

Portfolio

BONIFACIO GLOBAL CITY

A PUBLIC-PRIVATE JOINT VENTURE PROJECT



Presented By:	1. Carl Jhon Odicta (GH1043274) 2. Sandesh Shrishail Madannavar (GH1040589) 3. Joao Roberto Marques Castelhano (GH1043681) 4. Yohannes Terefe Furgasa (GH1040720) 5. Rakesh Nelli (GH1044321)
Module Code	M502
Module Title	Project Management
Module Tutor	Prof. Peter White

OVERVIEW

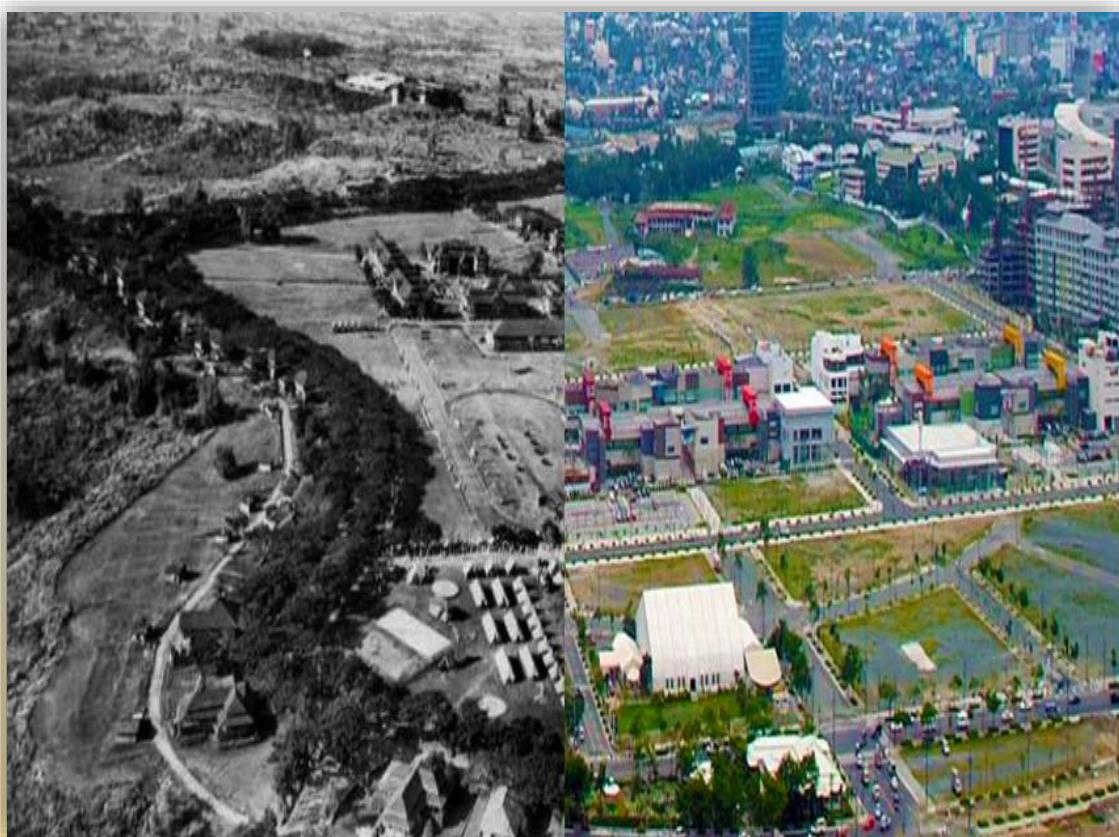


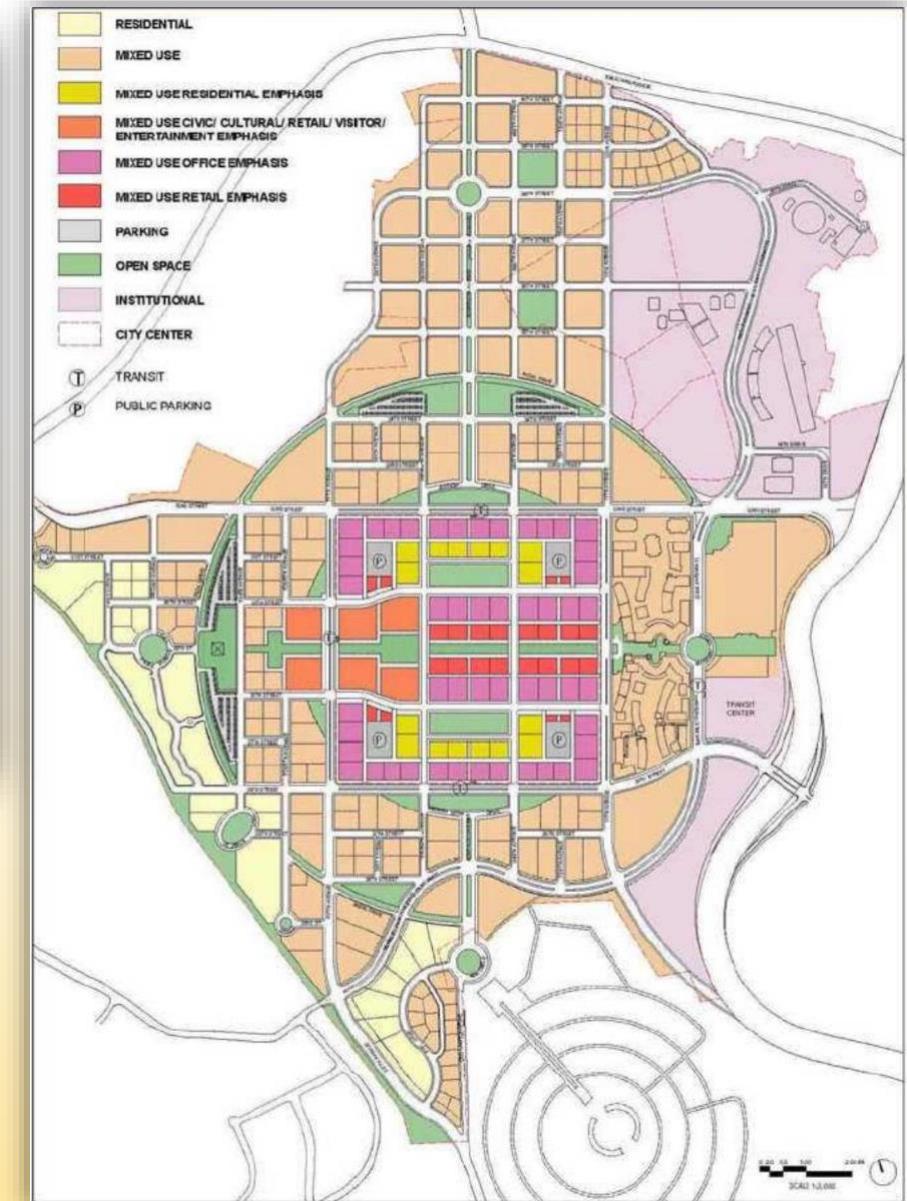
IMAGE: BEFORE AND AFTER

- **Bonifacio Global City is a visionary urban development project in Southeast Asia, designed to set a new benchmark for modern urban design.**
- Developed by HOK, the master plan addresses the region's rapid economic growth through a comprehensive strategy that combines architecture, urban planning, and landscape design.
- Inspired by Daniel Burnham's legacy in Manila, the project emphasizes collaboration, scale, and global connectivity to create a dynamic, future-ready city.

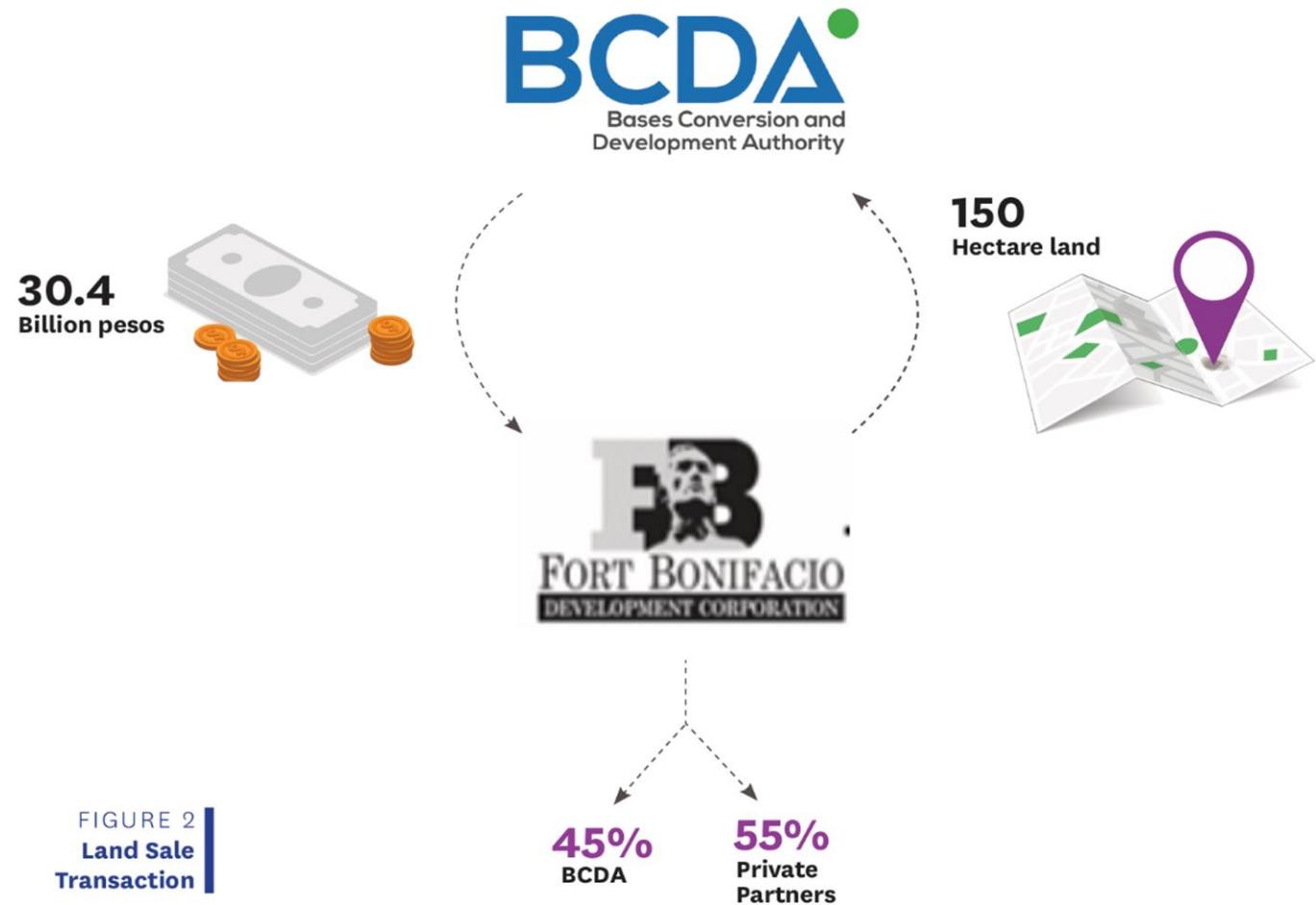
SUMMARY

- The Project is focused on decommissioning the U.S. military bases for productive use through the Base Conversion and Development into high-quality business districts and for Urban Regeneration.
- Fort Bonifacio, a defunct base on the outskirts of Manila, held great potential due to its proximity to the city and available infrastructure.
- Through a joint venture with the private sector, the previous military base was converted into a mixed-use, international business district called Bonifacio Global City.
- The development boasts Commercial spaces, eco-friendly residential townships, retail outlets, cultural facilities, international schools, embassies, and multi-national firms, etc.

(ULI Case Studies, 2020)



ESTABLISHMENT OF JOINT VENTURE

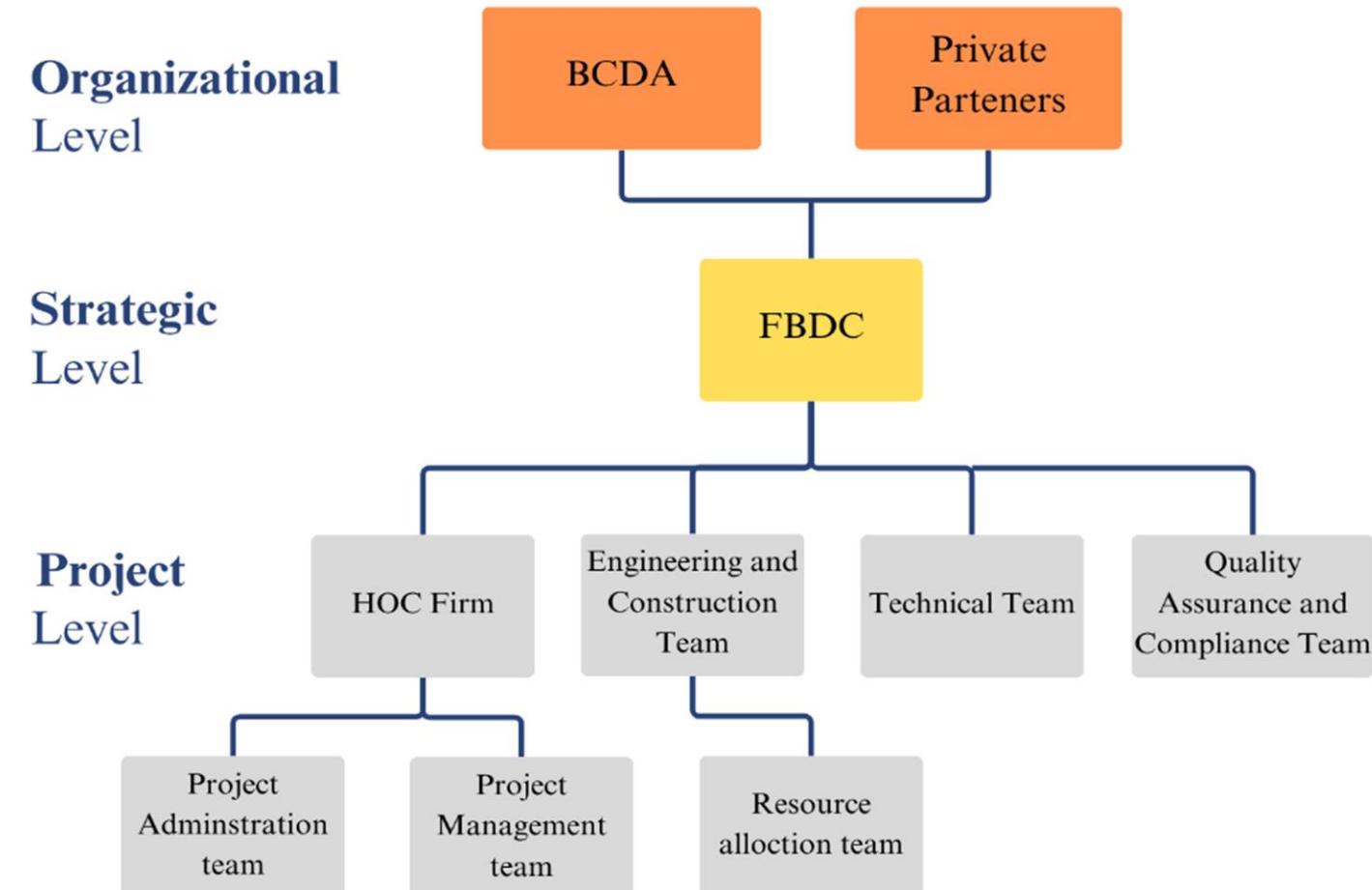


The Fort Bonifacio Development Corporation (FBDC) joint venture was formed between

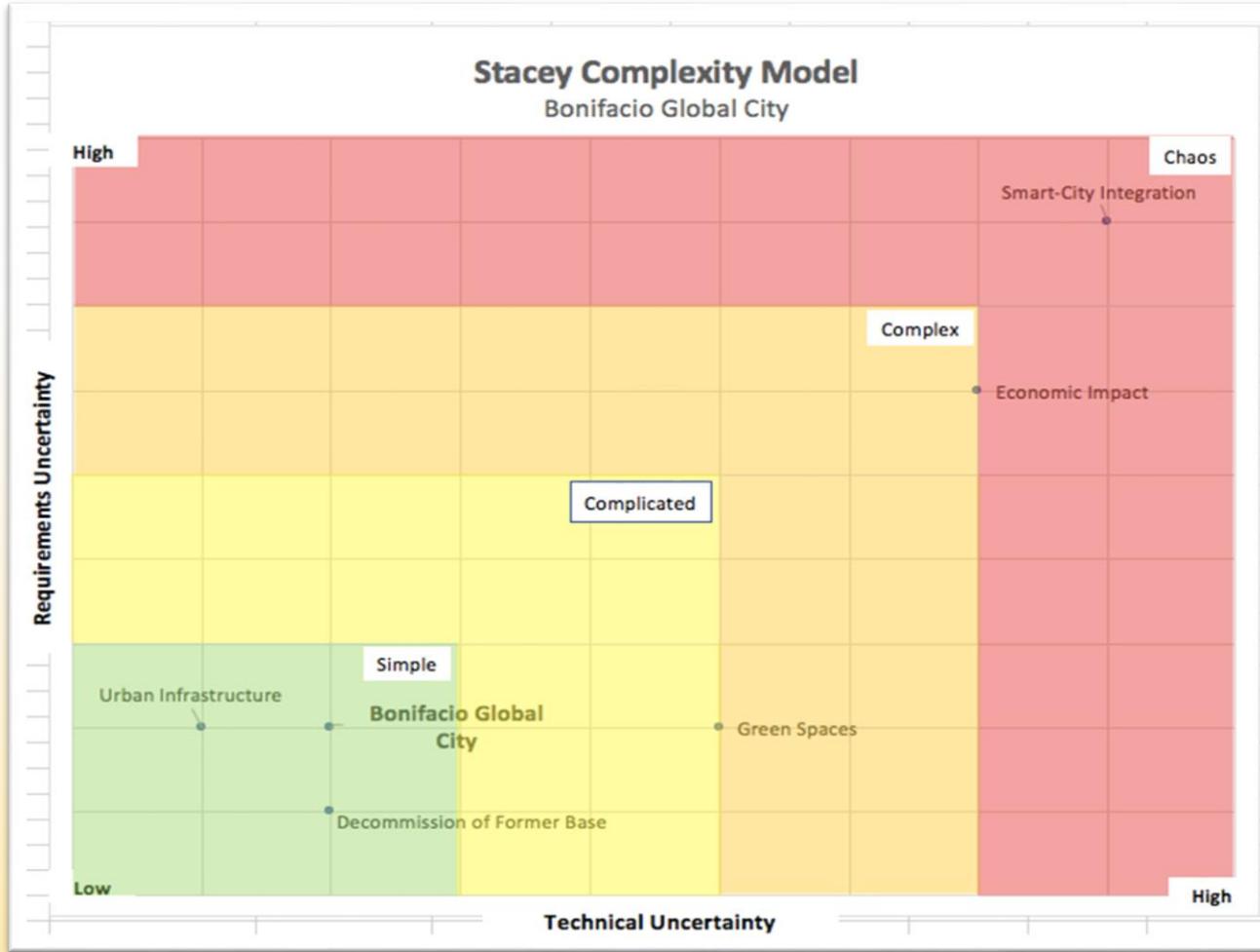
1. The BCDA and
2. Private Partners

PPP – Public Private Partnership

ORGANIZATION GOVERNANCE STRUCTURE



PROBLEM SOLVING

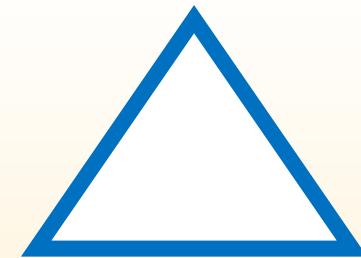


Agreed Requirements and Clear Technicalities/Processes = Low Uncertainty

IRON TRIANGLE

Scope:

Urban Regeneration –
Fixed



Schedule:

20-25 years –
Ongoing/Flexible

Budget/Cost:
Forecasted ₱378B

Fixed Scope, Flexible Schedule and Budget/Cost

∴ We can use the Traditional PM approach!
(for this assessment)

PROJECT CHARTER

Project Participants			
Stakeholders	Name	Bonifacio Global City	
	Project Sponsor	Fort Bonifacio Development Corporation (FBDC)	
	Customers	Corporate and Public	
	Contractors	DCCD Engineering Corporation	
Project Manager	Project Team and Project Manager		
	Hector Obata + Kasagham Project Management Team	Email Address or Website newbusiness@hok.com https://www.hok.com	
Project Team	Carl Ibon Odicla, Sandesh Shribhai Madanayak, Joao Roberto Marques Castelano, Yohannes Teres Furtado, Rakesh Nelli		
Project Description			
Goal Statement	Urban regeneration of a 150 hectare, former U.S military base land in Taguig into a high-quality business district for the next 25 years.		
Description and Background	Redevelopment of a defunct base with 150-hectare land area into a mixed-use, international business district to be called Bonifacio Global City by the FBDC - a public-private joint venture by BCDA and Metro Pacific. The development boasts integration commercial and residential, and public infrastructures with sustainable, eco-friendly, and smart-city technologies		
Objectives	<ul style="list-style-type: none"> Complete land redevelopment of 150 hectares into public and commercial spaces by 2025. A design that optimizes public infrastructures such as for underground utilities (water, power, sewage, and fiber optic), and the use of integrated transit strategies. A set of documents and a structure to ensure correct implementation of the master plan. Attract investors, businesses, corporations to influence economic growth Implement eco-friendly initiatives, develop green areas and achieve high ESG metric scores Integrate smart-city technologies by 2025 		
Scope	<p>This Project involves the full redevelopment of 150 hectares of former military base land into a high-quality business district through master planning of urban design, zoning, and land use.</p> <p>The scope includes dividing the area into commercial and public spaces. Building works and underground utility systems. Construction of high-rise towers for residential and commercial purposes to attract investors and bolster economic growth. At least 40% of the area will be green/open space. Integrate smart city technologies such as for surveillance and online connectivity.</p> <p>This Project does not include interior designs of privately owned buildings as well as any developments outside of this 150 hectare zone.</p>		
Deliverables	<ul style="list-style-type: none"> Improved urban landscape – Build public infrastructures and vertical projects Economic Sustainability – Build corporate investments and relationships Integration of environmental and smart-city technologies 		
Schedule	Start Date	March 2005	
	End Date	December 2021	
Time Reporting	Project progress, updates, and concerns will be reported and documented as follows:		
	Stakeholder	Frequency	Medium
	Key/Primary (Business Partners, Investors)	Quarterly	Press Conference, Quarterly Progress Report
	FBDC Executives	Monthly	Board Meetings, Written Report

	Project Team	Regularly	Team Meetings, Emails
	Public	Ongoing	FBDC Website, News outlet coverage, Social Media
At the end of the project a closure report will be submitted detailing all notable events throughout the project			
Cost Estimate			
Costing	FBDC forecasted a total capital investment of around US\$7.3B or ₱378B (Beda.gov.ph, 2019). We will use this data as the value of your projected cost, this figure includes human/labor, equipment, materials, technology, utilities, buildings, land, community/relocation, marketing, legal, and contingency costs		
Milestones			
	1997	Initiation and Setup	
	1999	Creation of Master Plan and Design	
	2006	Construction of Public Infrastructures	
	2006	Implementation of Eco/sustainability Initiatives	
	2019	Construction of Vertical Projects/Commercial Buildings	
	2021	Closure	
Assumptions, Constraints, Dependencies, Impacts, and Risks			
Assumptions	<ul style="list-style-type: none"> Establishment of Fort Bonifacio This is a public-private joint venture project by FBDC Initial budget of US\$1.6 Billion from Metro Pacific winning bid 		
Constraints	<ul style="list-style-type: none"> Macroeconomic instability Planning and design challenges Site conditions Expertise limitations 		
Risks	<ul style="list-style-type: none"> Macroeconomic instability Insufficient long-term funding plan Inefficient or impractical master plan Limited local talent pool Legal disputes over land conversion Over-reliance on government support 		
Name/Signatures		Roles and Responsibility	
Fidel Ramos		President of the Republic of the Philippines	
Ricardo Pascua		President and CEO of Metro Pacific Corporation	
Manuel Pangilinan		MPC Chairman	
Victorino Basco		BCDA Chairman and President	
Sigrida Lopez		City Mayor of Taguig	
Brian Jannett		Senior Urban Planner and Designer, HOK	
Carl Ibon Odicla		Project Team	
Sandesh Shribhai Madanayak		Project Team	
Joao Roberto Marques Castelano		Project Team	
Yohannes Teres Furtado		Project Team	
Rakesh Nelli		Project Team	
We agree that this is a viable project. We authorize the beginning of the project planning stage.			
Signature		Signature	
Date	03/2005	Date	03/2005
Project Sponsor	Ricardo Pascua	Senior Manager	Brian Jannett

PROJECT CHARTER

Goal Statement

Urban regeneration of a 150 hectare, former U.S military base land in Taguig into a high-quality business district for the next 25 years.

Scope

- Dividing the área into commercial and public spaces
- Building roads and underground utility systems
- Construction of high-rise towers for residential and commercial use
- At least 40% of the área will be green/open spaces
- Integrate smart city technologies
- This Project **does not** include interior designs of privately owned buildings as well as any developments outside of this 150 hectare zone.

Costing

- FBDC forecasted a total capital investment of around US\$7.3B or ₱378B
- Includes human/labor, equipment, materials, technology, utilities, buildings, land, community/relocation, marketing, legal, and contingency costs

1997 Initiation and Setup
1999 Creation of Master Plan and Design
2006 Construction of Public Infrastructures
2006 Implementation of Eco/sustainability Initiatives
2019 Construction of Vertical Projects/Commercial Buildings
2021 Closure

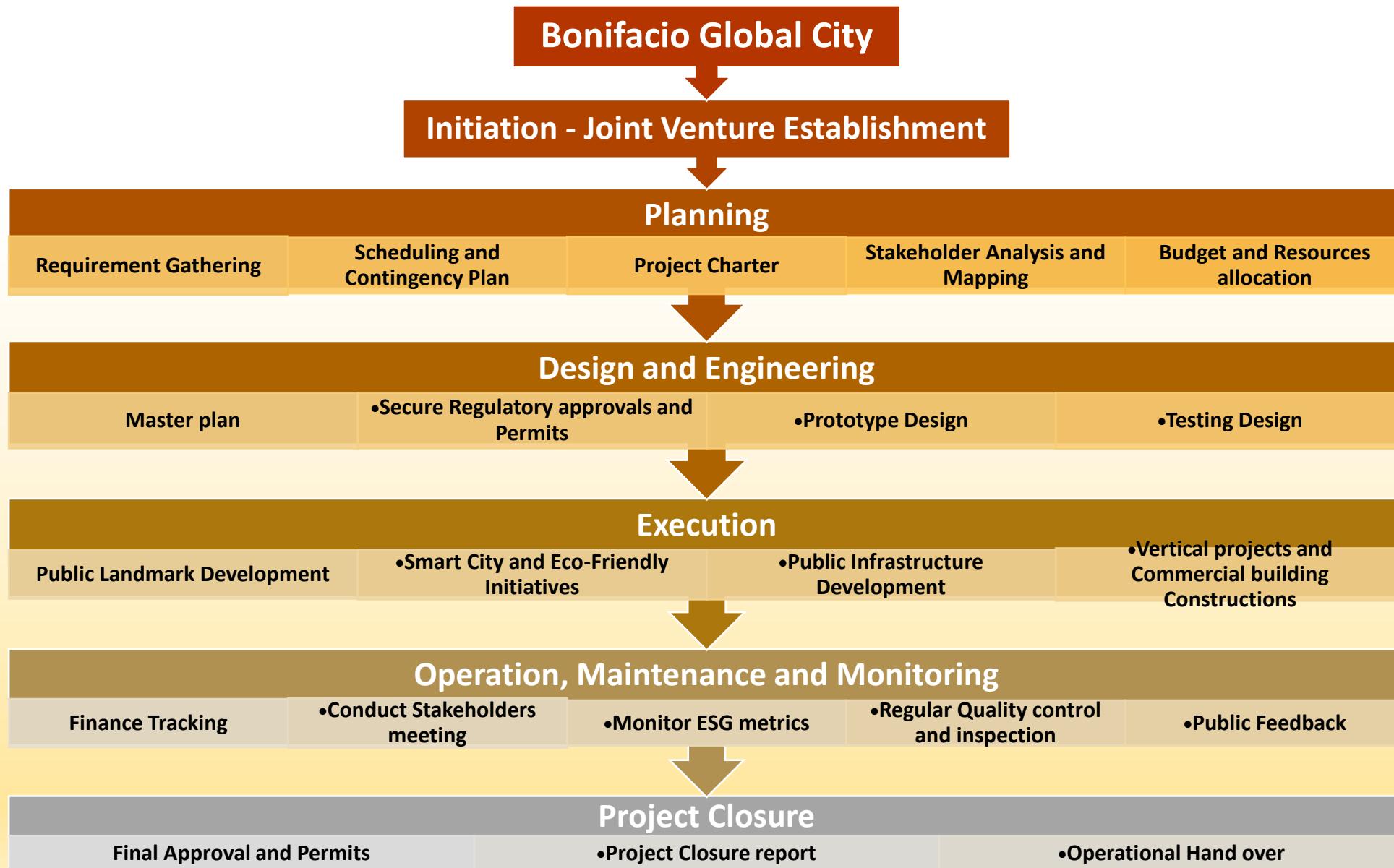
Risks

- Macroeconomic Instability
- Insufficient long-term funding plan
- Inefficient or Impractical master plan
- Limited local talent pool
- Legal disputes over land conversion
- Over-reliance on government project

We agree that this is a viable project. We authorize the beginning of the project planning stage.

Signature		Signature	
Date	03/2005	Date	03/2005
Project Sponsor	Ricardo Pascua	Senior Manager	Brian Jennett

WORK BREAKDOWN STRUCTURE (WBS)



RESPONSIBILITY ASSIGNMENT MATRIX (RAM)

RACI Matrix

R A C I

Task / Deliverable	Project Manager	Sponsor	Board	Quality	PMO	Design
1. Project Charter	A	A	R	A	C	I
2. Project Plan	A	R	C	A	C	I
3. Change Control	R	C	C	C	I	I
4. Stakeholder Analysis	R	A	I	A	I	I
5. Quality Plan	A	A	I	A	C	I
6. Risk Management Plan	R	R	A	A	I	I
7. Execution	A	R	I	I	C	I
8. Operations & Maintenance	I	A	C	A	I	I
9. Closure	A	R	I	I	C	I
10. Lessons Learned	I	R	C	C	I	I

Legend:

● = Responsible

● = Accountable

● = Consulted

● = Involved

KEY CONSTRAINTS AND KEY DEPENDENCIES

The Key Project Constraints That Can Impact The Timescale, Budget, Or Performance Of The Project:

- Macroeconomic Instability
- Planning And Design Challenges
- Site Conditions
- Expertise Limitations

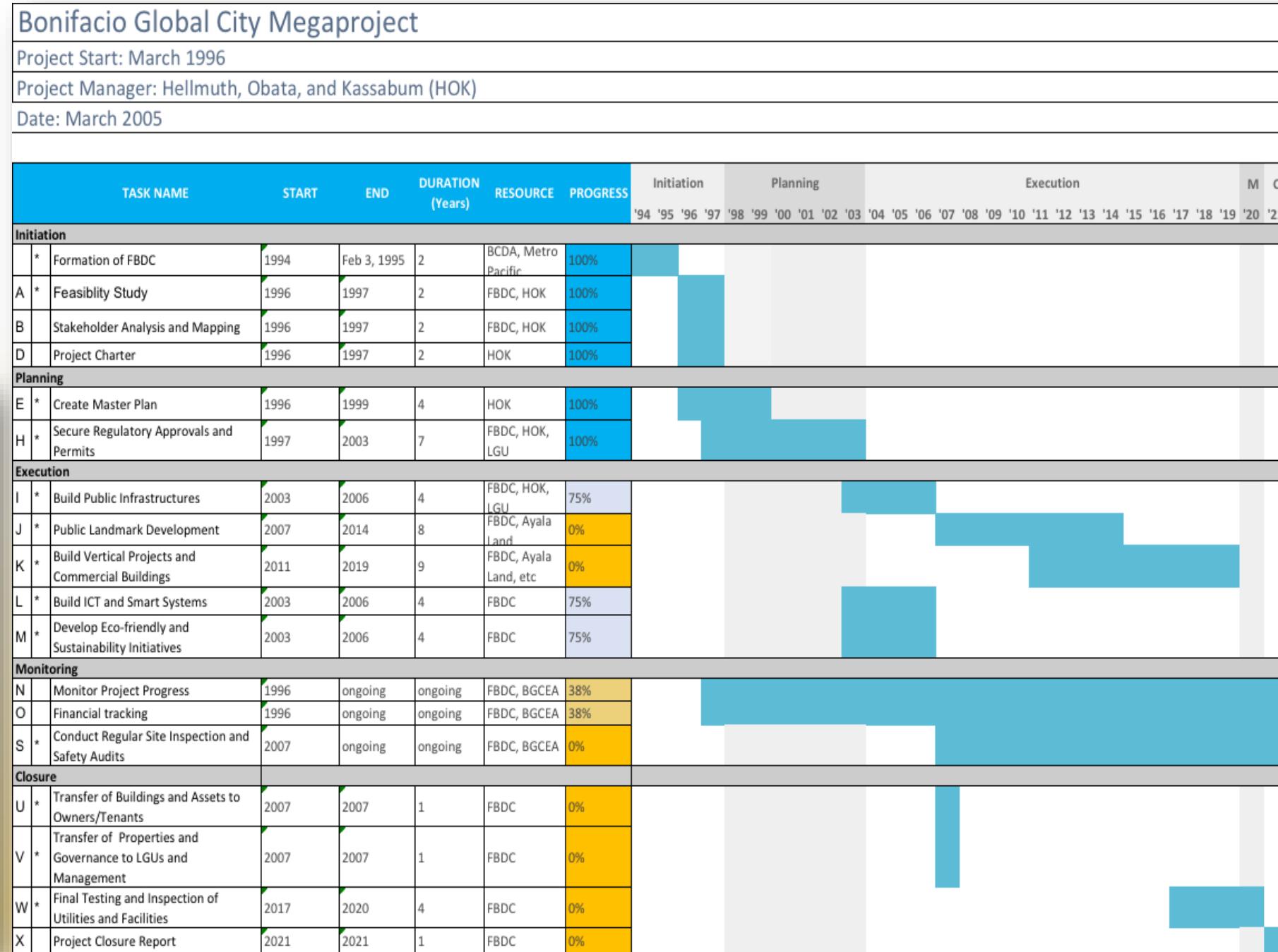
Dependency	Ownership	Impact Period
Government Approvals	Philippine Government	Beginning
New Government Subway Line	Philippine Government	Next Few Years
Limited Road Access To Adjacent Areas	BCDA	Initial Phase
Development Standards Of Surrounding Areas	Various Developers	Next Few Years
Member Financing	Consortioum	Asian Financial Crisis-1997

RISK MANAGEMENT AND MITIGATION STRATEGIES

A	B	C	D	E
No	Risk Title	Risk Description/impact	Risk Probability	Possible Mitigation
1	Macroeconomic Instability	Slowing Progress	High	Revised Strategies
2	Insufficient Long Term Funding Plan	Financial Pressure	High	Capital Infusion
3	Inefficient or Impractical Master Plan	Timescale for Planning	High	Revised Master Plan
4	Limited Local Talent Pool	Large number of Foreigner hired, this may lead to cultural instability	Medium	Form Joint Ventures
5	Legal Disputes Over Land Conversion	Delays	Low	Provide a Legal Framework
6	Over-Reliance on Government Projects	Timescale for Planning	Low	Revised Master Plan

PROJECT SCHEDULE (GANTT CHART)

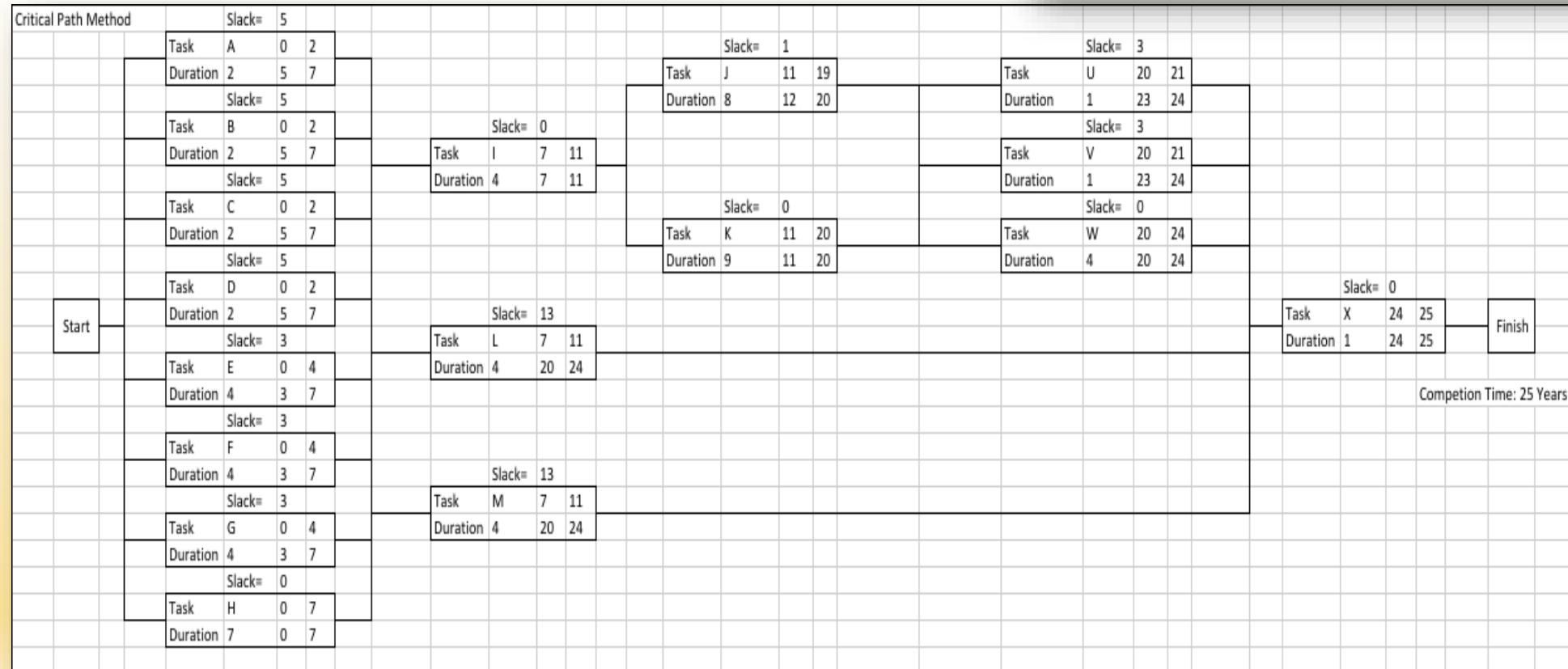
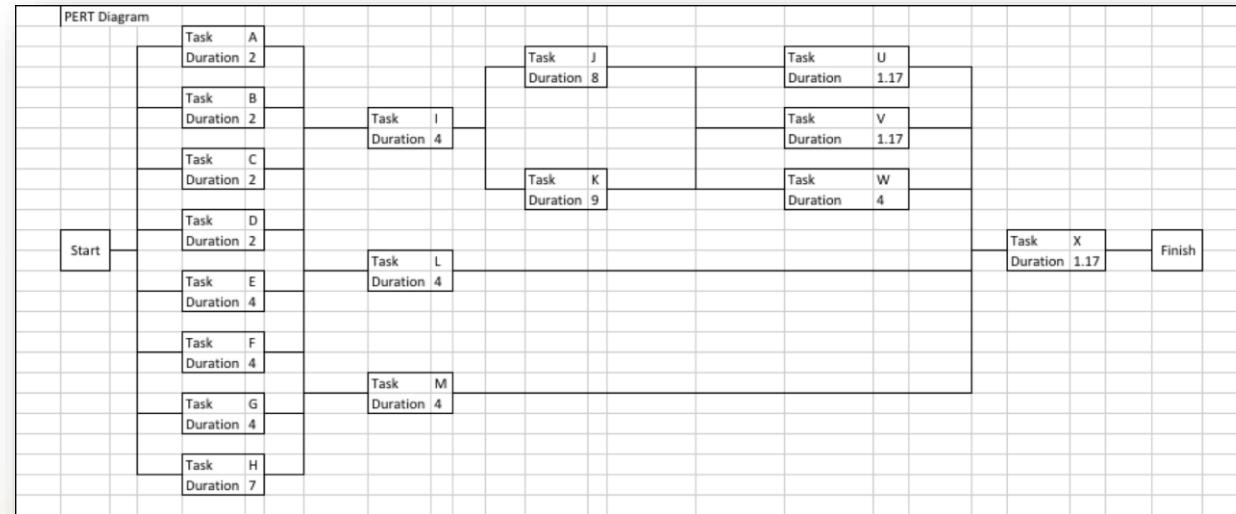
Activity Duration Estimates	
Activity	Most Likely (M)
Initiation and Set-up	4 years
Creation of Master Plan and Design	4 years
Construction of Public Infrastructures	12 years
Construction of Vertical Projects / Commercial Buildings	9 years
Implementation of Eco/sustainability Initiatives	11 years
Monitor Project Progress and ESG Metrics	Entire Duration
Closure	5 years



PROJECT SCHEDULE (DEPENDENCIES)

Critical path: Task H → I → K → W → X = $7 + 4 + 9 + 4 + 1 = 25$ years

PERT

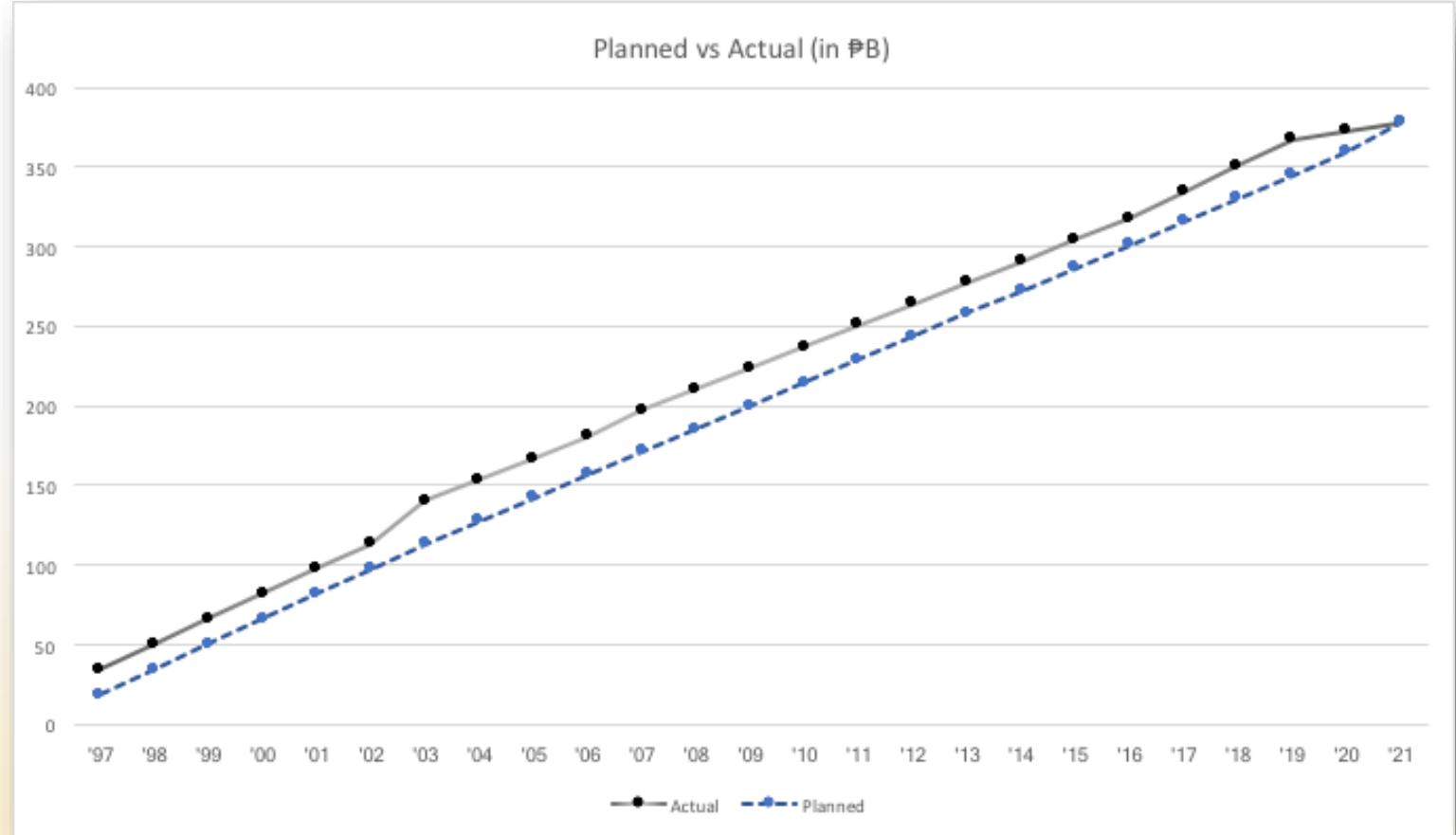


Critical Path Method

BUDGET

Cost

Resource	Estimate (₱B)
Human/Labor	67.5
Equipment	21.6
Materials	94.5
Technology	5
Utilities	18.9
Buildings	105
Land	30.4
Community and Relocation	7.6
Marketing	3.8
Legal	1.9
Contingency	22.8
Total	378



Cost Management: EVM

Planned	Phase	% Share	Total Budget	# of Years	Budget per Year
					Initiation Planning Execution and Monitoring Closure
A	Initiation	5%	18.9	1	18.90
B	Planning	25%	94.5	6	15.75
C,D	Execution and Monitoring	65%	245.7	17	14.45
E	Closure	5%	18.9	1	18.90
		100%	378	25	

KPI
Planned Value, PV
Earned Value, EV
Cost Performance Index, CPI
Schedule Performance Index, SPI
Estimate at Completion, EAC

STAKEHOLDER ENGAGEMENT

TRACKING AND MONITORING

Tracking methods:

- **Source Tracking** - Record all sources in a spreadsheet
- **Progress Tracking** - Use tools like Trello or Excel to keep tasks arranged with simple phases:
- **Change Tracking** - Follow changes in BGC's organization
- **CSR Tracking** - Record CSR initiatives by objective, timeline, status (completed/ongoing), and results to check impact.
- **Version Control** - Keep drafts in Google Drive or other such tools to maintain a record of changes and be able to readily reinstate previous versions.
- **Data Tracking** – Collect data for analysis, reports, and dash boarding to track and monitor project KPIs.

KPI	Formula
Planned Value, PV	$PV = \text{Planned Completion Rate} * \text{Total Budget}$
Earned Value, EV	$EV = \text{Actual Completion Rate} * \text{Total Budget}$
Cost Performance Index, CPI	$CPI = EV / AC$
Schedule Performance Index, SPI	$SPI = EV / PV$
Estimate at Completion, EAC	$EAC = PV / CPI$

EVM metrics

- EVM measures scope, schedule, and cost performance simultaneously which can provide early warnings of performance problems

PROJECT OUTPUT AND DELIVERABLES

Urban Regeneration:

- Urban Systems
- The Grid System
- The Geometric System
- The Organic System
- Advance Neighbourhoods & Districts
- City Centres
- Station Squares
- Institutional Districts



Transportation:

- Streetscape & Open Space System
- Public and Private Parking Spaces
- Shuttles And A Light-rail System
- People-friendly Streets and Public Spaces
- Engineering Marvel with Skyscrapers

Significance Of The Results:

- Converting Military Bases Into Vibrant Economic Use
- Economic Sustainability
- Social And Economic Outcomes
- Improved Urban Landscape

LESSONS LEARNED

The Bonifacio Global City (BGC) project emphasizes the importance of **visionary leadership, strong public-private collaboration, and comprehensive planning**.

- Looking back on the successes and challenges met throughout the project
- Obtaining feedback from various stakeholders and team members involved
- Defining mistakes or challenges with the intention of not repeating the same next time
- Realizing best practices to be applied and repeated in future projects
- Thoroughly documenting everything for mutual benefit of the entire organization

As lessons learned are documented, teams become stronger, and projects run more smoothly, saving time, money, and effort in the long term

Present Day BGC



<https://youtu.be/4s10NLdy2Uc?si=8l7UaLDZ4mK4N6sf>

THANK YOU



Gisma University of Applied Sciences

Student Number (If this is group work, please include the student numbers of all group participants)	GH1043274, GH1040589, GH1043681, GH1040720, GH1044321
Assessment Title	Bonifacio Global City Megaproject
Module Code	M502
Module Title	Project Management
Module Tutor	Prof. Peter White
Date Submitted	03.07.2025

Declaration of Authorship

We declare that all material in this assessment is our work except where there is clear acknowledgement and appropriate reference to the work of others.

We fully understand that the unacknowledged inclusion of another person's writings or ideas or works in this work may be considered plagiarism and that, should a formal investigation process confirms the allegation, We would be subject to the penalties associated with plagiarism, as per GISMA Business School, University of Applied Sciences' regulations for academic misconduct.

Signed: Carl Jhon Odicta, Sandesh Shrishail Madannavar, Joao Roberto Marques Castelhano, Yohannes Terefe Furgasa, and Rakesh Nelli.

Date: 03.07.2025

Table of Contents

1. Project Overview	1
1.1 Scope	1
1.2 Assumptions, Constraints, and Dependencies	2
1.3 Business Case	3
1.4 Statement of Work	4
1.5 Project Management Methodology	5
2. Project Organization	6
2.1 Organizational Structure	6
2.2 Work Breakdown Structure	8
2.3 RACI Matrix	10
2.4 Project Charter	11
3. Project Risks	13
3.1 Risk Identification	13
3.2 Probability and Impact	14
3.3 Mitigation Strategies	15
4. Project Schedule	16
4.1 Gantt Chart	17
4.2 Activity Network	18
5. Project Budget	19
5.1 Resources	19
5.2 Cost Estimates	19
5.3 Time-Phased Budget	20
6. Project Stakeholder	21
6.1 Stakeholder register	21
6.2 Stakeholder Matrix	21
6.3 Stakeholder Engagement	22
7. Project Monitoring	23
7.1 Key Performance Indicators	23
7.2 Success Criteria	23
7.3 Tracking Methods	24
7.4 Control Systems	24
8. Project Close-Out	25
8.1 Closing Cost Accounts	25
8.2 Lessons Learned	26

List of Tables

Table

1. Specific Objectives	1
2. Assumptions	2
3. Constraints	2
4. Dependencies	2
5. Organizational structure Description	7
6. Organization Breakdown Structure	10
7. Risk Register	13
8. Identified Risks	13
9. Mitigation Strategies	15
10. Activity Duration Estimates	16
11. Resources	19
12. Cost Estimates	19
13. EVM Metrics	23
14. Success Criteria	23
15. Sample Data Collected	24

List of Figures

Figure

1. Business Opportunity	3
2. Significance	3
3. Benefits	4
4. Statement of Work	4
5. Iron Triangle	5
6. Stacey Complexity Model	5
7. FBDC: Joint Venture	6
8. Organizational Structure	6
9. Work Breakdown Structure	8
10. RACI Matrix	10
11. Project Charter	12
12. Risk Matrix	14
13. Gantt chart	17
14. PERT Diagram	18
15. CPM Diagram	18
16. Planned Budget vs Actual Cost	20
17. Stakeholder Register	21
18. Mendelow Matrix	21

Bonifacio Global City Megaproject

1. Project Overview

Bonifacio Global City (BGC) has become the epitome of an urban development in Southeast Asia that draws inspiration from the very early planning ideas of Manila by Daniel Burnham. The design was executed by Hellmuth, Obata & Kassabaum (HOK) wherein the master plan is a perfect integration of architecture, urban design, and landscape planning to create a modern, functional, and sustainable city (bgc.com).



Set in motion by Fort Bonifacio Development Corporation (FBDC) as the very first successful public-private partnership in the Philippines, composed of the Bases Conversion and Development Authority (BCDA) together with Metro Pacific Investments Corporation (MPIC) and later on with leading developers; such as Ayala Land, Inc. through the development of converting former military bases into sustainable and economically vibrant urban communities. Presently, it is the country's second-largest central business district with world-class infrastructure, residential neighbourhoods, schools, and cultural spaces. Featured in well over 200 buildings and nearly one million occupants daily in 2019, BGC declared its name for itself as the new sunset in large-scale sustainable urbanization within Southeast Asia (fdbfi.org).

1.1 Scope

- ✓ **Urban Regeneration:** Focus on turning Fort Bonifacio into one vibrant, high-intensity, mixed-use urban centre. The development, therefore, needs to cater for an equitably balanced provision of commercial, residential, institutional, recreational, and utility infrastructures.
- ✓ **Urban Systems and Inspirations:** In the course of their work, the planners studied 13 major cities across Europe, Asia, and the United States, trying to draw their lessons from successes and pitfalls.
- ✓ **Three Urban Layout Systems:** In the technical perspective, the master-planning integrates the three major urban layout systems; the grid system, geometric system, and organic system.

OBJECTIVES

- A design that optimizes the use of mass transit through an integrated transit strategy which is flexible and compatible with all phases of development.
- An integrated car parking strategy that minimizes the impact of the automobile by creating a pedestrian-friendly environment within the city.
- A series of definitive urban neighborhoods which focuses on distinct individual open spaces.
- A set of documents and a structure to ensure correct implementation of the master plan.
- A design sensitive to local culture, context, and climate.

Table 1. Specific Objectives

1.2 Assumptions, Constraints, and Dependencies

Assumptions
• Privatization of Fort Bonifacio
• Incorporating international best practices in urban planning and development
• A Public-private joint venture project by FBDC
• Initial budget of US\$1.6 Billion from MPIC winning bid

Table 2. Assumptions

Constraints	
Constraint	Area of Impact
Macroeconomic Instability	Budget and Cost
Planning and design challenges	Schedule and Budget
Site conditions	Schedule and Budget
Expertise Limitations	Budget and Cost

Table 3. Constraints

Dependencies		
Dependency	Owner	Impact Date
Goverment appprovals	Philippine Government	Beginning
New Goverment Subway Line	Philippine Government	Next Few Years
Limited road access to adjacent areas	BCDA	Initial Phase
Development standards of surrounding areas	Various Developers	Next Few Years
Member financing	Consortioum	Asian Financial Crisis - 1997

Table 4. Dependencies

1.3 Business Case

Metro Manila was heading towards rapid urban growth without any proper infrastructure, resulting in over gathering of people, traffic, and damages to environment. Hence, the requirement of modern, sustainable urban area that could withstand these pressures while helping the economic and social benefits of the country (bgc.com). Urban regeneration of Fort Bonifacio, being a huge yet unutilized military-occupied space-the, could be a solution to this problem and be economically profitable.

Business Opportunity

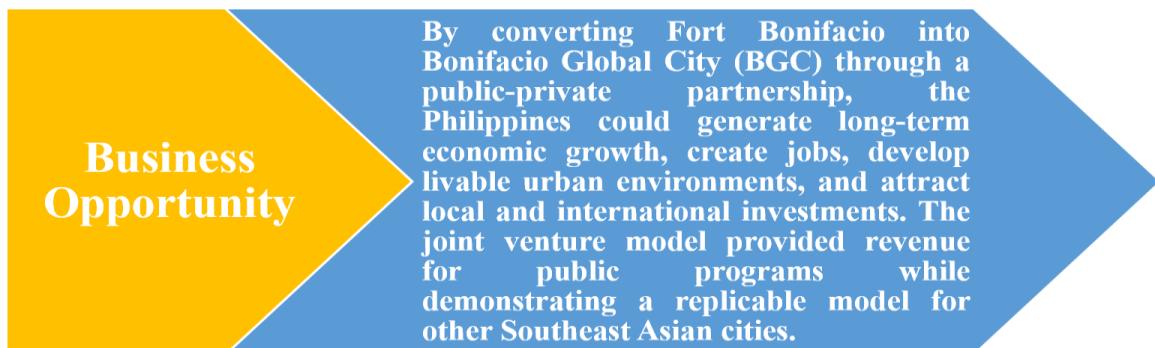


Figure 1. Business Opportunity

Significance



Figure 2. Significance

Benefits



Figure 3. Benefits

1.4 Statement of Work

This transformational endeavor for Metro Manila is under the aegis of the Bases Conversion and Development Authority, in collaboration with the Fort Bonifacio Development Corporation. This project spans an area of 150 hectares with the intention of creating a highly densified mixed-use urban center comprising residential, commercial, institutional, cultural, and recreational grounds. It is developed based on a comprehensive master plan amalgamating grid, geometric, and organic urban design systems. Among others, the principal deliverables shall be the development of walkable neighborhoods, multimodal transit infrastructure, sustainable engineering systems, and green public spaces. The project has also mapped out revenue streams for the long term that can in turn be utilized to advance development priorities at the national level such as military and homeless housing, and infrastructure investment. With a number of years stretching somewhere between 20 and 25 and having been started in 1996, BGC is poised to evolve into a world-class central business district that communicates innovation, livability, and economic value.

Figure 4. Statement of Work

1.5 Project Management Methodology

With information on the nature of the project and on the project's scope, schedule, and cost, we can use the following tools to justify the use of **Traditional PM Methodology** for this project.

Iron Triangle

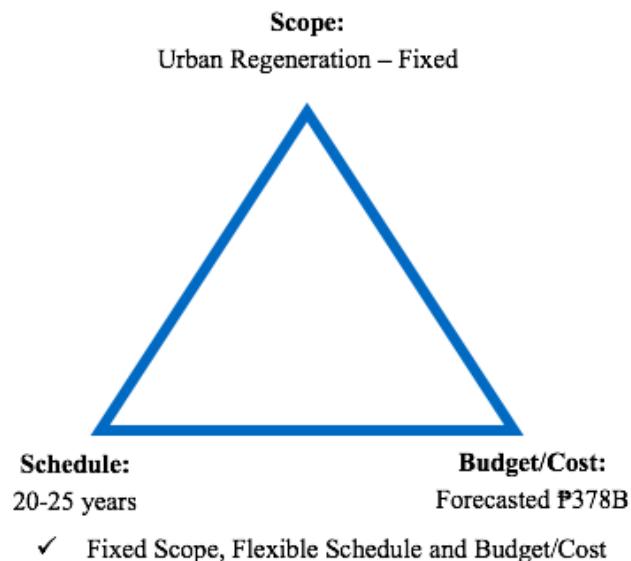
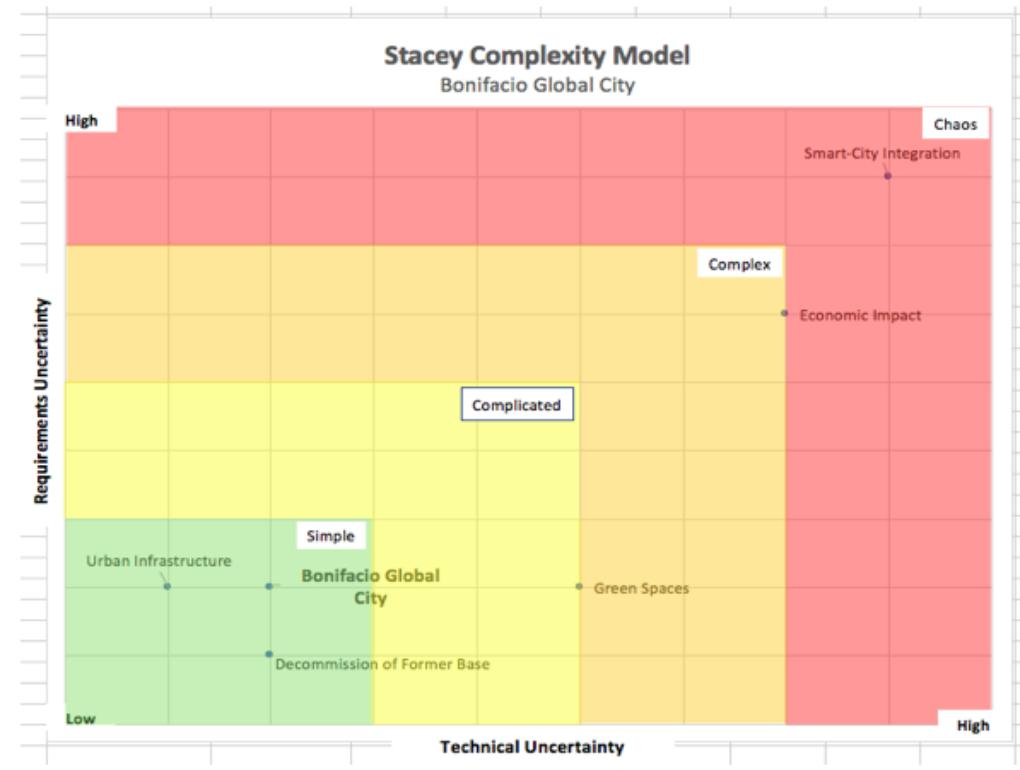


Figure 5. Iron Triangle

Stacey Complexity Model



- ✓ Agreed Requirements and Clear Technicalities/Processes = Low Uncertainty

Figure 6. Stacey Complexity Model

2. Project Organization

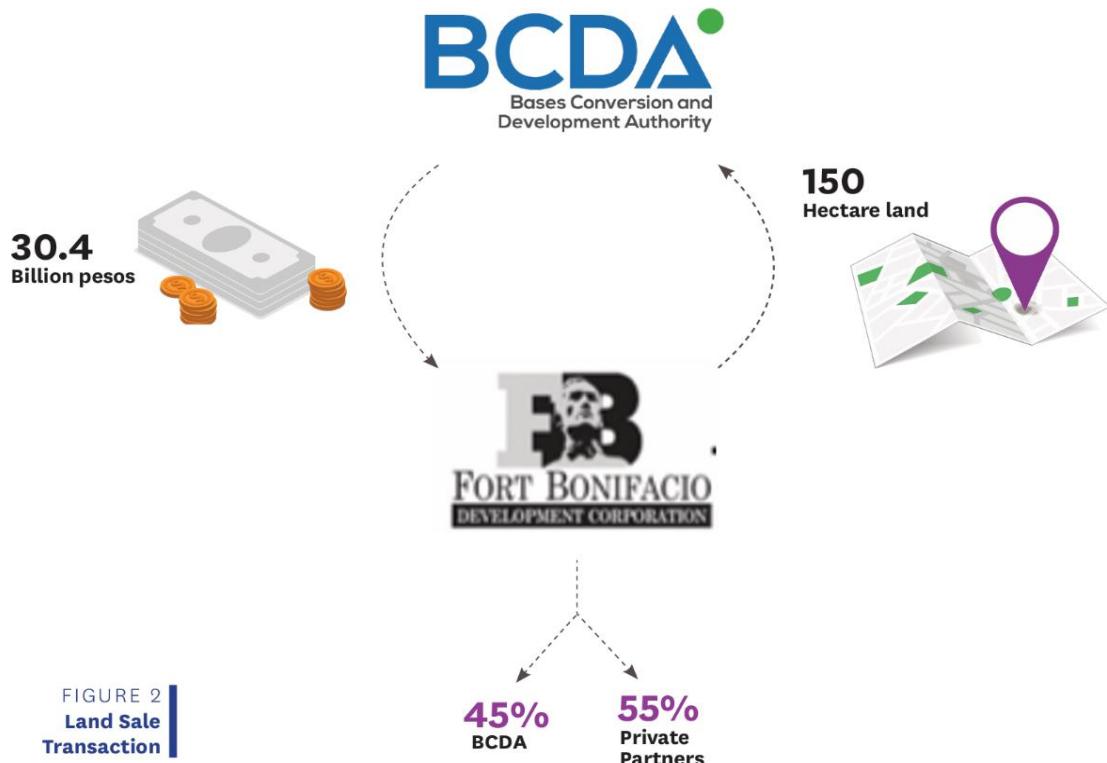


Figure 7. FBDC: Joint Venture

2.1 Organizational Structure

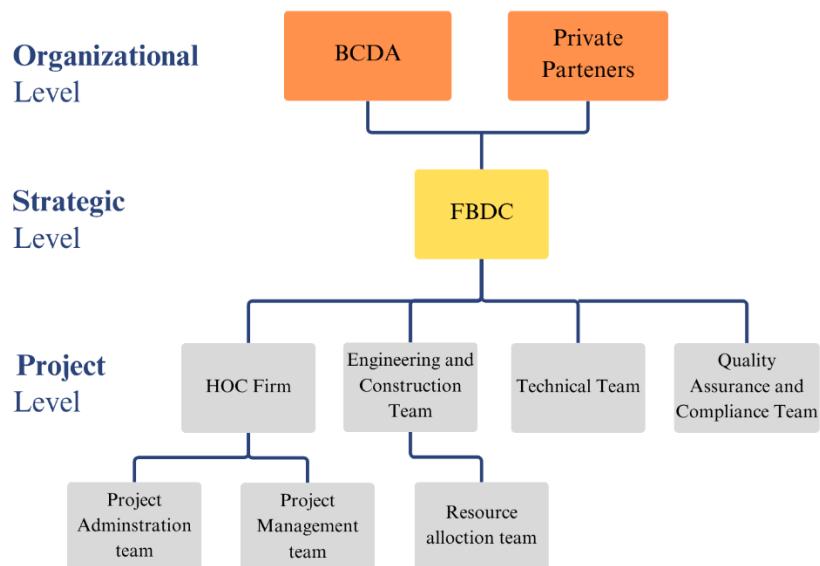


Figure 8. Organizational Structure

Philippine Government Agency	Bases Conversion and Development Authority (BCDA)
Joint Venture	Fort Bonifacio Development Corporation (FBDC)
Private Partners	Metro Pacific Investment Corporation (1992-1996), Ayala Land, Inc. and Evergreen Inc. (2000-present)
Project Management and Design	Helmuth, Obata + Kassabaum (HOK)
Engineering and Construction	DCCD Engineering Corporation

Table 5. Organizational structure Description

Organizational level – The BCDA board and the private partners who are the project sponsors. Their main function will be setting policies, overlooking the entire project finance aspects. The Executive Leaders of the FBDC will report back to them.

Strategic level - The FBDC is responsible with setting strategy for project, overlooking each Project levels and communicating in regular basis with the teams of each project Executives. The other main responsibility of the FBDC is assigning different companies to their respective tasks. Setting communication channel between itself and the Organizational leadership, including ways of reporting and taking direction.

Project level

- HOC – The project management group responsible for managing and leading all departments. Project Management Office and Project management team under HOC are responsible for the entire master plan.
- Engineering and Construction Team responsible for all construction works.
- Technical Team is responsible for the installation and monitoring of every electrical and mechanical procedure, ie. smart city technologies.
- Quality assurance and compliance team is responsible for monitoring performance and audit.

2.2 Work Breakdown Structure



Figure 9. Work Breakdown Structure

The Work Breakdown structure (WBS) visualizes all the tasks that needs to be conducted from start to end of this project. This project starts with the formation of the joint venture as our initiation phase, then the following five phases of WBS will occur.

Planning

- Requirement Gathering - Collecting all information and required approvals for the land acquisition, zoning, etc.
- Stakeholder Analysis and Mapping - Identify and create a list/stakeholder register for all stakeholders (anyone affected by or interested by the project) and specify each of their roles, importance, and important details.
- Scheduling and Contingency Plan - Set project timeline.
- Budget and Resource Allocation - Estimate costs and plan budget distribution.
- Project Charter - Submit a clear and self-explanatory document showing all necessary details about the project for approval.

Design and Engineering

- Master Plan: Structural and Architectural Design of the city.
- Prototype Design: Build a prototype (in this case, a feasibility study or city model) following the Master plan. Explaining each structure in details, so to know and understand what the city will look like.
- Secure Regulatory Approvals and Permits
- Testing Design: Get approval on the Architectural and Engineering design.

Execution

- Public Landmark Development – Construction of public hospitals, schools, parks, etc.
- Public Infrastructure Development - Construction of public infrastructures (roads, bridges, etc.), utilities (Water, Electricity, sewage), and IT systems (telecomm, fibre optic).
- Smart City and Eco-Friendly Initiatives - Integrate smart city and Eco-friendly initiatives such as IoT, traffic systems, CCTVs, and Green zones.
- Vertical projects and Commercial Building Construction - Construction of condominiums, hotels, offices, etc.

Operation, Maintenance and Monitoring

- Finance Tracking - Manage and monitor cost vs budget. Conduct financial audits and reports.
- Regular Quality Control and Inspection - Check-up on project progress and quality.
- Conduct Stakeholder Meetings - Arrange meetings with stakeholders to give updates and feedback-driven decision making.
- Public Feedback – Collect customer feedback through surveys and reviews.
- Monitor ESG metrics - Weigh the organisation's performance in terms of environmental, social and governance results.

Closure

- Project Closure report: Report of the entire project's ups and downs for the stakeholders and understanding lesson learnt.
- Final Approval and Permits – Process for approval to officially close the project
- Operational Hand Over: Transfer ownership and assets to specified users.

Organization Breakdown Structure

Tasks	Responsibilities
Pre-planning and planning	architecture team and urban design team,
Design and Engineering	HOK architecture team, landscape architecture, Lighting, experience design
Construction and Development	HOK Engineering team, on-site space management
Operation, maintenances and Monitoring	HOK Technical team, life style and control system team
Project Closure	All the parties involved

Table 6. Organization Breakdown Structure

2.3 RACI Matrix

RAM/RACI matrix is a cross-tabulation of each tasks with each stakeholder (focus@admin, 2020). This is important to keep awareness and accountability all required tasks for the project.



Figure 10. RACI Matrix

2.4 Project Charter

This document contains all significant information regarding the project which will be submitted and presented to the project sponsor and key stakeholders for approval and documentation.

Project Participants			
Name	Bonifacio Global City		
Stakeholders	Project Sponsor	Fort Bonifacio Development Corporation (FBDC)	
	Customers	Corporate and Public	
	Contractors	DCCD Engineering Corporation	
	Project Team and Project Manager		
Project Manager	Hellmuth, Obata + Kassabaum Project Management Team	Email Address or Website	newbusiness@hok.com https://www.hok.com
Project Team	Carl Jhon Odicla, Sandesh Shrishail Madannavar, Joao Roberto Marques Castelhano, Yohannes Terefe Furgasa, Rakesh Nelli		

Project Description															
Goal Statement	Urban regeneration of a 150 hectare, former U.S military base land in Taguig into a high-quality business district for the next 25 years.														
Description and Background	Redevelopment of a defunct base with 150-hectare land area into a mixed-use, international business district to be called Bonifacio Global City by the FBDC - a public-private joint venture by BCDA and Metro Pacific. The development boasts integration commercial and residential, and public infrastructures with sustainable, eco-friendly, and smart-city technologies														
Objectives	<ul style="list-style-type: none"> • Complete land redevelopment of 150 hectares into public and commercial spaces by 2025. • A design that optimizes public infrastructures such as for underground utilities (water, power, sewage, and fiber optic, and the use of integrated transit strategies. • A set of documents and a structure to ensure correct implementation of the master plan. • Attract investors, businesses, corporations to influence economic growth • Implement eco-friendly initiatives, develop green areas and achieve high ESG metric scores • Integrate smart-city technologies by 2021 														
Scope	<p>This Project involves the full redevelopment of 150 hectares of former military base land into a high-quality business district through master-planning of urban design, zoning, and land use.</p> <p>The scope includes dividing the área into commercial and public spaces. Building roads and underground utility systems. Construction of high-rise towers for residential and commercial purpose to attract investors and bolster economic growth. At least 40% of the área will be green/open spaces. Integrate smart city technologies such as for surveillance and online connectivity.</p> <p>This Project does not include interior designs of privately owned buildings as well as any developments outside of this 150 hectare zone.</p>														
Deliverables	<ul style="list-style-type: none"> • Improved urban landscape – Build public infrastructures and vertical projects • Economic Sustainability – Build corporate investments and relationships • Integration of environmental and smart-city technologies 														
Schedule	Start Date	March 2005													
	End Date	December 2021													
Time Reporting	<p>Project progress, updates, and concerns will be reported and documented as follows:</p> <table border="1"> <thead> <tr> <th>Stakeholder</th> <th>Frequency</th> <th>Medium</th> </tr> </thead> <tbody> <tr> <td>Key/Primary (Business Partners, Investors)</td> <td>Quarterly</td> <td>Press Conference, Quarterly Progress Report</td> </tr> <tr> <td>FBDC Execomm</td> <td>Monthly</td> <td>Board Meetings, Written Report</td> </tr> <tr> <td>Project Team</td> <td>Regularly</td> <td>Team Meetings, Emails</td> </tr> </tbody> </table>			Stakeholder	Frequency	Medium	Key/Primary (Business Partners, Investors)	Quarterly	Press Conference, Quarterly Progress Report	FBDC Execomm	Monthly	Board Meetings, Written Report	Project Team	Regularly	Team Meetings, Emails
Stakeholder	Frequency	Medium													
Key/Primary (Business Partners, Investors)	Quarterly	Press Conference, Quarterly Progress Report													
FBDC Execomm	Monthly	Board Meetings, Written Report													
Project Team	Regularly	Team Meetings, Emails													

Cost Estimate			
Costing	FBDC forecasted a total capital investment of around US\$7.3B or ₱378B (Beda.gov.ph, 2019). We will use this data as the value of your projected cost, this figure includes human/labor, equipment, materials, technology, utilities, buildings, land, community/relocation, marketing, legal, and contingency costs		
Milestones			
1997	Initiation and Setup		
1999	Creation of Master Plan and Design		
2006	Construction of Public Infrastructures		
2006	Implementation of Eco/sustainability Initiatives		
2019	Construction of Vertical Projects/Commercial Buildings		
2021	Closure		
Assumptions, Constraints, Dependencies, Impacts, and Risks			
Assumptions	<ul style="list-style-type: none"> • Privatization of Fort Bonifacio • This is a public-private joint venture project by FBDC • Initial budget of US\$1.6 Billion from Metro Pacific winning bid 		
Constraints	<ul style="list-style-type: none"> • Macroeconomic instability • Planning and design challenges • Site conditions • Expertise limitations 		
Risks	<ul style="list-style-type: none"> • Macroeconomic Instability • Insufficient long-term funding plan • Inefficient or Impractical master plan • Limited local talent pool • Legal disputes over land conversion • Over-reliance on government project 		
Name/Signatures		Roles and Responsibility	
Fidel Ramos		President of the Republic of the Philippines	
Ricardo Pascua		President and CEO of Metro Pacific Corporation	
Manuel Pangilinan		MPC Chairman	
Victorino Basco		BCDA Chairman and President	
Sigfrido Tiñga		City Mayor of Taguig	
Brian Jennett		Senior Urban Planner and Designer, HOK	
Carl Jhon Odicla		Project Team	
Sandesh Shrishail Madannavar		Project Team	
Joao Roberto Marques Castelhano		Project Team	
Yohannes Terefe Furgasa		Project Team	
Rakesh Nelli		Project Team	
We agree that this is a viable project. We authorize the beginning of the project planning stage.			
Signature		Signature	

Figure 11. Project Charter

3. Project Risks

Risks are uncertain events that may happen during project implementation that will affect project's scope, time, or cost.

Risk	Probability	Impact	Mitigation
Macroeconomic Instability	High	Slowing progress	Revised strategies
Insufficient Long-term Funding Plan	High	Financial pressure	Capital infusion
Inefficient or Impractical Master Plan	High	Timescale for planning	Revised master plan
Limited Local Talent Pool	High	Large numb of foreigners hired	Form joint ventures
Legal Disputes over Land Conversion	High	Delays	Provide a legal framework
Over-reliance on Government Projects	High	Timescale for planning	Revised master plan

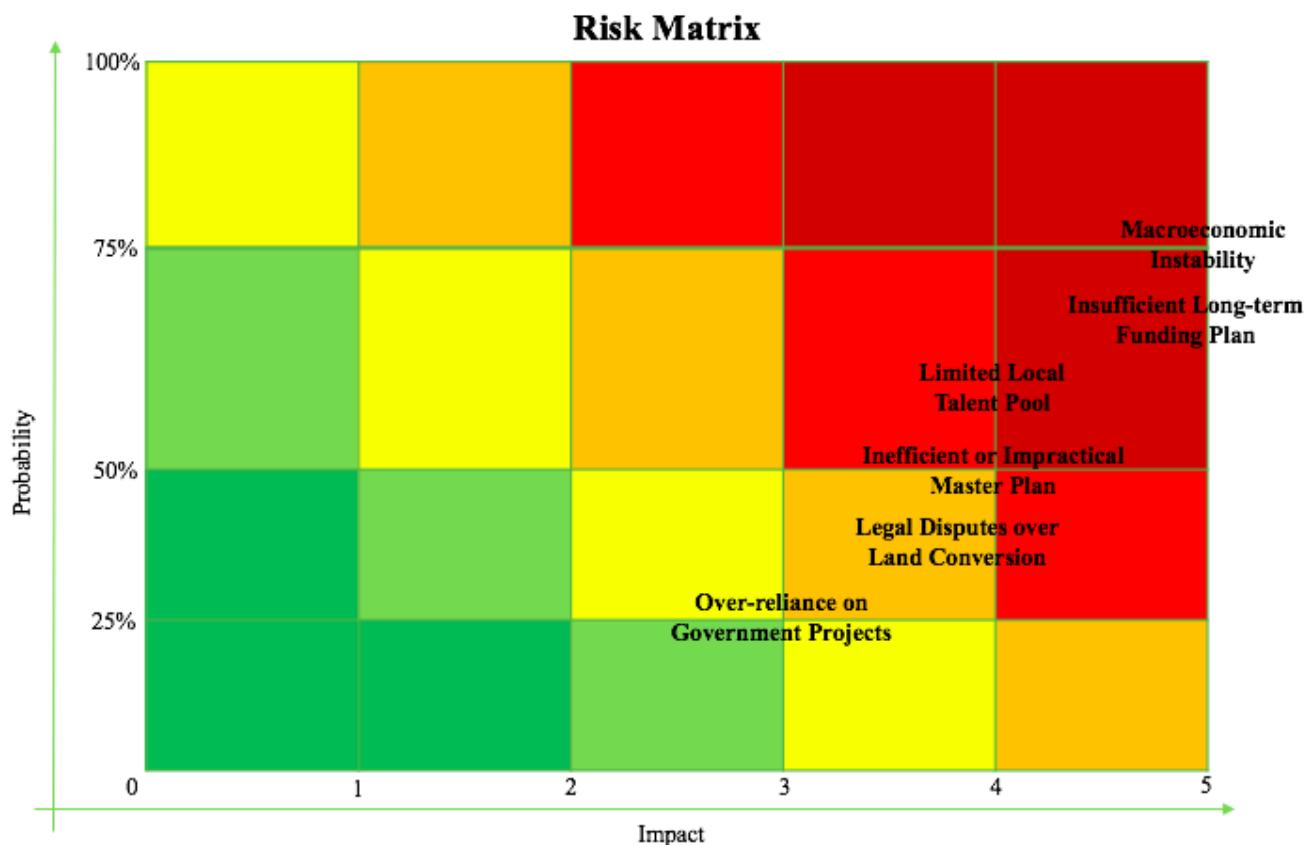
Table 7. Risk Register

3.1 Risk Identification

Risk	Description
Macroeconomic Instability	The Asian Financial Crisis impacted all project stakeholders, including consortium members and financial institutions.
Insufficient Long-term Funding Plan	Excessive leverage and over-reliance on foreign currency, acquiring debt can destabilize operations.
Inefficient or Impractical Master Plan	Design and details of the master plan could be inachievable, this is a possibility since this is the first project of this kind and level in the country.
Limited Local Talent Pool	The project demands some specialized level of skill not available locally, requiring foreign hires with higher asking salaries.
Legal Disputes over Land Conversion	Affected personnels living in the area could require relocation, which can create legal problems.
Over-reliance on Government Projects	The project is in a city surrounded by others and depends on connected public transport and roads access. Additionally, private partnerships are not guaranteed.

Table 8. Identified Risks

3.2 Probability and Impact



Risk	Probability (%)	Impact
Macroeconomic Instability	75	5
Insufficient Long-term Funding Plan	70	5
Inefficient or Impractical Master Plan	50	4
Limited Local Talent Pool	60	4
Legal Disputes over Land Conversion	40	4
Over-reliance on Government Projects	25	3

Figure 12. Risk Matrix

3.3 Mitigation Strategies

Risk	Mitigation Strategy
Macroeconomic Instability	Infusion of capital to substantially revised key items in the master plan.
Insufficient Long-term Funding Plan	Establishing a sustainable strategic partnership model, implementing systems to monitor macroeconomic changes in real time.
Inefficient or Impractical Master Plan	Substantial revision of the master plan to improve operational efficiency, mainly through rationalized public transport.
Limited Local Talent Pool	Reliance on foreign expertise through strategic joint ventures with leading global companies.
Legal Disputes over Land Conversion	Fair compensation package for military families, leadership with clear process for relocating military families.
Over-reliance on Government Projects	Plan less expensive and more practical alternatives, avoid over-reliance on future government megaprojects.

Table 9. Mitigation Strategies

4. Project Schedule

Duration of some of the key activities are estimated using a three-point estimate – a probabilistic estimation technique that identifies the “Most Likely”, “Best Case”, and the “Worst Case” based on available resources (Sahni, 2023).

Activity	Most Likely (M)	Best Case (B)	Worst Case (W)
Initiation and Set-up	4 years	3 year	5 years
Creation of Master Plan and Design	4 years	3 years	*7 years
Construction of Public Infrastructures	12 years	10 years	14 years
Construction of Vertical Projects / Commercial Buildings	9 years	7 years	11 years
Implementation of Eco/sustainability Initiatives	11 years	9 years	13 years
Monitor Project Progress and ESG Metrics	Entire Duration	Entire Duration	Entire Duration
Closure	5 years	3 years	7 years

Table 10. Activity Duration Estimates

4.1 Gantt Chart

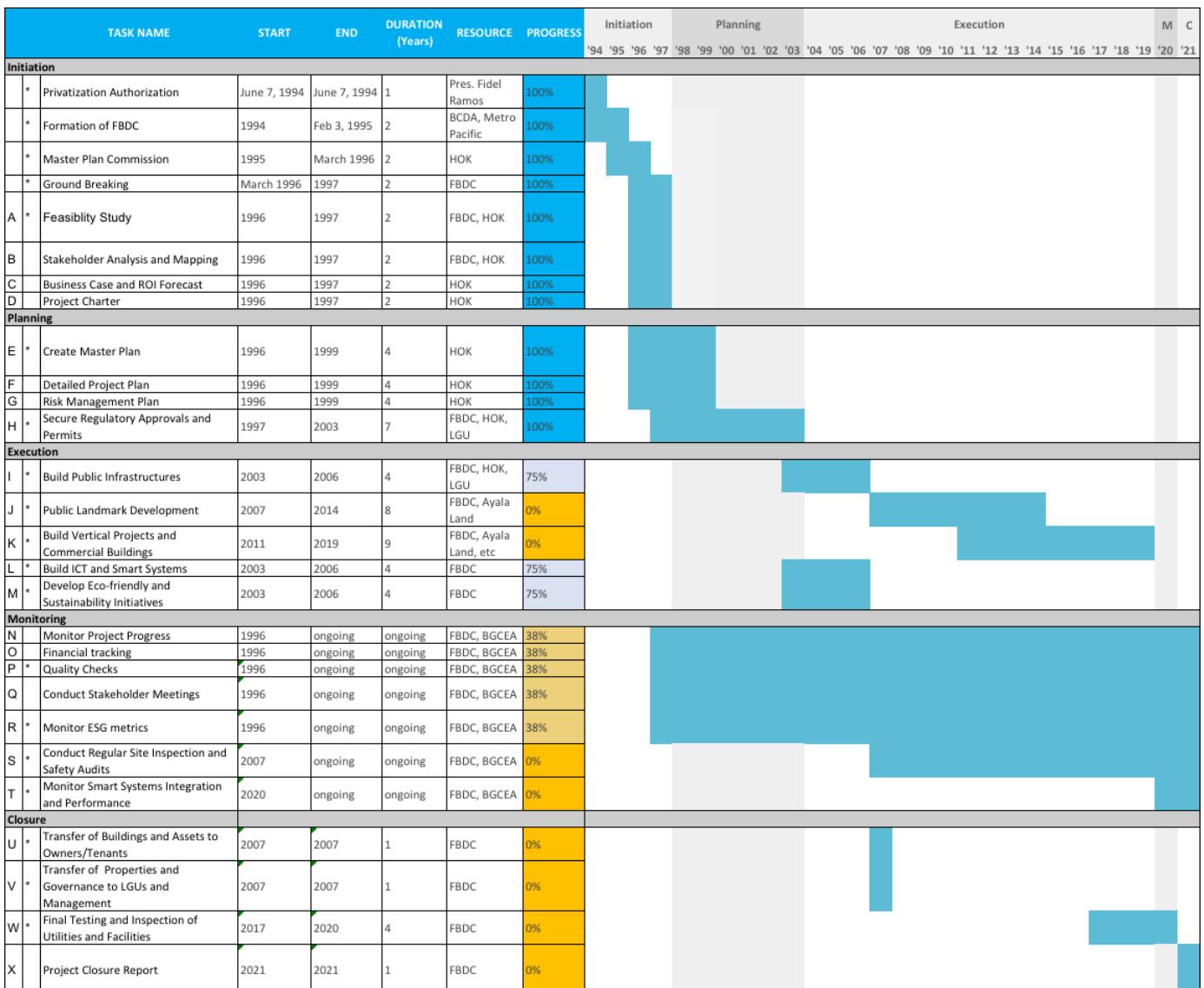
A Gantt Chart shows the timeline for a project, including the list of tasks and description , start and end date, resources, progress (in %), and a bar chart that plots activities' duration. Entries not marked with (*) were added as a theoretical exercise in-line with the goals of this assessment.

Bonifacio Global City Megaproject

Project Start: March 1996

Project Manager: Hellmuth, Obata, and Kassabaum (HOK)

Date: March 2005



4.2 Activity Network

Activity Network or Network Analysis is a technique for planning and controlling the flow of the project through the relationships among the activities, provide information on the activities' time, cost, and resource requirements, and device the optimal sequence of tasks in the project (Senthilnathan, 2012).

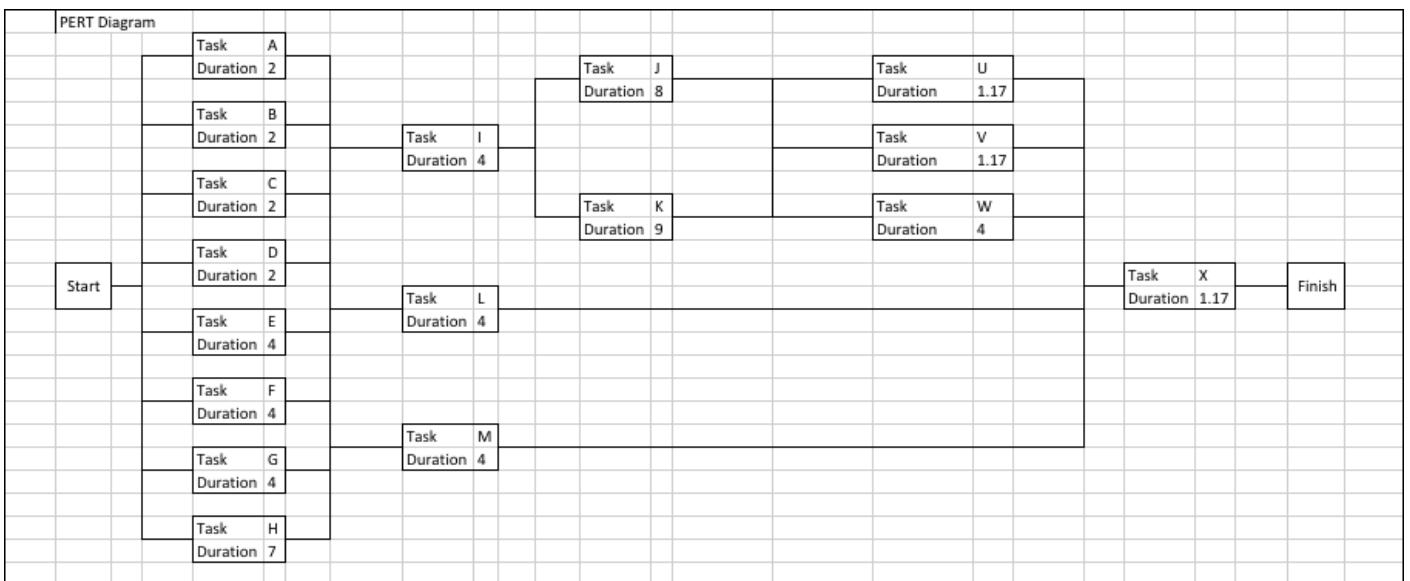


Figure 14. PERT Diagram

The PERT diagram shows the dependencies of each task from start to finish. Duration here is calculated as Estimate Duration = [Best Case + (4*Most Likely) + Worst Case] / 6.

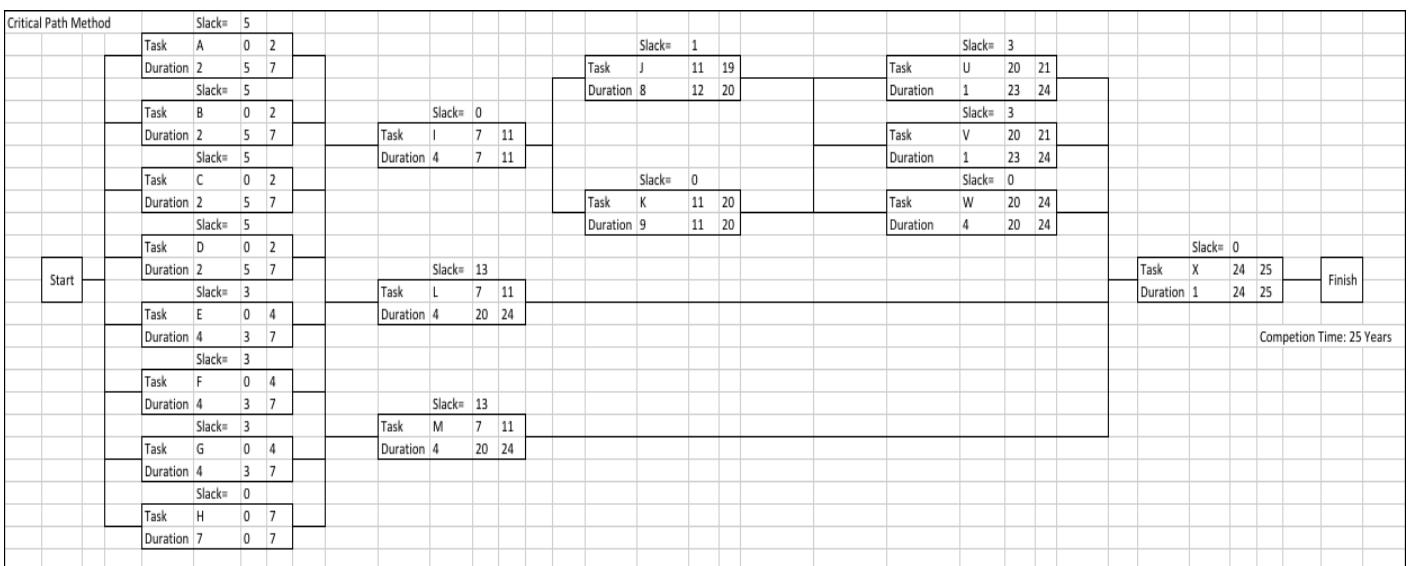


Figure 15. CPM Diagram

CPM also shows the dependencies between each activity from start to finish. Duration here however, is just equal to "Most Likely". Earliest start (ES) and earliest finish (EF) is calculated using a forward pass and Latest start (LS) and latest finish (LF) are calculated using a backward pass. We then calculate slack to get the time we can delay that activity without affecting the end date, slack = LS-ES or LF-EF. The path from start to finish with slack = 0 is the critical path, in this case that would be: Task H→I→K→W→X, 7+4+9+4+1=25 years.

5. Project Budget

The budget is the total financial amount allocated for a particular purpose of the project for a specified time. Project budget management is essential to ensure sufficient budget all throughout the project duration to avoid delays or failure. We need to provide a budget estimate that is attainable and sufficient before project implementation and monitor costs to deliver the project within that budget (pm4dev, 2015).

5.1 Resources

Human/Labor	Skilled/unskilled workers, project team, engineers, professionals, etc.
Equipment	Construction equipment (trucks, cranes, mixers), transportation, etc.
Materials	Civil raw materials (concrete, steel, glass, sand, etc.), environmental materials (seeds, soil, trees), etc.
Technology	CCTVs, smart-city infrastructure, servers, computers, etc.
Utilities	Water, electricity
Buildings	Residential, office, government centers

Table 11. Resources

5.2 Cost Estimates

Resource	Estimation Procedure	Estimate (₱B)
Human/Labor	Industry norm is that Labor are 25% of direct cost (~₱270B)	67.5
Equipment	DPWH benchmark for mega-infrastructure projects estimated at 8% of total construction and infrastructure cost (~₱270B)	21.6
Materials	35% of construction and infrastructure (~₱270B)	94.5
Technology	Skytrain (₱3B) + ICT Investments (~₱2B)	5
Utilities	7% of development cost	18.9
Buildings	Total cost for private towers; Metrobank (₱17B), Shangri-La (₱14B), PSE (₱3.5B), others	105
Land	Formal land acquisition figure (55%) as specified in the joint venture contract	30.4
Community and Relocation	Based on world bank urban displacement cost at 2% of total cost.	7.6
Marketing	Industry standard of 1% of total cost	3.8
Legal	Joint venture structuring + legal services	1.9
Contingency	International benchmark of 6% of total cost	22.8
Total		378

Table 12. Cost Estimates

FBDC secured a \$1.6B bid for the land and they have forecasted a total capital investment of around US\$7.3B or ₱378B (Bcda.gov.ph, 2019). We will use this data as the total cost/budget, the rest of the budget and cost figures will be done via estimation. We used a ballpark approach (arbitrary values) for estimation since per unit cost and quantities are not known, hence, industry standards are used for the computation.

5.3 Time-Phased Budget

Using the cost estimates as baseline to compute for the budget, we can compare it against the actual cost as the project progresses. With this, you can visually monitor if you have exceeded your allotted budget for that evaluation period and can make future adjustments to balance it out. (*Values for the planned budget and actual cost are just arbitrary for this example*)

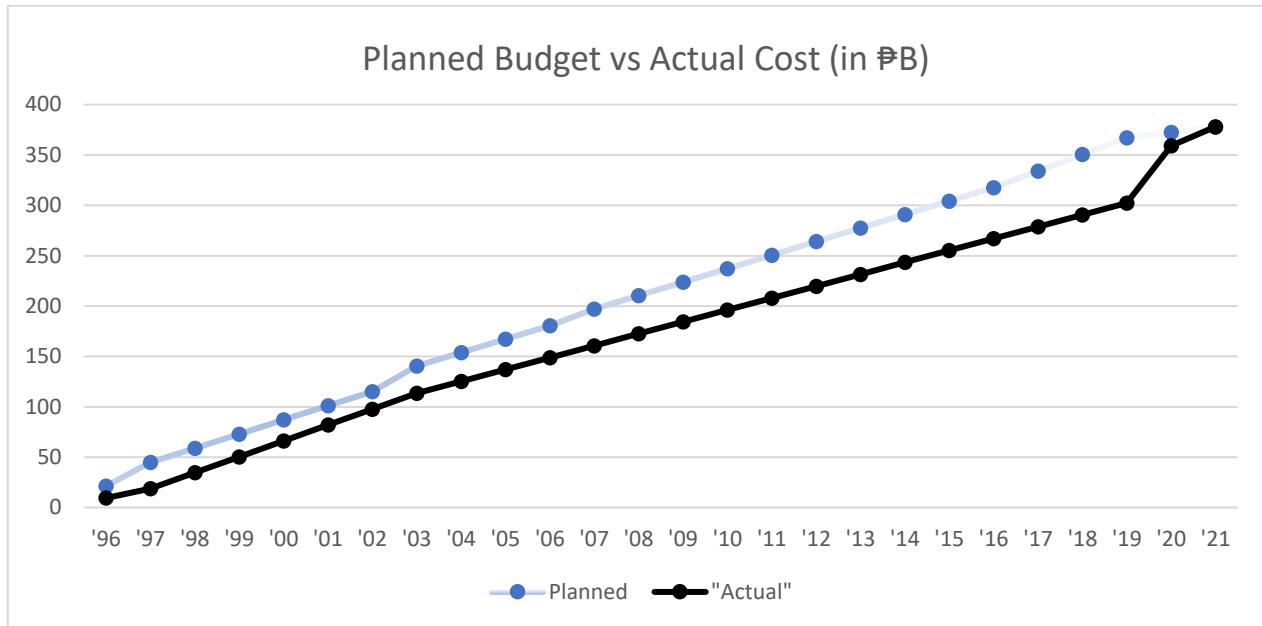


Figure 16. Planned Budget vs Actual Cost

6. Project Stakeholder

A stakeholder is any individual, group or organization directly or indirectly affected by the project (projectmanager.com). We list them down in a stakeholder register together with their name, description, role, contact details, category, interest, and influence.

6.1 Stakeholder register

Stakeholder Register														
Project Name	Bonifacio Global City			Project Manager	HOK		Project Phase	Initiation		Date	Comments			
Sr.NO.	Name	Designation	Department	Role	Contact	Category	Interest	Influence	Expectations	Comms Requirement	Comms Frequency			
1	Mateo Santiago	Vice President	Ayala Private Corporation	Sponsor	Phone: +63 908 870 2656 Email: Santiago07@hok.de	Internal	● ● ●	● ● ●	overseeing the whole Project, and Leading the way	Meetings, Email And Phone	Meeting: once Every 3 month Email and phone: When Required	plan to involve feedback Session		
2	marcelino wehne	Vice President	Evergreen Private Corporation	Sponsor	Phone: +63 994 917 1808 Email: marcelino.wehner@hok.de	Internal	● ● ●	● ● ●	overseeing the whole Project, and Leading the way	Meetings, Email And Phone	Meeting: once Every 3 month Email and phone: When Required	plan to involve feedback Session		
3	Halmuth Obata	Board Member	BCDA	Sponsor	Phone: +63 896 354 9777 Email: mireya01@hok.de	Internal	● ● ●	● ● ●	overseeing the whole Project, and Leading the way	Meetings, Email And Phone	Meeting: once Every 3 month Email and phone: When Required	plan to involve feedback Session		
4	Carl Jhon Odicla	Chief Executives	FBDC	Project Lead	Phone: +63 896 128 1892 Email: jarred71@hok.de	Internal	○ ○ ○	○ ○ ○	Strategizing the plan from above and below	Meetings, Email And Phone	Meeting: once Every 1 month Email and phone: When Required	plan to involve feedback Session		
5	Sandeesh Madannavar	Director	HOK	PMO	Phone: +63 912 774 0374 Email: rodolf.reinger0@hok.de	Internal	○ ● ●	○ ○ ○	Implementing Detail Plans	Meetings, Email And Phone	Meeting: twice month Email and phone: When Required	plan to involve feedback Session		
6	João Castelhano	Main Contractor	DOCD	Project Team Member	Phone: +63 895 738 5442 Email: gudrun11@hotmail.de	Internal	○ ● ●	○ ○ ○	Building Infrastructure and Everything	Meetings, Email And Phone	Meeting: once a week Email and phone: When Required	plan to involve feedback Session		
7	Yohannes Furgasa	BIR	ISO	Project Team Member	Phone: +63 908 667 3810 Email: SanM@yahoo.de	External	○ ● ●	● ● ●	Regulating the Finance and Budget	Meetings, Email And Phone	Meeting: once a week Email and phone: When Required	plan to involve feedback Session		
8	Rakesh Nelli	ISO	BIR	Project Team Member	Phone: +63 905 521 7131 Email: evan_fade12@gmail.de	External	○ ● ●	● ● ●	Quality Control	Meetings, Email And Phone	Meeting: once a week Email and phone: When Required	plan to involve feedback Session		

Figure 17. Stakeholder Register

6.2 Stakeholder Matrix

From our list of stakeholders, we plot them in a four-quadrant chart based on that stakeholder's power/influence and impact/interest, called the Mendelow Matrix. We then make sure to satisfy the stakeholders that are in the green quadrant (high power/influence, high impact/interest) by focusing most of our stakeholder engagement strategies around them.

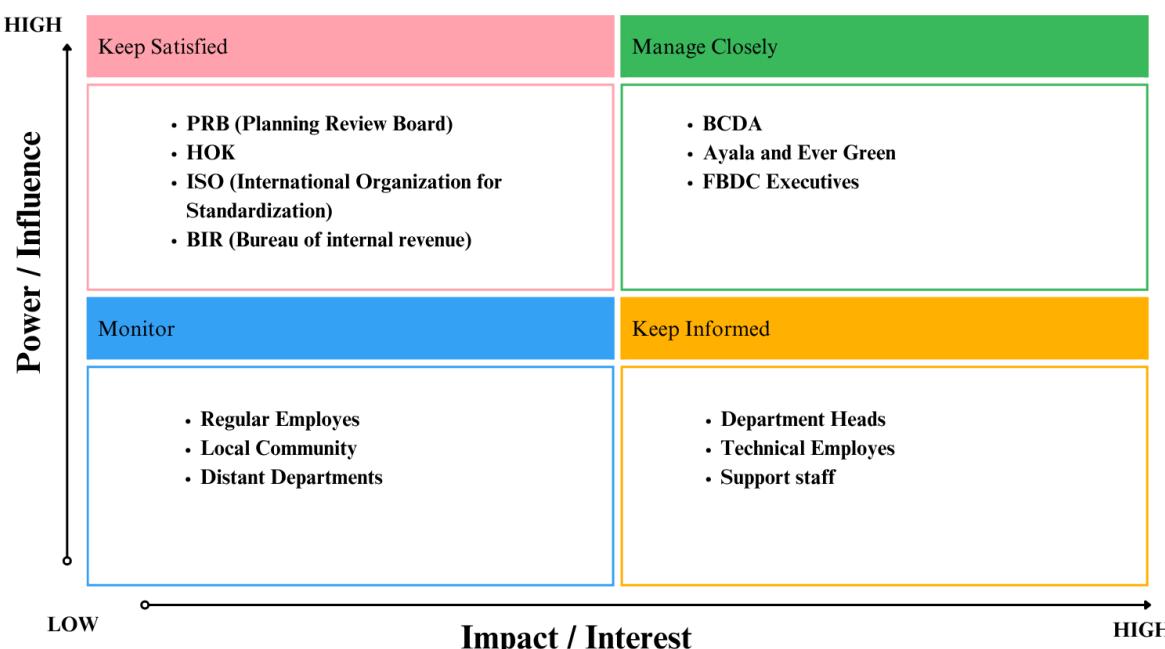


Figure 18. Mendelow Matrix

6.3 Stakeholder Engagement

Meetings - The meeting between the HL (high level) leaders, this include the Board members from both BDCA and Private Company Executives and also Executives from FBDC. This will be done once in a quarter of a year, Rather FBDC management will use Email for reporting ongoing major process until the meeting. On the other hand, the meeting between the LL (lower Level) management and the FBDC will takes place once a month. Each Department Leader and Team Leader will report back to FBDC with email, a phone when it's required. Lower level team Management can meet once a week to discuss correlated matters.

Emails - Our main means of communication is by email via MS Teams for internal communication, and using the official BGC email address for external communication.

Online Website – Official updates will be posted in our BGC official website.

7. Project Monitoring

Monitoring a project is a continuous process of collection and analysis of data and information, for the purposes to assess progress on project implementation (afocosec.org). We primarily monitor and evaluate the project in terms of its scope, schedule, and cost, then make decisions based on this information.

7.1 Key Performance Indicators

Earned Value Management (EVM) - A project management technique that measures project progress holistically. EVM measures scope, schedule, and cost performance simultaneously which can provide early warnings of performance problems. EVM involves calculating the following metrics which can be monitored and used as primary metrics.

KPI	Formula
Planned Value, PV	$PV = \text{Planned Completion Rate} * \text{Total Budget}$
Earned Value, EV	$EV = \text{Actual Completion Rate} * \text{Total Budget}$
Cost Performance Index, CPI	$CPI = EV / AC$
Schedule Performance Index, SPI	$SPI = EV / PV$
Estimate at Completion, EAC	$EAC = PV / CPI$

Table 13. EVM Metrics

Other Applicable Key Performance Indicators (KPIs)

- ESG Metrics – Measures green spaces, environmental and governance metrics.
- Schedule Adherence – Measures if project is on-track with schedule.
- Quality – Track how many times an infrastructure passed the regular quality checks.
- Stakeholder Satisfaction – Survey scores from stakeholders.
- Economic Engagement – How much BGC contributes to the National and Local GDP.
- Cultural Engagement – Track number of community events.
- Foot Traffic – Measures population density

7.2 Success Criteria

Some of the success criteria based on previous section's KPIs. Other metrics can be formulated as long as it helps in achieving the project objectives.

Qualitative	Quantitative
Transforming the Former Military Base into a Productive Urban Center	Done
Realizing a Visionary and Comprehensive Master Plan	Done
Project Progress On-Schedule	Yes
Prioritizing Pedestrian-Friendliness and Open Spaces	Positive ESG Scores
Developing Robust and Efficient Infrastructure Systems	>95% passing rate for quality checks
Satisfied Stakeholders	>4 Stars (Out of 5) Stakeholder Review Scores
Achieving Economic Viability and Financial Return	ROI >= 15%
Successful BGC Events	1-2 Successful Events per month
Creating a High-Quality, Dense, Mixed-Use Environment	Foot Traffic of 100,000 - 200,000

Table 14. Success Criteria

7.3 Tracking Methods

- Source Tracking - Record all sources in a spreadsheet (source, URL, date, key info, status).
- Progress Tracking - Use tools like Trello or Excel to keep tasks arranged with simple phases: To Do, In Progress, and Review, Done.
- Change Tracking - Follow changes in BGC's organization (e.g., partnerships, leadership, CSR news) in a timeline with dates, descriptions, and sources.
- CSR Tracking - Record CSR initiatives by objective, timeline, status (completed/ongoing), and results to check impact.
- Version Control - Keep drafts in Google Drive or other such tools to maintain a record of changes and be able to readily reinstate previous versions.
- Data Tracking – Collect data for analysis, reports, and dashboarding to track and monitor project KPIs.

Sample Data - Used to track KPIs						
Key Variable	Category	Description	Value	Source	Date Extracted	Comments
000xx0001	Cost	5kg Cement	500	DCCD Construction	07/03/2025 1:10:36 AM	Construction of Bonifacio High Street
000xx0115	Review	Safety	5 stars	BGC Public Plaza	05/24/2022 21:50:06 PM	"Public CCTV makes me feel safe"
...						
..						
.						

Table 15. Sample Data Collected

7.4 Control Systems

Bonifacio Global City (BGC) operates through an integrated control system between FBDC, Ayala Land, and BCDA, promoting effective, safe, and sustainable urbane living.

Key Aspects:

- ✓ Operations & Control Management – Supervision and operating costs.
- ✓ Resource Management - Maintenance of common services like water and electricity.
- ✓ Traffic Management – Employs intelligent technologies in controlling the traffic flow and in ensuring safety.
- ✓ Financial Management - Tracking expenditures and investments for transparency and budgeting.
- ✓ Project Management - Transitions and develops projects.
- ✓ Regulatory Consent – Handling all legal requirements and environmental standards.
- ✓ Association & CSR: Working on cultural and social events under the BGC Art Foundation and FBDFI.

8. Project Close-Out

Project Close-Out is the final step of a project's life cycle, where all the tasks are completed and the project has officially closed. It concludes deliverables are met, completion of documentation, and important Outcomes are documented.

Key aspects include:

- ❖ Proper Documentation –for future project reference project files, reports, and records are organized
- ❖ Estimation- Evaluating plans to establish success and lessons for enhancement.
- ❖ Financial Settlement - budgets, bills settlement, and closing additional cost accounts.
- ❖ Stakeholder Response - Collecting feedback from stakeholders and the project team.
- ❖ Formal Termination- Project completion approval and formal closure.
- ❖ Recollection- Honour team efforts and achievement.

Proper close-out provides responsibility, transparency, and lessons learned for future projects aspects.

8.1 Closing Cost Accounts

Closing cost accounts is the final task in closing down a project financially. It confirms that all the budget are properly accounted, no new fees can be suffer, and the project financials documents are transparent and complete.

Key aspects include:

- Evaluating expenses - Inspection of all costs in covered in the project.
- Balancing accounts – Purchase order matching, payments, and budgets.
- Excessive fund management – Pay out unused amounts or variable allowance
- Blocked accounts - Block the accounts to prevent further costs.
- Closing report – Summary preparation for total spend and budget variables.
- Confirmation - Getting formal closing from project and finance managers to attest closure

It handles money flows transparent, responsibility, and allows clear auditing and future planns.

8.2 Lessons Learned

Lessons learned are the knowledge, experiences, and remedies that a particular project imparts once closed. They provide a review to ascertain what went right, what went not-so-well, and what measures to take to make things run more smoothly next time.

Generally, the process could include:

- ✓ Looking back on the successes and challenges met throughout the project
- ✓ Obtaining feedback from various stakeholders and team members involved
- ✓ Defining mistakes or challenges with the intention of not repeating the same next time
- ✓ Realizing best practices to be applied and repeated in future projects
- ✓ Thoroughly documenting everything for mutual benefit of the entire organization

Once documented and reported, teams become better equipped, and projects will be completed faster with fewer resources in the longer term.

9. References

Articles

Ahmed, S., & Khan, M. (2021). The role of Gantt charts in project management: A case study of construction projects in Pakistan. *International Journal of Project Management*, 39(4), 612-623

Bennett, Paul. "Manilan Amalgam." *Landscape Architecture*, vol. 88, no. 5, 1998, pp. 40–45. JSTOR, <http://www.jstor.org/stable/44680359>. Accessed 7 June 2025.

Michel, B. (2010) 'Going Global, Veiling the Poor: Global City Imaginaries in Metro Manila', *Philippine Studies*. Loyola Heights, Quezon City, Philippines: Ateneo De Manila University, 58(3), pp. 383–406. <https://search.informit.org/doi/10.3316/informit.403442075296567>

Sahni BPS. (2023). Understanding 3 Point Estimation Technique. USA. *Journal of Artificial Intelligence, Machine Learning and Data Science*.

Sara Liss-Katz. (2016). Fort Bonifacio Global City: A New Standard for Urban Design in Southeast Asia.

Urban Land Institute. (2020). ULI Case Studies BGC Manila Philippines

Senthilnathan S. (2012). Network Analysis. Eastern University, Sri Lanka.

(*Urban Land Institute: Case Study*, 2020) Bonifacio Global City (BGC), Metro Manila, Philippines. | ULI Case Studies

Links

Ayala Land, Inc. (ALI) – Investor Relations / Annual Reports

<https://www.ayalaland.com.ph>

Bases Conversion and Development Authority (BCDA)

<https://bcda.gov.ph>

BGC Art Foundation / The Mind Museum / BGC Arts Center

<https://artsatbgc.org/>

<https://www.themindmuseum.org>

Fort Bonifacio Development Foundation, Inc. (FBDFI)

<https://fbdfi.org.ph>

Guidelines for Project Monitoring and Evaluation

https://afocosec.org/wp-content/uploads/2021/11/G-2-20R-Project-M_E-GuidelinesEffective-on-20201127.pdf

Official BGC Website – About Us

<https://bgc.com.ph/about-us/>

Phil star Global

<https://www.philstar.com/business/2003/04/27/203924/ali-campos-group-finalize90-m-deal-mpc>

Project Budget Management

<https://www.pm4dev.com/resources/free-e-books/2-project-budget-management/file.html>

RACI Responsibility Matrix

<https://focus.admin.ox.ac.uk/files/racipdf>

Stakeholder Engagement in Project Information

<https://www.projectmanager.com/blog/stakeholder-engagement>

Understanding the Three Types of Estimates

<https://www.cleart.com/understanding-the-three-types-of-estimates.html>