning** phase of the project.

Completion Criteria

Next, list the criteria for project completion. Once these criteria have been met, the project will be considered complete and ready for closure.

Completion Category	Completion Criteria
List the categories of completion criteria, such as Objectives, Benefits and Deliverables.	<p>List the criteria, to be used at the end of the Project Lifecycle, to determine whether the project is complete and ready for closure. Examples of completion criteria include:</p> <ul style="list-style-type: none"> ■ The project vision must have been achieved ■ All of the project objectives must have been met ■ The project must have resulted in the stated benefits ■ All the deliverables specified must have been produced

Initiation: Completion Criteria Table

List the Risks and Issues

The final step to complete your Project Charter is to identify any project risks, issues, assumptions and constraints related to the project.

Risks

Risks are defined as events that **may** adversely affect the ability of the solution to produce the required deliverables. List any apparent risks associated with the project by completing the following table.

Risk Description	Risk Likelihood	Risk Impact	Action to be Taken to Mitigate Risk
List the apparent project risks, and for each risk describe the potential effect on the project.	Rate the likelihood of each risk as Low, Medium or High.	Rate the impact of the risk on the project if it were to eventuate as Low, Medium or High.	List the actions needed to reduce the likelihood of the risk, and the impact to the project should it eventuate.

Initiation: Project Charter Risks Table

Note: A detailed **Risk Plan** will be completed during the **Planning** phase of the project.

Issues

Issues are defined as events that **currently** adversely affect the ability of the solution to produce the required deliverables. Summarize the highest priority issues associated with the project by completing the following table.

Issue Description	Issue Priority	Action to be Taken to Resolve Issue
List and describe any current issues associated with the project, such as a lack of project funding or skilled resources to manage it.	Prioritize the list of issues, based on their effect on the project. Assign Low, Medium and High to depict priority.	List each of the actions required to resolve the issue as quickly as possible.

Initiation: Project Charter Issues Table

Assumptions

Identify any key assumptions made about the project up to this point. For instance, it may be assumed that you will be able to find appropriately skilled staff as required, or that additional funding will be available if required.

Constraints

Take note of any major project constraints identified to date, such as limited budget, time or financial resources.

And there you have it. By completing each of the steps above, you will have collated all of the necessary materials required to document a comprehensive Project Charter.

Resources: adapted from: Method123 Ltd. <http://www.method123.com/>

Project Charter Example

Project Manager: Mark Harris

Wrights Construction Partners is a highly regarded construction company in the southeast United States. We have set ourselves apart from our regional competitors by delivering high quality properties cheaper, faster and better than any other construction company in the area. Recently, our reputation has helped us to win a tender with *Oceanic Properties*, for the construction of a new residential area called "Palm Grove."

Twelve months ago, *Oceanic Properties* purchased a large area of land for the purpose of developing a secure housing complex called "Palm Grove" with 40 freestanding three- and four-bedroom homes. After gaining council consent, purchasing the property, completing site surveys and rendering architectural drawings, *Oceanic Properties* contracted us to complete the remainder of their property development project. This included:

- Installing the infrastructure, including roads, drainage, services and boundary walls
- Building two showcase houses, including landscaping and furnishings
- Building a Marketing Office at the complex entrance, which will later become the Security Checkpoint
- Constructing each home, complete with basic landscaping and gardens
- Building recreational assets, including a lake, park and children's playground

All of the new homes are to be sold before they are constructed. From the time each property becomes available and is sold, we will have four months to construct it and prepare it for delivery to the new owner. Since *Oceanic Properties* expects that all homes will be sold within nine months of the project's introduction to the market, this presents an intense period of work for *Wrights Construction Partners*.

On behalf of *Wrights Construction*, I have been tasked with the management of this challenging building construction project. My first task was to develop an internal Business Case to ensure that project benefits and costs were clearly stated. I then completed a Feasibility Study to ensure that we would be able to develop each property within the timeframes required by the client (*Oceanic Properties*). My next step was to establish the Project Charter by documenting the project vision, objectives, scope, deliverables and overall implementation plan. The Project Charter created for this project follows.

Customer Profile	
Project Name:	Palm Grove Project
Project Organization:	Wrights Construction Partners
Project Client:	Oceanic Properties
Project Manager:	Mark Harris
Project Activity:	Establish the Project Charter
This Example describes the Project Charter used within this project. The project, people and organizations described are fictional but provide a realistic scenario to help you.	



Project Charter for Palm Grove Project

1 Executive Summary

The Palm Grove housing estate project is the first of its kind in the region. This exclusive estate property will offer 40 three-bedroom and four-bedroom luxury homes in a secure community. Top-quality landscaping, a lake, children's playground and park will all be included in this prestigious property location.

This document defines the Project Charter for a project to construct the Palm Grove complex. It describes the vision, objectives, scope, deliverables, project organization and implementation approach for the project. It clearly references the terms by which this project will be undertaken.

The vision for this project is: "to develop a prestigious residential community that includes 40 new homes, infrastructure, landscaping, services, swimming pool, tennis court and children's play area." To achieve this vision, the project will produce the following key deliverables:

- The provision of water, electricity, telephone and drainage services
- Access to the complex through high quality roading
- The construction of two *showcase* homes including landscaping and furnishings
- The construction of 25 three-bedroom homes and 15 four-bedroom homes
- Security fencing, a security gate and security checkpoint
- Communal and residential landscaping
- A swimming pool, lake, children's playground and park

The project will produce the above deliverables to achieve the vision within 24 months of initiation.



2 Project Definition

2.1 Vision

The vision for this project is:

"To develop a prestigious residential community which includes 40 new homes, infrastructure, landscaping, services, swimming pool, tennis court and children's play area."

2.2 Objectives

The key objectives for this project are:

- To clear the site and install the water, electrical, telephone and drainage services for the new community complex within six months of the start of the Execution phase
- To construct 2.5 kilometers of roadway, paving and visitor parking and to install street lighting within nine months of the start of the Execution phase
- To construct each of the 40 new homes within four months after the purchaser signs the contract

2.3 Scope

The following items are considered to be within the scope of this project:

- The delivery of services within the Palm Grove complex
- Roading, pedestrian paving, drainage, landscaping
- Secure boundary fencing and a security checkpoint
- Recreational areas, including a park, swimming pool, children's playground and lake
- Residential housing, general landscaping and fencing
- Construction and furnishing of two showcase houses and a marketing office

The following items are considered to be outside of the scope of this project and are therefore the responsibility of Oceanic Properties:

- All activities required to market and sell each residential property
- All creation of architectural drawings for each residential property
- All land surveying for the Palm Grove complex
- The furnishing and maintenance of each property upon its completion

2.4 Deliverables

Deliverable	Components	Description
Services	Water	Provide essential drinking and wastewater services to each dwelling. This includes digging trenches and laying piping from the boundary of the estate to each individual residence.
	Electricity	Provide essential electrical services to each dwelling. This includes digging trenches and laying electrical cabling from the boundary of the estate to each individual residence.
	Telephone	Provide essential telephone services to each dwelling. This includes digging trenches and laying telephone cabling from the boundary of the estate to each individual residence.
	Drainage	Provide essential drainage services to each dwelling. This includes digging trenches and drainpipes from the boundary of the estate to each individual residence.
Access	Roads	Construct 2.5 kilometers of roading and footpaths plus three roundabouts, as specified by the architectural plans for the Palm Grove estate. This includes excavating topsoil, laying the base course, compacting the base, adding curbing, and laying and marking the road surface. All roads are to be fully verged.
	Storm Water Drainage	Lay storm water drainage for the entire estate by installing guttering, grates and pipes.
	Car Parking	For each residential property within the Palm Grove estate, construct one off-street parking space and two street parking spaces.
	Street Lighting	Install 83 streetlights spread 30 meters apart to provide adequate road lighting. Install an additional 10 lights in communal areas such as the lake, park and children's playground.
Housing	Showcase Housing	Construct two complete residential homes near the entrance to the Palm Grove complex. Each home should be 100% complete and fully furnished as examples of properties within the residential complex, which Oceanic Properties can present to potential buyers.
	Residential Housing	Construct 25 three-bedroom and 15 four-bedroom houses according to the approved architectural plans. Each house should be constructed by building the foundations, framing, roofing, exterior cladding, interior cladding, finishing, electrical and plumbing, kitchens, bathrooms, driveway, landscaping and services from its boundary into the house. Other private recreational features may be required (per the architectural design for each property), such as a swimming pool, tennis court or BBQ area.
Security	Boundary Wall	Build a boundary wall around the Palm Grove estate. This wall will be 1.8 kilometers long and consist of secured-razor wire-timber fencing.

Landscaping	Checkpoint	Construct a Security checkpoint office (by converting the Marketing Office) with guard post and electronic security gate.
	Communal	Complete communal landscaping including center medians for roads and roundabouts, and other grass areas (such as the park and lakeside).
	Residential	Complete basic landscaping for each property by providing flat, grassy terrain.
Recreation	Water Feature	Build a water feature in the form of a small lake. This lake should be oval shaped, 30 meters long x 20 meters wide and conform to the council safety regulations.
	Children's Play Ground	Construct a small pre-fabricated adventure playground for 5-12 year-old children, which conforms to the council safety regulations.
	Park	Build an open grass park in the center of the community, 80 meters long by 50 meters wide, for all community residents.



3 Project Organization

3.1 Customers

The following customers are defined for this project:

Customer Group	Customer Representative
Oceanic Properties	The primary customer for this project is Oceanic Properties, as it will make payment of the moneys due for the construction of the complex. Alan Fletcher is the project's key representative for Oceanic Properties.
Purchasers	The individuals who purchase the residential homes will also be considered as customers for this project.
City Council	This entire property development project is subject to final council consent. Robert Williams is the council representative responsible for ensuring that we have all the required government and local body consents and will be treated as a customer for this project.

3.2 Stakeholders

The following groups and organizations are the key stakeholders in this project:

Stakeholder / Group	Stakeholder Interest
Entire Palm Grove Project Team	All team members are responsible for (and therefore have a key interest in) the successful completion of this project.
Senior Management Team, Oceanic Properties	This property development project is a major undertaking for Oceanic Properties. As such, the entire Senior Management Team has asked to be kept fully informed of its progress. The CEO of Oceanic Properties will be the Project Sponsor.
CEO, Wrights Construction Partners	The CEO of Wrights Construction Partners has a vested interest in the success of this project, as the cost in undertaking it will place the organization at risk.
Financial Controller, Wrights Construction Partners	The Financial Controller for Wrights will be interested in ensuring that the cash flow for this project is extremely well managed.
Housing Authority	The local government housing authority will be interested in ensuring that municipal standards and ordinances are upheld throughout the project.
Builders Union	The local building and construction union will be interested in ensuring that the employment contracts and regulations are upheld throughout this project.

3.3 Roles

The following key roles have been defined for this project:

Role	Resource Name	Organization	Assignment Status	Assignment Date
Project Sponsor	Alan Fletcher	Oceanic Properties	Assigned	15 August
Project Board	Anthony Davis	Oceanic Properties	Assigned	25 August
	Matthew Jones	Oceanic Properties	Assigned	25 August
	Richard Hall	Oceanic Properties	Assigned	25 August
	Nancy Roberts	Wrights Construction Partners	Assigned	25 August
	Christopher Martin	Wrights Construction Partners	Assigned	25 August
Project Manager	Mark Harris	Wrights Construction Partners	Assigned	25 August

Project Leaders	Stephen Miller	Wrights Construction Partners	Unassigned	N/A
	Gary Jackson	Wrights Construction Partners	Unassigned	N/A
	Ann Walker	Wrights Construction Partners	Unassigned	N/A

3.4 Responsibilities

Project Sponsor

The Project Sponsor will be primarily responsible for:

- Leading the Project Board as Chairman
- Defining the vision, purpose and objectives of the project
- Approving the requirements, timetable and resources
- Approving the provision of funds and resources
- Authorizing acceptance of the final solution delivered by the project

Project Board

The Project Board will be primarily responsible for:

- Overseeing the progress of the project
- Resolving all high-level risks, issues and change requests
- Ensuring that the project team has everything it needs to deliver successfully

Project Manager

The Project Manager will be primarily responsible for:

- Delivering the project on time, within budget and to specification
- Managing project staff, suppliers, customers and all other project stakeholders
- Undertaking the activities required to initiate, plan, execute and close the project successfully

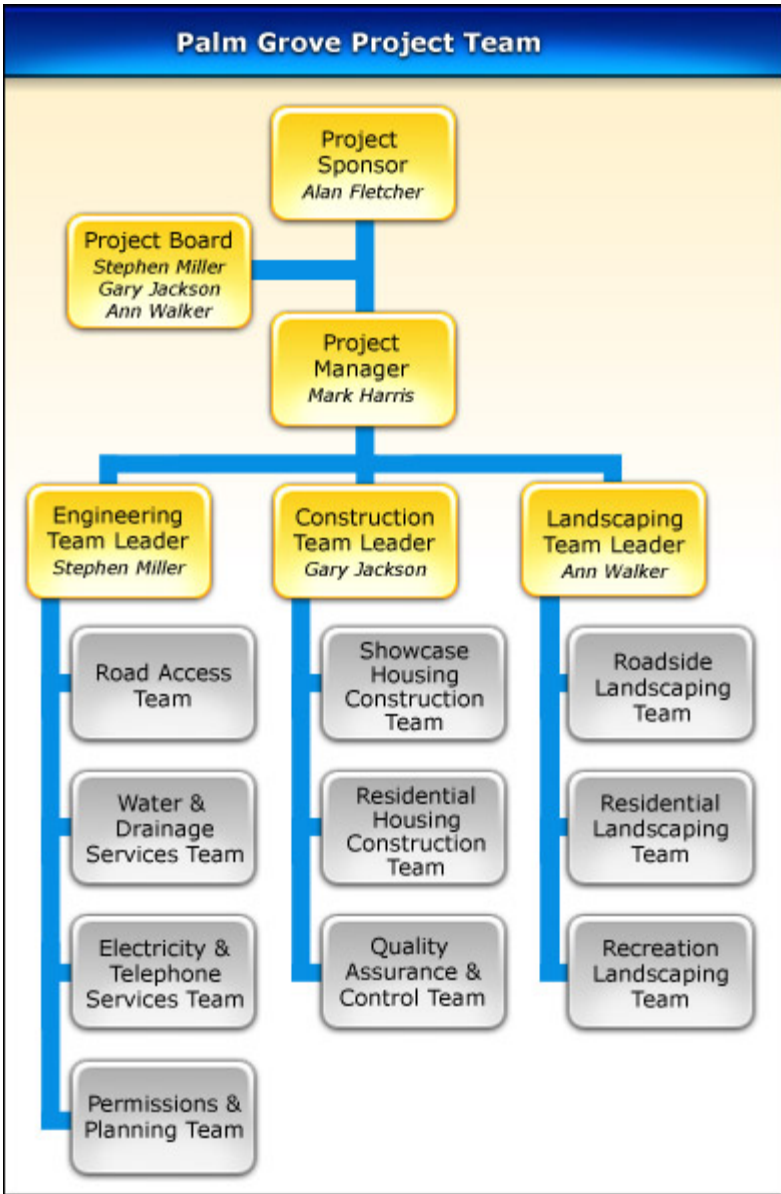
Project Leaders

The Project Leaders will be primarily responsible for:

- Undertaking all tasks allocated by the Project Manager per the Project Plan
- Reporting progress of the execution of tasks to the Project Manager on a frequent basis
- Escalating risks and issues to be addressed by the Project Manager

3.5 Structure

The following organizational structure will be put in place to ensure the successful delivery of this project:





4 Implementation Plan

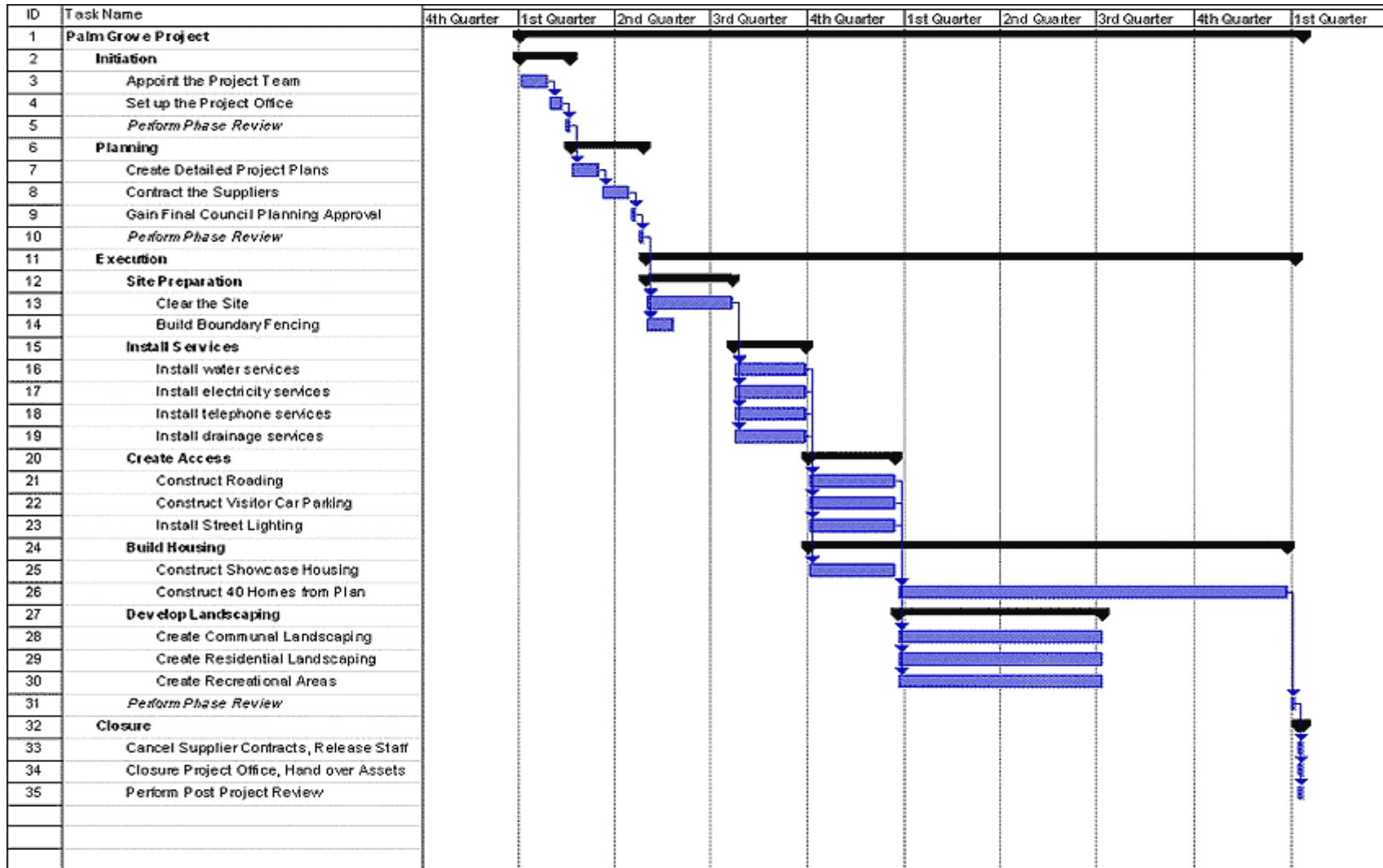
4.1 Approach

The following table describes the approach to be taken towards implementation of this project.

Phase	Overall Approach
Initiation	<p>After this Project Charter document has been approved, we will proceed with the recruitment of the project team by appointing the:</p> <ul style="list-style-type: none">■ Project Board■ Engineering team members■ Construction team members■ Landscaping team members <p>We will establish an on-site Project Office (a Wrights' project equipped shipping container), enabling us to centrally administer and control the project.</p>
Planning	<p>With the team appointed and the Project Office established, we will begin the detailed planning phase of the project. We will create a suite of project planning documentation to specify the detailed tasks, resources, finances and suppliers needed to undertake this project. We will also create plans for project communications, risk management, quality review, and customer acceptance of the deliverables (i.e. Oceanic Properties).</p>
Execution	<p>During the Execution phase (the longest phase in this project) we will install services, engineer roads, construct homes and complete the landscaping required to establish this exclusive residential property estate. We will also build two showcase homes to enable the Oceanic Properties sales team to effectively market the complex.</p>
Closure	<p>After all 40 properties have been purchased and the required dwellings constructed, the project will be ready for closure. This phase will involve terminating supplier contracts, closing the Project Office, releasing project staff and handing over the property to Oceanic Properties, which will contract a maintenance firm for ongoing support of the estate. Following closure, the customer and Wrights' staff will conduct a post-project review to determine the overall success of the project and identify any lessons learned for the future.</p>

4.2 Schedule

The following schedule describes the key activities and timescales involved in implementing this project.



4.3 Milestones

The following table lists the key milestones and their required delivery dates:

Milestone	Date	Description
Site cleared and ready for construction	15 July 2006	The property is cleared of unwanted vegetation, obstructions and waste. Boundary fencing is complete.
All services installed	31 September 2006	Water, electricity, telephone and drainage services are fully installed.
Roads complete	31 December 2006	Roads, parking and street lighting is complete.
Showcase houses complete	31 December 2006	Two fully furnished showcase houses are complete and ready for presentation.
Residential housing complete	31 December 2007	All 40 homes have been sold and constructed to plan.
Landscaping complete	30 June 2006	All communal, residential and recreational landscaping is complete.
Project complete	31 December 2007	The customer has signed off on all deliverables. Project has been closed and is ready for review.

4.4 Dependencies

The key project dependencies are listed in the following table:

Project Activity	Impacts	Is Impacted by	Criticality	Date
Gain Final Council Planning Approval	All planning and execution activities	N/A	Very High	1st March 2006
Construct Showcase Housing	N/A	Operation of all water and power services	High	30th September 2006
Install Services	Create Access Build Housing	N/A	High	30th September 2006

4.5 Resource Plan

To ensure that the project is fully resourced, the following general resource list has been specified. A detailed Resource Plan will be created later in the Project Planning phase.

Role	Start Date	End Date	% Effort
Project Board (3)	1 April 2005	1 Jan 2007	10%
Project Sponsor (1)	1 April 2005	1 Jan 2007	25%
Project Manager (1)	1 Jan 2005	1 Jan 2007	100%
Team Leaders (1)	1 Feb 2005	1 Jan 2007	100%
Road Access Team (15)	30 Sept 2005	1 Jan 2006	100%
Water & Drainage Services Team (10)	1 July 2005	1 Oct 2005	100%
Electricity & Telephone Services Team (5)	1 July 2005	1 Oct 2005	100%
Permissions & Planning Team (2)	1 Jan 2005	1 April 2005	100%
Showcase Housing Construction Team (3)	1 Oct 2005	1 Jan 2006	100%
Residential Housing Construction Team (9)	1 Jan 2006	1 Jan 2007	100%
Quality Assurance & Control Team (2)	1 Jan 2005	1 Jan 2007	100%
Roadside Landscaping Team (4)	1 Oct 2005	1 July 2006	100%
Residential Landscaping Team (5)	1 Oct 2005	1 July 2006	100%
Recreation Landscaping Team (3)	1 Oct 2005	1 July 2006	100%

4.6 Financial Plan

The following table lists the general financial expenditure required to complete this project successfully. A detailed Financial Plan will be created later in the Project Planning phase.

Expenditure Category	Expenditure Item	Expenditure Value
Infrastructure	Installation of all services	\$4,500,000
Construction	Construction of all built assets within the project	\$11,000,000
Landscaping	Labor and materials	\$2,500,000
Transportation	Transport of site materials and removal of rubble	\$1,500,000

4.7 Quality Plan

The management processes to be undertaken during this project are summarized in the following table. A detailed Quality Plan will be created later in the Project Planning phase.

Process	Description
Time Management	All builders, engineers and other contracting staff allocated to this project will record their actual project time using Timesheets. Timesheet information will be summarized in a Timesheet Register and the Project Plan updated weekly.
Cost Management	Expense Forms will be used to record expenses on this project.
Quality Management	Our "Quality Assurance & Control Team" will undertake a suite of reviews throughout the project lifecycle to ensure that the defined quality targets are achieved.
Change Management	Any changes requested within this project must be recorded using a Change Request Form. The Project Manager will be responsible for approving or seeking approval for all change requests.
Risk Management	All project risks will be documented using Risk Forms. The details of each risk will be summarized in a Risk Register to enable the Project Manager to monitor and control the status of risks throughout the project.
Issue Management	All project issues will be documented using Issue Forms. The details of each issue will be summarized in an Issue Register to enable the Project Manager to monitor and control the status of issues throughout the project.
Procurement Management	All project goods and services procured from external suppliers must be reviewed and approved by the project team before the Project Manager will issue payment for related supplier invoices.
Acceptance Management	The customer must approve all deliverables produced by this project in order for the project team to mark it as 100% complete.
Communications Management	The project management team will meet on a weekly basis (at 9:30 am each Monday) throughout the project to discuss progress to date, current risks and issues, and any changes required to ensure project success.

4.8 Completion Criteria

The following table lists the criteria that must be met for closure of the project to be approved.

Process	Description
Vision	The project vision, as stated within this document, must have been achieved.
Scope	The project must have operated within the scope specified by this document.
Business Benefits	The project must have produced the business benefits specified in the Business Case.
Deliverables	The project must have produced the deliverables specified by this document. Note: All rubble must have been cleared from the estate and the security checkpoint must be fully functional before this project will be considered ready for closure.
Acceptance	The customer must have signed off on all project deliverables as complete.
General	Where possible, the project must have produced the deliverables on schedule, under budget and to the required level of specification.



5 Project Considerations

5.1 Risks

The following table lists the risks identified for this project to date.

Risk Description	Risk Likelihood	Risk Impact	Action to be Taken to Mitigate Risk
That geological instabilities prevent the project from achieving its objectives	Low	High	Initial surveys undertaken indicate few instabilities; however, further test drilling will be carried out.
That delays in council water service connection result in delays to the project	Medium	Medium	Apply to the council for a connection as early as possible, and follow up regularly to ensure that the connection is

			scheduled as needed.
That delays in council planning approval results in delays to the project	Medium	High	Apply to the council for planning approval as early as possible, and follow up regularly to ensure that approval is granted when needed.
That delays in the supply of required goods and services cause a delay in the overall project	Low	Medium	Inform suppliers of procurement requirements as early as possible. Identify alternative suppliers in case of non-delivery.

5.2 Issues

The following table lists the risks identified for this project to date.

Issue Description	Issue Priority	Action to be Taken to Resolve Issue
Oceanic Properties has not yet completed its site and architectural drawings for the complex. This may lead to delays in planning permission.	High	Obtain a commitment from Oceanic Properties for completion of architectural drawings within a reasonable timeframe. Make the Project Board aware of this issue.
There is a lack of agreement between Wrights Construction Partners and Oceanic Properties regarding the type of external cladding required for each property. This issue is delaying the project.	High	Raise issue to Project Board for action.

5.3 Assumptions

Within this project, it is assumed that:

- Final planning permission will be approved by the Council within the timeframes required
- There is sufficient enough demand for the residential properties that all homes will sell in the timeframes required
- It is feasible to install water, electricity, telephone and drainage services within the Palm Grove estate
- All the required suppliers, resources, goods and services will be available as required by the project
- The prices of raw materials will not increase more than 10% during the course of the project

5.4 Constraints

The following constraints have been identified:

- The contingency available in the project budget is 10%.
- Only the designated number of houses (40) may be constructed.
- The complex must allow for suitable roadside parking. This will reduce the size of all communal land areas allocated.



6 Appendix

6.1 Supporting Documentation

- Curricula Vitae (CVs) for the Project Manager and all Team Leaders within the project team
- Palm Grove "Initial Site Plan" and surveyors notes
- Sample housing estate brochures for Palm Grove
- Detailed financial planning spreadsheets
- Copies of key correspondence with local authorities
- Bulk quotes for materials

Resources: adapted from: Method123 Ltd. <http://www.method123.com/>