CSUEB *Playground* Project

MGMT658 - Professor Steve Peng

California State University East Bay

Project Management BAN - 658, Spring 2023

Faculty: Dr. Steve Peng

Professor - Department of Management College of Business and Economics

Presented By

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Project Overview/Background

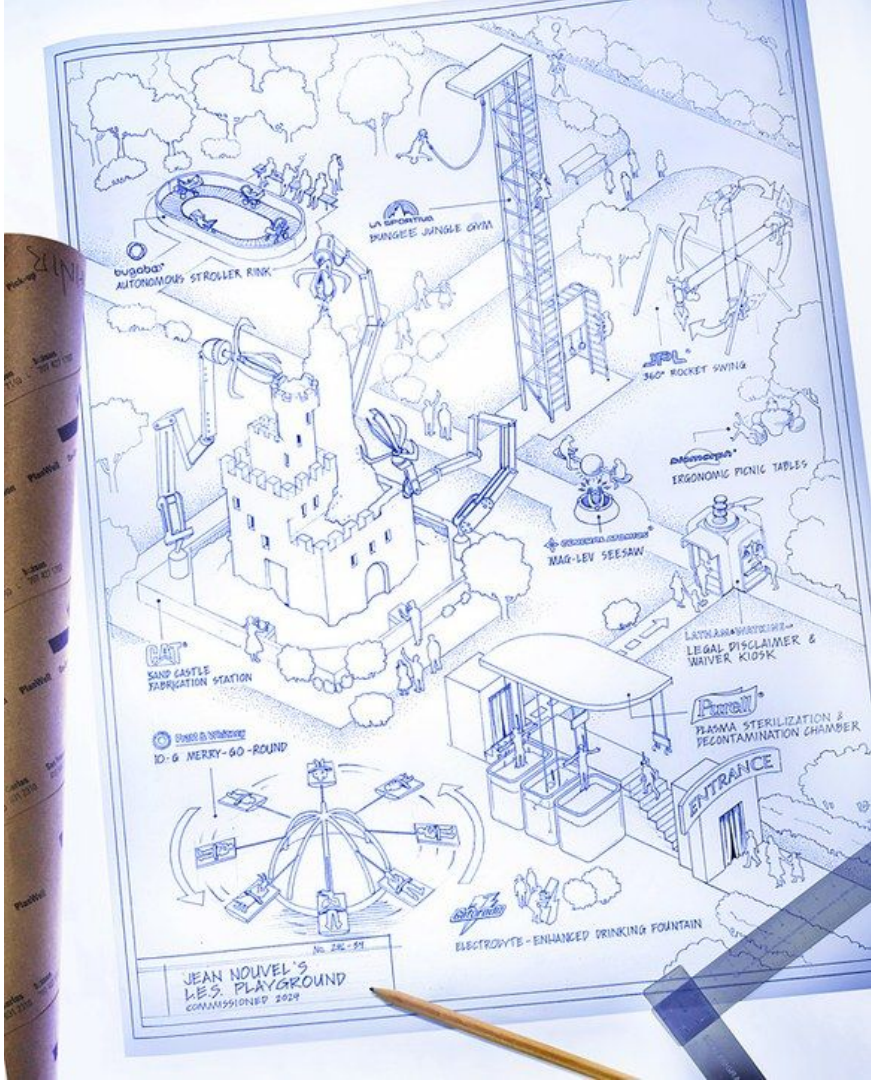
CSU EAST BAY Child Development Center is currently lacking a safe play area. We have been approached by CSU EAST BAY to develop a project plan.

EastBay Consulting consisting of 8 Project Managers working together and presenting the Playground Project, the project to build a playground in the CAL STATE CSUEB Child Development Center, and potentially implement it as an example project for other playgrounds to be built in Hayward Parks and Recreation Area.

Project Scope

Based on the initial inquiry from the CSU East Bay (the Client), the institution is requesting developing a project plan for engineering and construction of an age appropriate playground in the area adjacent to the Child Development Center of the Hayward campus of Cal State East Bay.

The playground structure and playground around it should accommodate up to 50 children safely. In addition, the risk assessment and risk mitigation was requested and will be presented to the client.



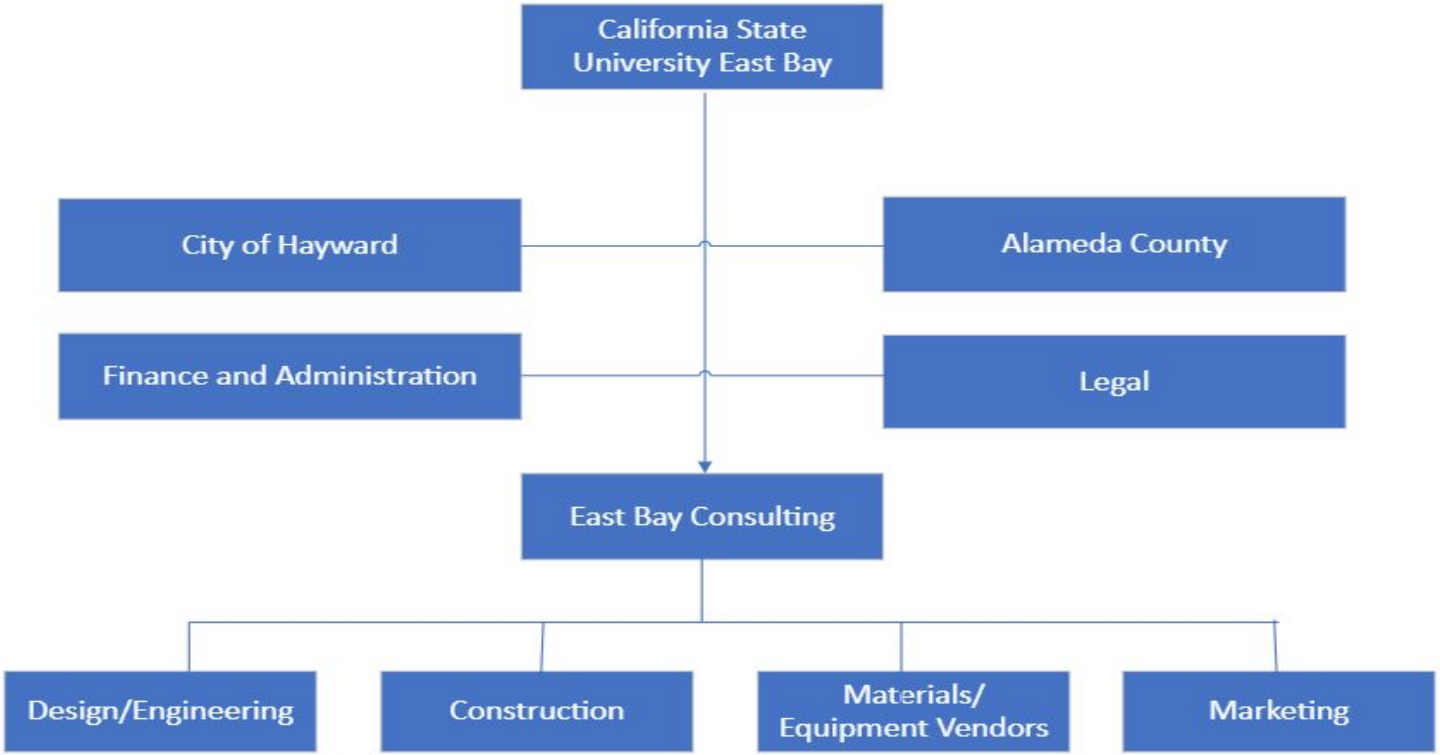
Goals


Reach Stakeholder Support
Risk Assessment & Mitigation
Present Executable Timeline
Create a Feasible Playground Construction Plan
GOALS

Major Deliverables

Project Scope and Objectives	Work Breakdown Structure	Resource Requirements	Project Schedule	Budget and Financial Plan	Communication Plan
Build an age-appropriate playground structure in CSU East Bay Hayward Campus Child Development Center.	Provide Organized Work Breakdown Structure to support project development and construction schedule	CSU East Bay Consulting workgroup Stakeholders Engineering Marketing Construction Materials Equipment Vendors	Detailed Project Schedule to Start on February 13, 2023 to be completed on April 22, 2024.	Financial Sources: Alameda County Disaster Recovery/FEMA funds City of Hayward Hayward Parks and Recreation Area funding CSUEB Budget	Project Presentation To be delivered to Stakeholders during Stakeholder Meeting Marketing Mailers to CSU East Bay Students and Hayward residents (construction notices)

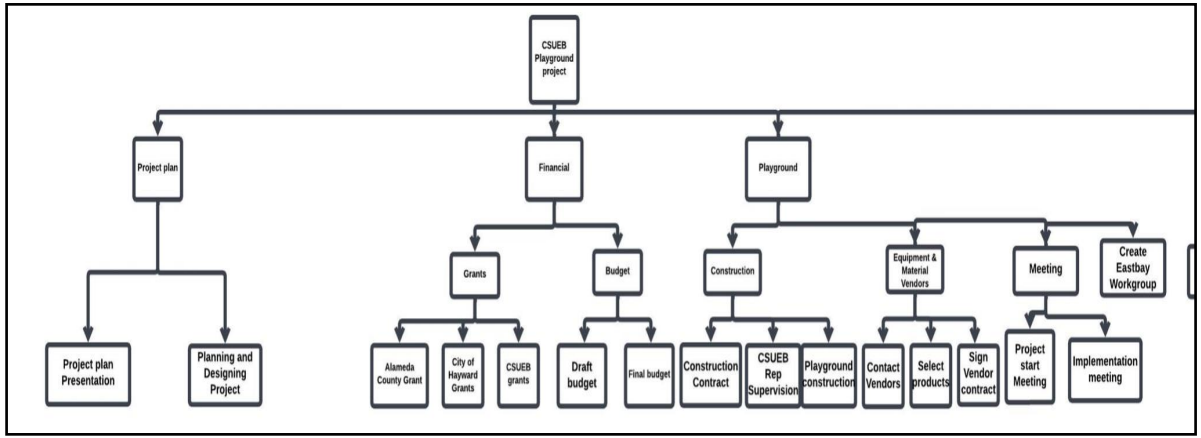
Organization Structure

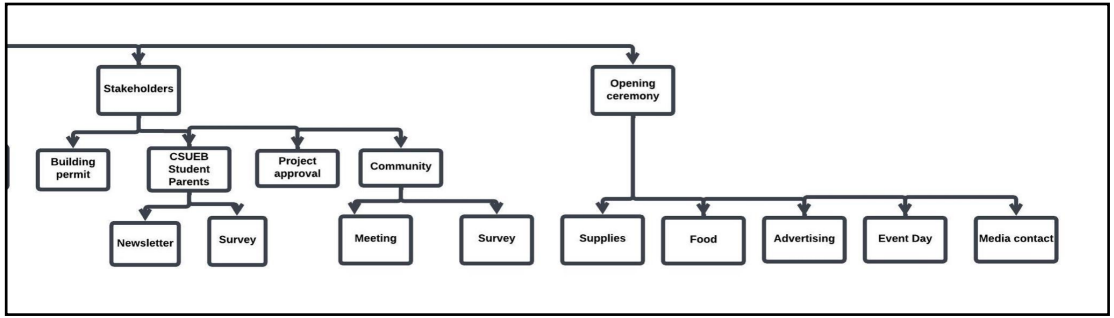


Project Resources

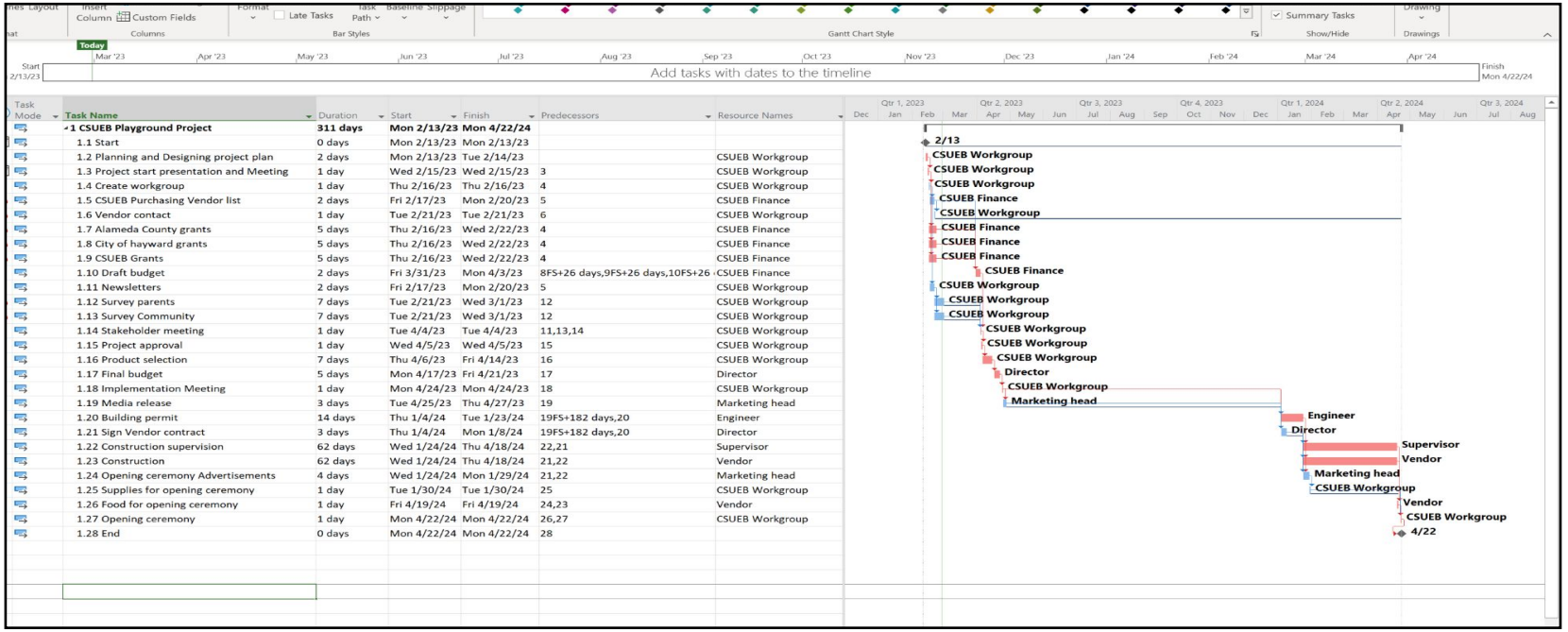
- Project Team
- Materials
- Equipments
- Tools
- Transportation
- Permits and approvals
- Funding
- Time
- Communication & coordination

Work Breakdown Structure



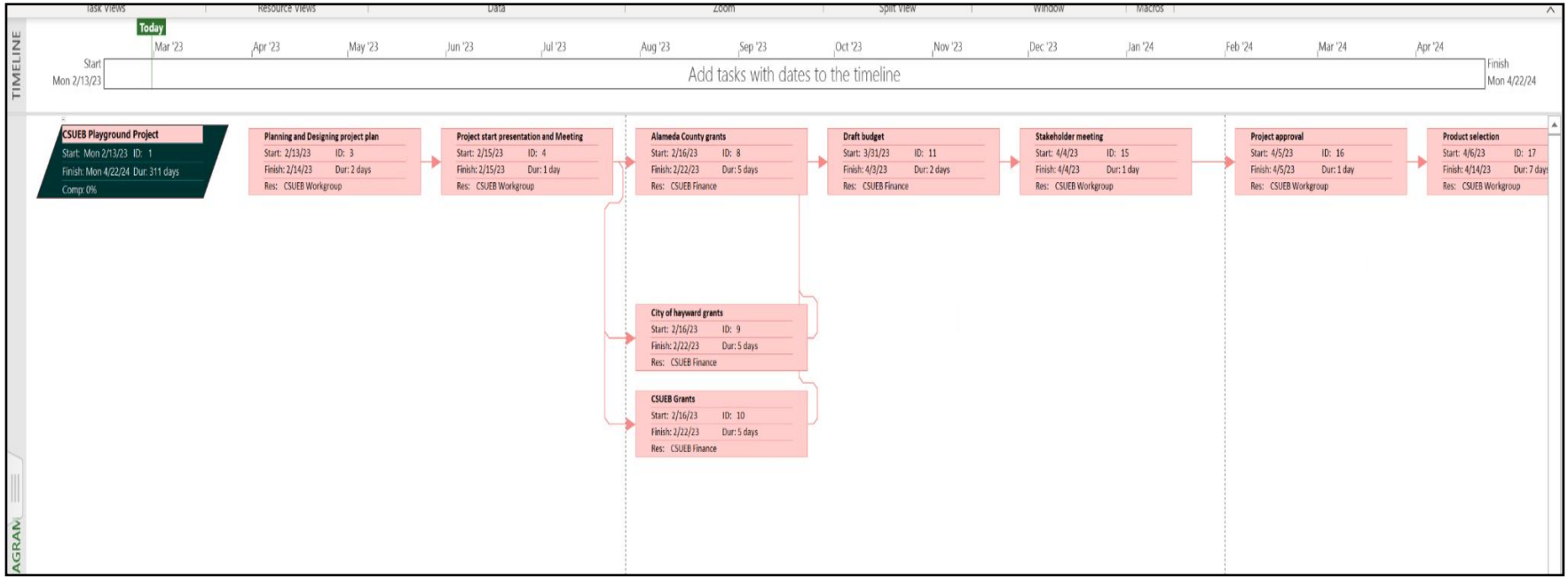


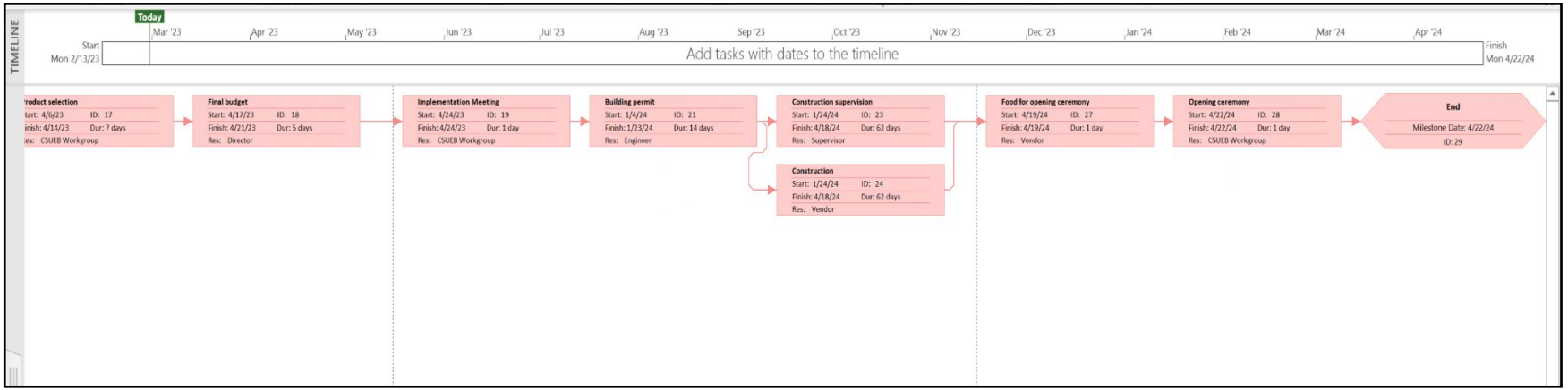
Gantt Chart



Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names
	1 CSUEB Playground Project	**311 days**	**Mon 2/13/23**	**Mon 4/22/24**		
	1.1 Start	0 days	Mon 2/13/23	Mon 2/13/23		
	1.2 Planning and Designing project plan	2 days	Mon 2/13/23	Tue 2/14/23		CSUEB Workgroup
	1.3 Project start presentation and Meeting	1 day	Wed 2/15/23	Wed 2/15/23	3	CSUEB Workgroup
	1.4 Create workgroup	1 day	Thu 2/16/23	Thu 2/16/23	4	CSUEB Workgroup
	1.5 CSUEB Purchasing Vendor list	2 days	Fri 2/17/23	Mon 2/20/23	5	CSUEB Finance
	1.6 Vendor contact	1 day	Tue 2/21/23	Tue 2/21/23	6	CSUEB Workgroup
	1.7 Alameda County grants	5 days	Thu 2/16/23	Wed 2/22/23	4	CSUEB Finance
	1.8 City of hayward grants	5 days	Thu 2/16/23	Wed 2/22/23	4	CSUEB Finance
	1.9 CSUEB Grants	5 days	Thu 2/16/23	Wed 2/22/23	4	CSUEB Finance
	1.10 Draft budget	2 days	Fri 3/31/23	Mon 4/3/23	8FS+26 days,9FS+26 days,10FS+26	CSUEB Finance
	1.11 Newsletters	2 days	Fri 2/17/23	Mon 2/20/23	5	CSUEB Workgroup
	1.12 Survey parents	7 days	Tue 2/21/23	Wed 3/1/23	12	CSUEB Workgroup
	1.13 Survey Community	7 days	Tue 2/21/23	Wed 3/1/23	12	CSUEB Workgroup
	1.14 Stakeholder meeting	1 day	Tue 4/4/23	Tue 4/4/23	11,13,14	CSUEB Workgroup
	1.15 Project approval	1 day	Wed 4/5/23	Wed 4/5/23	15	CSUEB Workgroup
	1.16 Product selection	7 days	Thu 4/6/23	Fri 4/14/23	16	CSUEB Workgroup
	1.17 Final budget	5 days	Mon 4/17/23	Fri 4/21/23	17	Director
	1.18 Implementation Meeting	1 day	Mon 4/24/23	Mon 4/24/23	18	CSUEB Workgroup
	1.19 Media release	3 days	Tue 4/25/23	Thu 4/27/23	19	Marketing head
	1.20 Building permit	14 days	Thu 1/4/24	Tue 1/23/24	19FS+182 days,20	Engineer
	1.21 Sign Vendor contract	3 days	Thu 1/4/24	Mon 1/8/24	19FS+182 days,20	Director
	1.22 Construction supervision	62 days	Wed 1/24/24	Thu 4/18/24	22,21	Supervisor
	1.23 Construction	62 days	Wed 1/24/24	Thu 4/18/24	21,22	Vendor
	1.24 Opening ceremony Advertisements	4 days	Wed 1/24/24	Mon 1/29/24	21,22	Marketing head
	1.25 Supplies for opening ceremony	1 day	Tue 1/30/24	Tue 1/30/24	25	CSUEB Workgroup
	1.26 Food for opening ceremony	1 day	Fri 4/19/24	Fri 4/19/24	24,23	Vendor
	1.27 Opening ceremony	1 day	Mon 4/22/24	Mon 4/22/24	26,27	CSUEB Workgroup
	1.28 End	0 days	Mon 4/22/24	Mon 4/22/24	28	

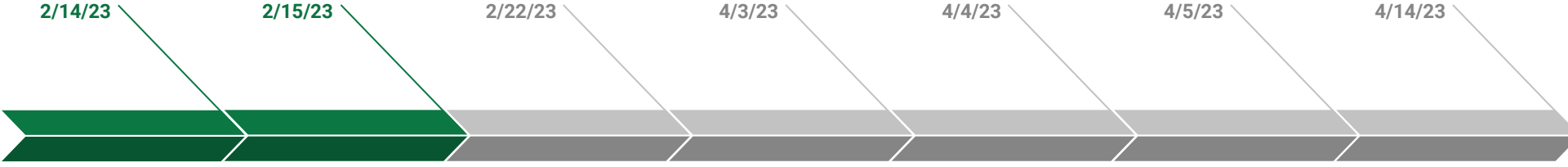
Critical Path





Planning and designing project plan→Project start presentation and meeting→Alameda County grants/City of Hayward grants/Alameda County grants→Draft budget→Stakeholder meeting→Project approval→Product selection→Final budget→Implementation meeting→Building permit→Construction/Construction supervision→Food for opening ceremony→Opening ceremony→End

Timeline



2/14/23 — Planning and Designing Project Plan

2/15/23 — Project Start - Presentation and Meeting

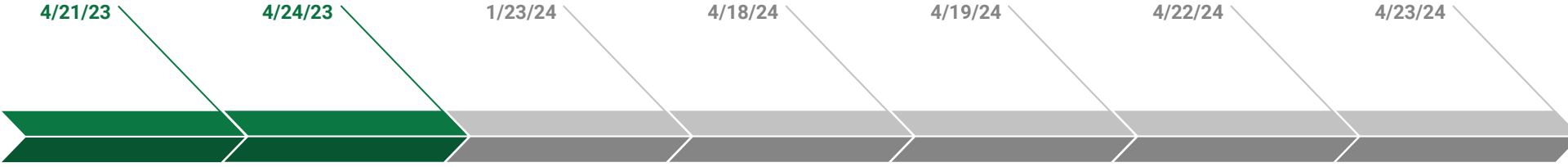
2/22/23 — Alameda County, City of Hayward, and CSUEB Grant funds are issued

4/3/23 — Draft Budget

4/4/23 — Stakeholder Meeting

4/5/23 — Project Approval

4/14/23 — Product Selection



4/21/23 — Final Budget

4/24/23 — Implementation Meeting

1/23/24 — Building Permit

4/18/24 — Construction

4/19/24 — Final Food and Vendor Payments for Opening Ceremony

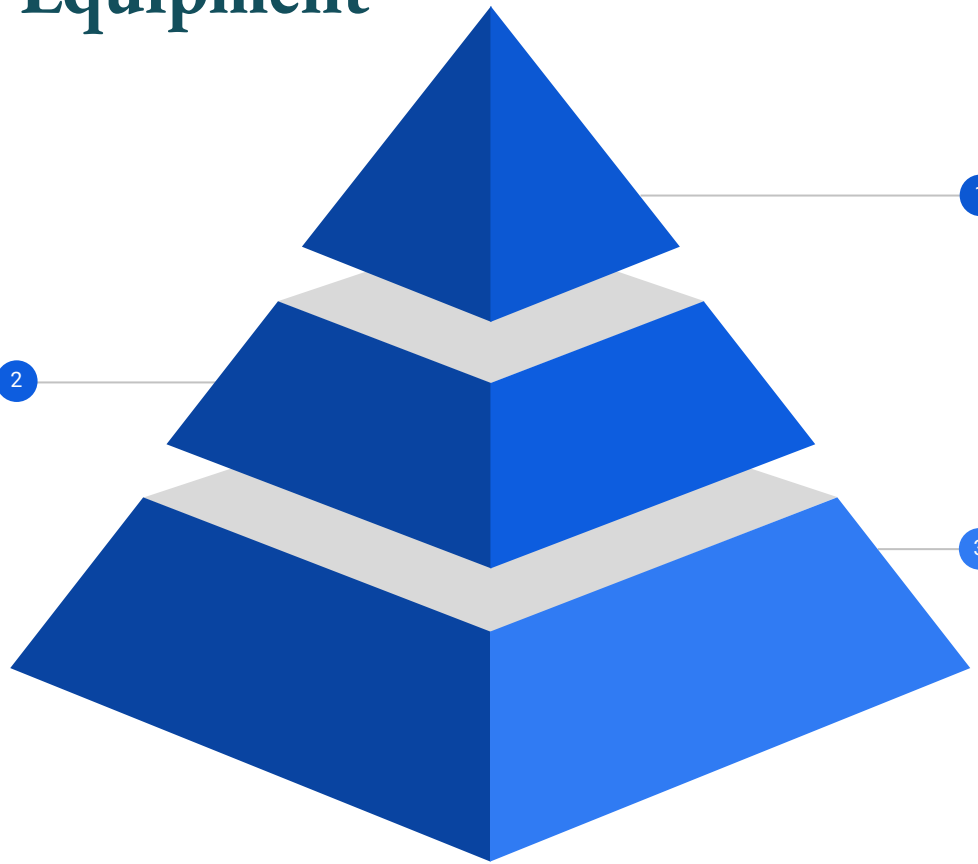
4/22/24 — Opening Ceremony

4/23/24 — Playground is open!

Funding Source & Budget

Incoming Funds:	**$150,000 in Grants received from:**	• Alameda County ($75,000) • City of Hayward ($50,000) • California State University, East Bay ($25,000)
Expenses:	**$100,000 spent on Construction Costs:**	• Permit application and approval ($3,000) • Labor ($90,000) • Workers Comp Insurance ($2,000) • Landscaping ($5,000)
Expenses:	**$35,000 spent on Material Costs:**	• Poured playground surface ($12,000) • Swing sets, ladders, activity blocks, etc. ($15,000) • Sand ($1,000) • Toys to be played with inside sandbox ($2,000) • Wood Chips ($1,000) • Turf ($4,000)
Expenses:	**$15,000 spent on Opening Ceremony costs:**	• Printed invitations and flyers ($500) • Goody bag/swag bag costs ($3,000) • Rental equipment (tables, chairs, tablecloths, speaker, etc.) ($8,000) • Necessary supplies (paper plates, napkins, cutlery, etc.) ($1,000) • Food, dessert, drinks, etc. ($2,500)

Materials & Equipment



1. Swing sets, Ladders, Slides, Monkey Bars, Activity Blocks, Seesaw, etc.
2. Sand, Sandbox, Toys to be played with inside of the sandbox
3. Poured playground surface, Turf, Wood Chips/Engineered Wood Fiber (EWF)

Stakeholders

CSUEB	Alameda County	City of Hayward	CSUEB Work Group (East Bay Consulting)
Client, Funding Resources; A public California State University local to the Bay Area in Northern California offering both undergraduate and graduate areas of study, including having a Child Development Center.	Funding Resources; A county in Northern California that provides social services, health care, public protection, and general government programs for their residing residents.	Funding Resources; A city in the East Bay of Alameda County falling under their jurisdiction, and providing those same or similar resources to their general population.	Project Manager; A work group consisting of 7 Project Managers working together on this project to build a playground in the CSUEB Child Development Center, part of Hayward Parks and Recreation area.

Technical Challenges

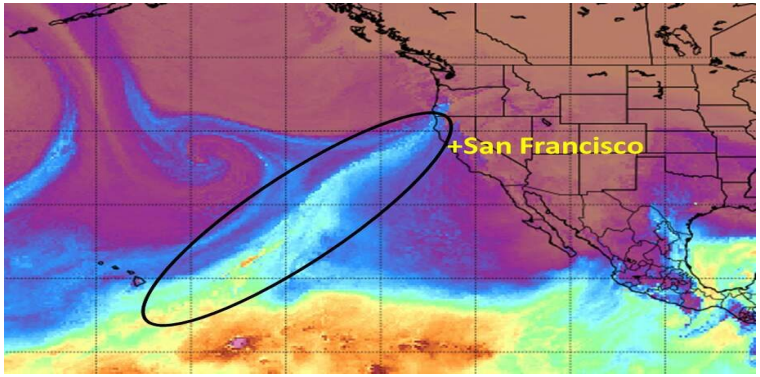
- Slope of Site
- Type of Soil
- Vegetation
- Underneath the Playground

Risk Management
Scenario #1: Atmospheric River

Risk Assessment Form

Risk Event	Likelihood	Impact	Detection Difficulty	When
Atmospheric River	2	5	3	During Project

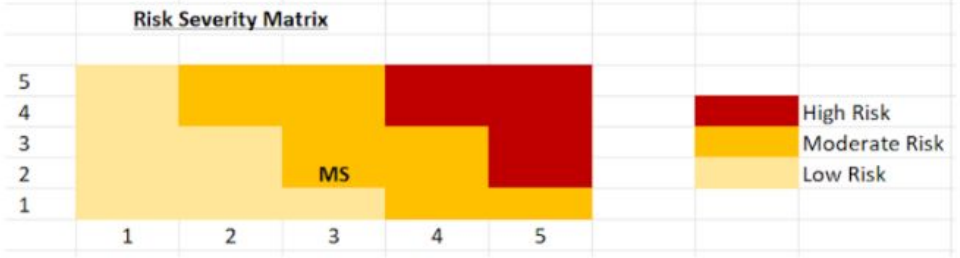
Risk Severity Matrix

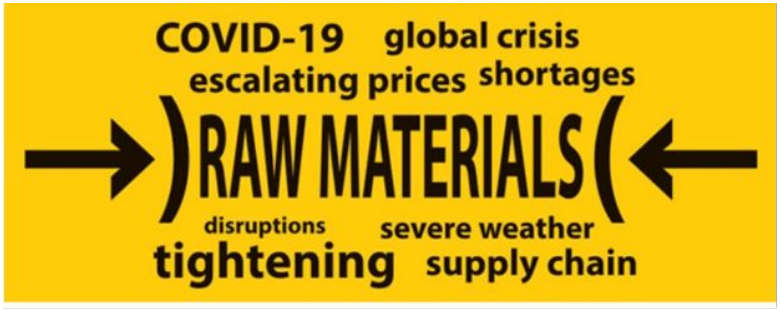


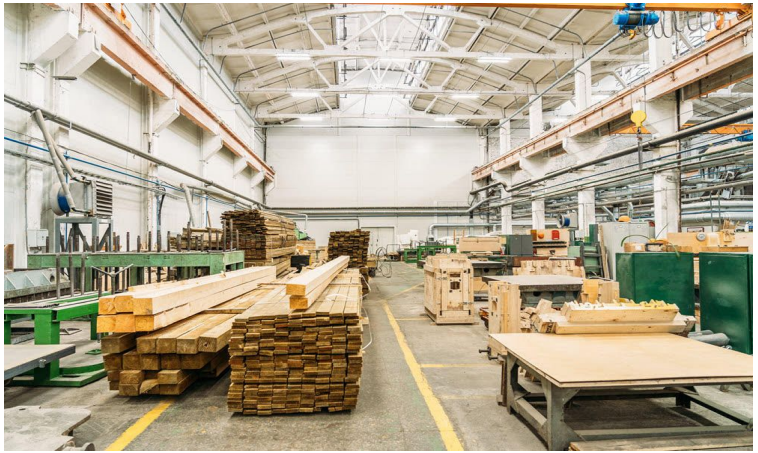
Risk Management

Risk Assessment Form

Risk Event	Likelihood	Impact	Detection Difficulty	When
Material Shortage	2	3	2	Before/During Project







Reducing Project Duration

Activity	Predecessor activity	Normal time	Maximum crash time	Normal cost	Crash cost	Extended crash cost
Building Permit	Implementation Meeting	14 days	4	$214/day	$350/day	$1400
Construction	Building Permit	62 days	21	$1,452/day	$1,600/day	$33,600
					Total additional cost	**$35,000**

Achievements

1. Addressed technical challenges during playground construction to ensure functionality and safety.
2. Prepared for natural disasters such as atmospheric rivers and earthquakes by implementing proper construction methods and emergency response plans.
3. Managed the project's budget effectively, including contingency plans for emergency maintenance and reconstruction.
4. Demonstrated foresight in purchasing extra materials in advance, saving costs and ensuring timely completion.

Conclusion

The team managed risks and made contingency plans. They also accelerated the project timeline by 25 days and identified which activities to crash within the budget. They learned about technical challenges, disaster planning, communication, and teamwork.

Questions?