

INFRASTRUCTURE ASSESSMENT AUDIT FOR SUVA – NAUSORI URBAN SCHOOLS

SUVA MUSLIM PRIMARY SCHOOL – REG 2345

SUMMARY REPORT







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1) INSPECTION SUMMARY

School name: SUN	JVA MUSLIM PRIMARY SCHOOL
Overall condition state: GO	OOD

Key recommendations:

- Overcrowding 9 new classrooms required based on FNBC standards
- Overcrowding 0 new classrooms required based on recommended sizing (1.5m²)
- WASH 3 new female toilet cubicles required and maintenance of ablution blocks required
- Accessibility All buildings require accessibility ramps, accessible doorways
- Disaster resilience Windows to include cyclone shutters and roof cladding fastened with Cyclone roofing screws.

Comments:

Major defects were noted as follows:

- Missing ramps (All buildings)
- Inadequate stairway width. (all buildings)

Aerial view of school



General view of school











School type:	Primary	✓	Secondary		Year levels	1,2,3,4,5	5,6,7,8
School address:	MEAD ROAD NABUA, SUVA.						
School enrolment and staff figures	No. of Students (Male)	No. of Students (Female)	No. of Students with Disability	No. of Teacher s (Male)	No. of Te	eachers (Fen	nale)
	388	431	2	7		18	
School building arrangement	TOTAL NUMBER OF BUILDINGS: 5 B1 – SINGLESTOREY / B2 – SINGLESTOREY / B3 – 2 STOREYS / B3b – SINGLE STOREY						
	/ B4 – 2 STOREYS	/ DZ — OIINOLLO	10NL17 D3 -2	OTORETO	J / DJ J –	OIIVOLL O	TORLI
Local government area:	SUVA						
Date of inspection:	4 th JULY, 2024						
Inspection team:	ANASEINI LEDUA (AL)						
	SHANEEL PRASAD (SP)						
	YASH VINEET MUDALIAR (YM)						
	DURGESH PAL (DP)						
	RAHUL PAL (RP)						
Data collection methods	Visual inspection ✓ Onsite measurement ✓				✓		
	Interviews with school staff ✓ Drone / aerial imagery ✓						
	Survey form ✓ Desktop research ✓						
	Other:						
Assumptions:	NONE						
Limitations:	UNAVAILABILITY OF A	ALL SCHOOL DO	OCUMENTS SU	ICH AS BC)UNDAR	Y AREA.	

2) ASSESSMENT OF OVERCROWDING

An assessment for overcrowding was undertaken based on FNBC standards and 2024 enrolment data. The table below summarises the data collected through visual inspection and interrogation of enrolment data and compares this against the FNBC standard student to classroom size ratio of 2 m² per student.

The results of the assessment are based on the recommended sizing (1.5m²), according to 2024 data, an additional 1 classrooms are required for Muslim Primary School to achieve compliance with FNBC standards.

Year	Stream	Number of students	Current number of classrooms	Number of extra classrooms required based on FNBC on 2024 data
	101	30		
1	102	27	3	0
	103	30		
	201	31		
2	202	30	3	0
	203	31		
	301	33		
3	302	32	3	0
	303	35		
	401	30		
4	402	30	3	0
	403	30		
	501	33		
5	502	35	3	0
	503	35		
	601	34		
6	602	34	3	0
	603	33		
7	701	42	3	1

PROJECT NAME: INFRASTRUCTURE PLAN FOR SUVA NAUSORI URBAN SCHOOLS

PROJECT NUMBER: 22403058

SCHOOL NAME: SUVA MUSLIM PRIMARY SCHOOL

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	702	38		
	703	40		
	801	31		
0	802	34	4	0
0	803	31	4	U
	804	30		

3) **EXISTING INFRASTRUCTURE CONDITIONS**

Given the outlined procedure, the following observations were made:

Block Code	Length (m)	Width (m)	Height (m)	No. of Levels	Туре	Room List
B1	40.20	8.05	2.6	1	Single storey concrete structure that consists of concrete floor slab, concrete block wall and steel/timber framed roof structure	- Classrooms (x4) - Library (x1)
B2	23.20	7.7	6.40	2	Double-storey concrete structure that consists of concrete floor slab, concrete block wall and timber framed roof structure	- Ground Floor Classrooms (x3) - Top Floor Classrooms (x3)
В3	24.60	6.10	6.40	2	Double-storey concrete structure that consists of concrete floor slab, concrete block wall and timber framed roof structure	- Ground Floor Classrooms (x3) Washroom - Top Floor Classrooms (x3)
B4	30.30	16.05	6.40	2	Double-storey concrete structure that consists of concrete floor slab, concrete columns, concrete block wall and steel framed roof structure	- Ground Floor Staffroom (x1) Washrooms - Top Floor School Hall
B5	21.30	11.95	9.40	3	Three-storey concrete structure that consists of concrete floor slab, concrete columns, concrete block wall and timber framed roof structure	- Ground Floor Administration Office (x1) Classroom (x1) School canteen - 2nd Floor Classrooms (x2) - 3rd Floor Classrooms (x2)

NOTE: Toilets mentioned refers to a set of cubicles.

Summary Table for Classrooms

This table provides a quick overview of the assessment findings, helping to identify areas that need immediate attention and those that are in good condition. The following criteria was used:

- Good No additional works / intervention required
- Fair Remedial works required
- Poor Demolition and replace with new

Assessment Area	Criteria	Conditions
Structural Integrity	Walls, ceiling, floor, foundation and roofs	Good
General upkeep	Exterior, interior, furniture and fixtures	Good
Safety compliance	Fire safety, electrical safety,	Good
Disability	Accessibility	Poor
Ventilation and lighting	Ventilations, Natural Lighting, Artificial Lighting.	Good

PROJECT NAME: INFRASTRUCTURE PLAN FOR SUVA NAUSORI URBAN SCHOOLS

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Observations on Structural Elements

- > Walls and Ceiling. There were signs of wear and tear on walls.
- Floors and Foundation the floor and foundation for the entire school is found to be stable. There were visible of cracks and uneven surface. However, the floor is mostly covered with titles.
- **Roofs** the school reported that there are no leaks. It was found that roof materials are in good condition. However, some roof cladding and fastenings are partially rusted and requires upgrading works.
- ➤ Windows some missing window louvre blades were recorded at various buildings
- **Cyclone** minor roof upgrading works required to increase cyclone resilient capacity of the structures.

Existing Conditions of Building and Maintenance

- **Exterior** the building is in fair/poor condition as the wall, beam, column, window seal, doors, eaves, fascia boards and gutters are intact and coated with paint. The school executes periodical maintenance.
- ➤ Interior the building is in fair condition as the walls, beams, columns windows, doors and ceiling are intact and coated with paint. The school executes periodical maintenance. The classrooms were found to be clean with proper waste disposal.
- Furniture and Fixtures the classrooms and offices have adequate furniture and fixtures that do not impede on the function of the buildings.

Safety and compliance with standards

- Fire Safety the school does not possess adequate fire safety mechanisms. Present fire Extinguishers need maintenance and commissioning. No fire hydrants and alarm systems were found. The school has Emergency exit plan and designated assembly area provisioned.
- ➤ Electrical Safety The school is connected to EFL Grid. The school has surface wiring with no fault outlets. All electrical systems are measured to be safe.
- ➤ Accessibility the school does not meet disability accessibility standards. The school does not have facilities such as ramps, handrails and accessible restrooms.

Lighting and Ventilation

- ➤ **Ventilation** HVAC system (Heating, Ventilation, and Air Conditioning) is centrally located in the school, in particular, offices and Computer Labs.
- Natural Lighting there are adequate number of windows installed in classrooms that are regularly cleaned to allow natural light to enter into classrooms unobstructed.
- > Artificial Lighting it was found that all light fixtures are working and provides adequate illumination.

4) WATER SANITATION HYGIENE (WASH) FACILITIES

Condition of Toilets and Washrooms

Suva Muslim Primary School has 1 block with toilet facilities. The facilities have some minor defects such as:

- The cubicle doors were damaged.
- Damaged and missing tiles.

The WASH facilities were clean and well maintained. The girls toilet cubicles does not comply with the FNBC for toilet numbers.

TOILET CUBICLE(S)	No. of C	Cubicles		(1 cubicle: ents)	Compliance of Stude Ratio (F	
Building Index	Female	Male	Female	Male	Female Requirement (1:20) Extra Toilets?	Male Requirement (1:30) Extra Toilets?
B1 – B4	13	0	35	0	3	0
B1 – B4	0	12	0	32	0	0



HAND BASINS IN THE TOILET	No. of Ha	nd Basins	Handbasi	n Ratio 1:	Compliance of Stud Ratio (F	
Building Index	Female	Male	Female	Male	Female Requirement (1:60) Extra Handbasins?	Male Requirement (1:60) Extra Handbasins?
WC	4	4	107	97	3	2

GENERAL OUTDOOR TAPS Building Index	No. of General Outdoor Taps	Outdoor Taps Ratio 1:	Compliance of Student to Outdoor Taps Ratio Requirement (1:60) (FNBC) Does it require additional hand basins?
B1	2	74	0
B2	2	81	0
В3	4	51	0
B4	4	62	0

5) <u>DISASTER RESILIENCE ASSESSMENT</u>

This infrastructure condition assessment aims to evaluate the architectural, structural, and non-structural features of the school to ensure it is resilient to natural disasters and provides a safe learning environment for students. The assessment also identifies areas for improvement and highlights the measures already in place to enhance overall resilience. FNBC 1990 and basic loading, wind and seismic AS/NZS codes typical details were utilized during and after inspection.

Architectural

- Cyclonic Roof: The school has a cyclonic roof designed to withstand strong winds and seismic activity. However, replacement with new roof cladding and roofing screws is needed.
- Location: The school's location makes it simple to go to relief services and main roads.

Structural

- Material Quality: The school buildings are constructed using reinforced concrete and follow acceptable
 engineering design principles.
- Structural Integrity: Buildings have demonstrated the capability to withstand and recover from natural disasters like earthquakes, category 3 cyclones, and floods.

Non-Structural

- Disaster Preparedness: Implementation of disaster evacuation plans, emergency exit routes, and safety protocols.
- Fire Safety: Equipped with a fire alarm system and strategically placed fire extinguishers to mitigate firerelated risks.

PROJECT NAME: INFRASTRUCTURE PLAN FOR SUVA PROJECT NUMBER: 22403058 SCHOOL NAME: SUVA MUSLIM PRIMARY SCHOOL



6) ACCESSIBILITY ASSESSMENT

1. Compliance with Accessibility Standards:

Educational facilities did not meet accessibility standards, such as the Fiji Disable People Federation Access Audit Tool 1.0. This toolkit covers aspects like ramps, door widths, signage, and accessible routes, also the noncompliance extends beyond physical structures to digital accessibility.

2. Facilities for Students with Disabilities:

- Classrooms did not have adjustable seating arrangements, clear sightlines, and adequate space for mobility aids also including accessible desks and adjustable podiums.
- Libraries require accessible shelving, reading stations, and assistive technology (such as screen readers) to enhance library usability.
- > Restrooms (WASH facilities) were not wheelchair-accessible or have grab bars and sinks at an appropriate height.
- > Common Areas: the cafeterias and outdoor spaces were not designed inclusively. Benches, seating areas, and a few pathways are not able to accommodate everyone.

3. Access to Classrooms, WASH Facilities, and Common Areas:

- Classrooms do not have wide doorways and ramps to ensure access to classrooms. Additionally, acoustics are not considered for students with hearing impairments.
- > WASH Facilities do not have accessible restrooms with proper signage and a clear pathway to the wash facilities.
- Common Areas like corridors, courtyards, and gathering spaces are not barrier-free and are without proper lighting and contrasting floor materials to aid navigation.

PROJECT NAME: PROJECT NUMBER: SCHOOL NAME:

INFRASTRUCTURE PLAN FOR SUVA NAUSORI URBAN SCHOOLS

22403058



7) **SUMMARY OF FINDINGS**

The following summarizes the individual characteristics assessed during the Suva-Nausori school audit for Suva Muslim Primary School:

Categories of	Existing Condition / State	Required as per Standards	Gaps Observed
Assessment	Laisting Condition / Otate	Required as per otanidards	Oups Observed
Existing Infrastructure Condition	- Structural Integrity – Columns, slabs, beams, rafters, purlins of adequate size General upkeep – Minor irregular maintenance Safety compliance- handrails where necessary Disability- no consideration when constructed Ventilation and lighting – damaged and missing lights at some sections of buildings.	- Structural Integrity – Columns, slabs, beams, rafters, purlins sizes to follow FNBC 1990 General upkeep –routine checkup as per MOE policies with major defects requiring immediate intervention Safety compliance- handrails, extra doors and signage where necessary Disability- to comply with FDPF Disability audit tool - Ventilation and lighting – adequate windows and doors required as per FNBC 1990.	- Structural Integrity – Columns, slabs, beams, rafters, purlins sizes to follow FNBC 1990 General upkeep –requires immediate intervention to major defects Safety compliance- safety handrails were only present in suspended floors while ground floor rails beside drain had missing rails (not fully safety compliant). FDPF requires signage which was absent from the school Disability- not fully compliant with FDPF Disability audit tool - Ventilation and lighting – limitations in the count of windows and lightings compared to required FNBC.
Assessment of Overcrowding	- The classrooms are accommodating an average of 819 roll/25 classrooms of 37 students.	- FNBC 1990 requires classroom occupancy to have 2m² per person. Based on that, the required roll per classroom was calculated.	 - 4/25 classrooms were accommodating more roll than required. - Given the recommended sizing (1.5m²), about 1 extra classrooms are required to address overcrowding in school.
Water Sanitation Hygiene (WASH) facilities	Toilets (students: Cubicle) - Boys – 32:1 (12 cubicles) - Girls – 35:1 (13 cubicles) Taps (students: tap) - Students – 24:1 (34 taps) - Menstrual Hygiene was present in female washroom block	Toilets Ratio (students: Cubicle) - Boys – 30:1 (9 cubicles) - Girls – 20:1 (31 cubicles) Taps Ratio (students: tap) - Students – 60:1 (15 taps) Please note: Above number of cubicles and taps are respective of 2024 enrolment numbers. Due to variation of ratio with student population in FNBC, the initial ratio is referred ONLY for reporting Menstrual Hygiene to be present in every female washroom block	- The girls toilet ratio exceeded the FNBC requirement indicating not enough toilet cubicles are in the school. Given the roll of students, an extra 4 girls toilet cubicles is required - The handbasin ratio exceeded the FNBC requirement indicating not enough handbasin are in the school. Given the roll of students, an extra 3 handbasin for girls and 2 handbasin for boys are required
Disaster Resilience Assessment	 Columns, beams, slabs. All roof had timber/steel roof frames. The windows only have rusted wire mesh shutters at some sections. 	Fiji Building Code 1990. Requirement is that roof cladding be free of rust and fastened securely with type 17 cyclonic screws with neoprene washers. Additionally, cyclone brackets to be fixed on every window frame.	Rusting of cladding contradicts to the cyclone certification requirement requiring replacement. Absence of cyclone brackets are not acceptable as per the cyclone certification.
Accessibility Assessment	-Handrails partially are secured and well maintained Stairway – average 2m width.	The following are requirements from Fiji Disabled People's Federation Access Audit Tool - Ramps – required wherever elevation with minimum 1:8 maximum 1:20 - Walkway clearance Handrails to be 0.76m to 0.9m Doors and Door size – minimum 0.9m.	The following facilities are missing. - Ramps and elevators for vertical access - Wide doorways and clear pathways - Proper signage - Wheelchair-accessible restrooms - Grab bars - Proper signage - Inclusive seating areas and pathways - Proper lighting - Contrasting floor materials



D2.1)		- Clearance required of 1.2m and tread width of minimum 310mm. (National Building Code Table	
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8) RECOMMENDATIONS

- In order to comply with the FNBC, the school will require the following:
 - Classrooms: An additional 9 new classrooms. This expansion aims to accommodate the growing number of students and provide them with an enhanced learning environment.
- > WASH Facilities: An additional 3 cubicles for girls is required, equipped with up-to-date WASH facilities (handbasins). The exact number could be discussed upon further analysis.

Weekly routine maintenance work and daily cleanup directive from MOE is also a critical component of the plan which includes:

- Roof repairs due to rusting of cladding, roofing nails, gutter and gutter straps.
- New paint application on rails and walls

These maintenance activities are designed to address existing wear and tear and to ensure that the school buildings remain in good condition. It is recommended that maintenance be carried out at regular intervals, ideally every 12 months, to prevent deterioration and to maintain a safe and functional environment.

> Accessibility: Prioritize building accessibility features, such as ramps and handrails, to ensure compliance with standards. These features are vital for providing all students, including those with disabilities, with equal access to the school's facilities.

9) COMPLIANCE

Upon inspecting Suva Muslim Primary School, the following conclusions were drawn:

- ➤ MEHA Compliance: Compliant
- > WASH Facilities: The school has ample taps. Additional 4 girls toilet cubicles required to comply with FNBC 1990.
- **Land Availability:** There is sufficient land for additional blocks.
- > NFA Compliance: Compliant with NFA basic guidelines but does not have NFA certification.
- **WAF Compliance:** Adequate water supply, but no backup system for water cuts.
- > FNBC Compliance: The school is not fully compliant with the occupancy requirements as well as the category 5 cyclone standards based on the windows and roofing requirements.
- > NDMO Compliance: Targeting NFA and NBC compliance for safety.
- **EFL Compliance:** Assumed to be compliant with EFL standards.
- > DISABILITY Accessibility: non-compliant

10) APPENDIX

Appendix A – Suva Muslim Primary School Site Inspection Report

Appendix B - Excel Scoring Sheet

Appendix C – Land Available for Expansion

INFRASTRUCTURE PLAN FOR SUVA NAUSORI URBAN SCHOOLS PROIFCT NAME: PROJECT NUMBER: 22403058 SCHOOL NAME:

Appendix A - Site Inspection Report



INFRASTRUCTURE ASSESSMENT AUDIT FOR SUVA – NAUSORI URBAN SCHOOL

MARIST BROTHERS PRIMARY SCHOOL - REG 2345

SITE INSPECTION REPORT







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List of Abbreviations

NRWM	NRW Macallan (Fiji) Pte Ltd
MOE	Ministry of Education
TT	Tetra Tech International Development Pty Ltd
DFAT	Department of Foreign Affairs and Trade (Australia)
FEG	Free Education Grant
OHS	Occupational Health and
NFA	National Fire Authority
WAF	Water Authority of Fiji
NBC	National Building Code
NDMO	National Disaster Management Office
EFL	Energy Fiji Limited



1) INTRODUCTION

NRW Macallan (Fiji) Limited has been tasked by Tetra Tech International Development PTY LTD to conduct a comprehensive visual inspection of 86 primary and secondary schools along the Suva and Nausori Corridor. The scope of the inspection includes several key aspects:

- 1) Data Gathering: Gathering information related to school administration and organization, such as school history and enrolment figures.
- 2) Services Connectivity Verification: Checking the connectivity of essential services including electricity, water, sewerage, and internet.
- 3) Structural Adequacy: Assessing the structural integrity of the buildings within the school premises, i.e., classroom, toilet blocks, etc, configuration and space requirements.
- 4) Safety Inspections: Ensuring compliance with Occupational Health and Safety (OHS) standards and Fire Safety measures on-site.
- 5) Compliance Review: Reviewing gathered information to ensure compliance with various regulatory bodies and standards:
- Ministry of Education (MOE) Compliance
- National Fire Authority (NFA) Compliance
- Water Authority of Fiji (WAF) Compliance
- National Building Code (NBC) Compliance
- National Disaster Management Office (NDMO) Compliance
- Energy Fiji Limited (EFL) Compliance

This particular report documents findings from the inspection conducted at Suva Muslim Primary School, utilizing the specified number of buildings outlined in the contract as a reference point for the inspection.

The purpose of this comprehensive inspection is likely to ensure that these schools meet regulatory and safety standards and to provide recommendations for any necessary improvements to infrastructure and classroom overcrowding.

2) SCHOOL BACKGROUND

On 31 October 1926, The Fiji Muslim League was founded at the Jamia Masjid in Toorak. The Fiji Muslim League contributed for the education systems in Fiji. The first school launched by FML was the Suva Muslim Primary School. Fiji Muslim League currently owns and manages seventeen primary and five secondary schools plus a tertiary institution. Fiji Muslim League has also helped for tertiary studies for poor Muslims through loans. The IDB loans for these studies were given locally for information technology and the other for the study of medicine in Pakistan by Fiji Muslim League.

For more information regarding the school, please contact Mr. Jazak Allahu Khair at contact number +679 338 2813 by e-mail: at smpsao2016@gmail.com



Table 1: SCHOOL DETAILS

NAME OF SCHOOL	SUVA MUSLIM PRIMARY SCHOOL					
SCHOOL REGISTRATION NUMBER	2345					
SCHOOL LOCATION	MEAD ROAD NABUA, SUVA					
SCHOOL TYPE	PRIMARY SCHOOL					
FEEDER SCHOOL	SUVA MUSLIM COLLEGE & ZONING					
MILESTONE NO. 2	(38 / 86 SCHOOLS)					
DATE OF INSPECTION	4 TH JULY, 2024					
	ANASEINI RAVULALA (AR)					
INSPECTED BY (TEAM 1)	SHANEEL PRASAD (SP)					
	DURGESH PAL (DP)					

Table 2: SCHOOL ENROLMENT FIGURES

Year of	Number of Students								
Enrolment	Male	Female	Total	with Disability	Male	Female	Total	Comments	
2024	388	431	864	2	7	18	25	No. 25 classroomsStudent to stream average ratio	
2023	391	424	921	0	8	18	26	is 37:1 for 2024 school	
2022	406	435	903	0	9	16	25	calendar.WASH ratio	
2021	418	445	900	0	8	17	25	Male 33 : 1 Female 34:1	
2020	454	459	932	0	8	17	25	T Gillalo C II. I	
2019	464	447	892	0	13	12	25		

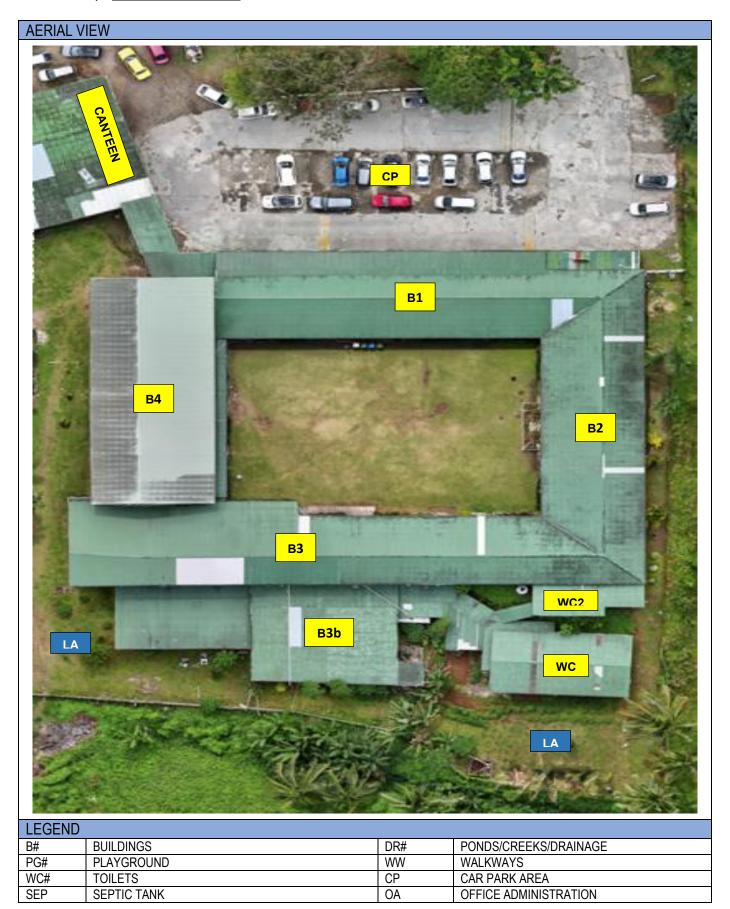


Table 3: 2024 CLASSROOM ENROLLMENT DETAILS

	CLASS	TOTAL	NUMBER	DIMENSI	ONS (m)	ACCESS V	VAY COUNT	
GRADE	NUMBER	STUDENT ROLL	OF TEACHERS	LENGTH	WIDTH	NO. OF DOORS	NO. OF WINDOWS	OVERCROWDING
1	101	30	1	7.50	6.70	2	12	□YES ⊠NO
1	102	27	1	7.50	6.70	2	12	□YES ⊠NO
1	103	30	1	7.50	6.70	2	12	□YES ⊠NO
2	201	31	1	7.50	6.70	2	12	□YES ⊠NO
2	202	30	1	7.50	6.70	2	12	□YES ⊠NO
2	203	31	1	7.50	6.70	2	12	□YES ⊠NO
3	301	33	1	7.50	6.70	2	12	□YES ⊠NO
3	302	32	1	7.50	6.70	2	12	□YES ⊠NO
3	303	35	1	7.50	6.70	2	12	⊠YES □NO
4	401	30	1	7.50	6.70	2	12	□YES ⊠NO
4	402	30	1	7.50	6.70	2	12	□YES ⊠NO
4	403	30	1	8.10	7.45	2	16	□YES ⊠NO
5	501	33	1	8.10	7.45	2	16	□YES ⊠NO
5	502	35	1	8.10	7.45	2	16	□YES ⊠NO
5	503	35	1	8.10	7.45	2	16	□YES ⊠NO
6	601	34	1	8.10	7.45	2	16	□YES ⊠NO
6	602	34	1	8.10	7.45	2	16	□YES ⊠NO
6	603	33	1	8.10	7.45	2	16	□YES ⊠NO
7	701	42	1	7.30	7.00	1	16	⊠YES □NO
7	702	38	1	7.30	7.00	1	16	⊠YES □NO
7	703	40	1	7.30	7.00	1	16	⊠YES □NO
8	801	31	1	7.30	7.00	1	16	□YES ⊠NO
8	802	34	1	7.30	7.00	1	16	□YES ⊠NO
8	802	31	1	7.30	7.00	1	16	□YES ⊠NO
8	802	30	1	7.30	7.00	1	16	□YES ⊠NO



3) SCHOOL SITE PLAN



PROJECT NAME: PROJECT NUMBER: SCHOOL NAME: INFRASTRUCTURE PLAN FOR SUVA NAUSORI URBAN SCHOOLS

22403058



4. VISUAL INSPECTION RESULTS

EXISTING BUILDING INFORMATION

BUILDING 1:

CLASSROOMS:

Building Index		CLASSROOMS		Year Bu	ilt:	(Age:	years old)			
Type: Concrete building – concrete block wall corrugated iron roof s		lls, with				No. of Levels: 1				
Dimen	sions	Length (m): 37.50		,	Width (m): 6	6.70		Height (n	n): 2.60	
Existin	g State of B	Building								
REF. No.	Building C	Component	Good¹	Fair ²	Poor ³	Structure	e Type⁴		Comm	ents
1	Roof Linin	g	✓			Steel		Good cond	ition	
2	Roof Struc	cture		✓		Timber		Concealed		
3	Walls			✓		Concrete		Good condition		
4	Columns			✓		Steel		Good condition		
5	Beams			✓		Timber		Good condition		
6	Floor			✓		Concrete		Good condition		
7	Handrails							N/A		
8	Walkway(s)		✓		Concrete		Space Ok		
9	Services -	- water supply	✓					OK		
10	Avoilable	tono for gonoral	_					# of taps: 2)	
10	Available	taps for general use	Y					Student –	Гар ratio =	: 33 : 1
11	Services -	- electricity	✓					Not all lights and fans are worki		s are working
12	Services - (internet)	- communication	✓							
13	Drainage		✓							

Comments

- <u>Floor</u>
 - Surface cracks are visible along the floor slabs along the corridor and staircase of each levels.
- Missing gutters fastenings and damage downpipes
- Missing louvre blades
- Doors and windows functional
- Floor tiles non-slippery minor damage
- Cyclone shutters not provided to some of the exposed glazed areas in classrooms.
- A sample classroom was taken, the dimensions are as follows:
 - Length (m): 7.50, Width (m): 6.70, Height (m): 2.6

PROJECT NAME: PROJECT NUMBER: 22403058 SCHOOL NAME:

INFRASTRUCTURE PLAN FOR SUVA NAUSORI URBAN SCHOOLS



BUILDING 2:

CLASSROOMS:

Building Index		CLASSROOMS				Year Built:		(Age:	years old)		
Type: Concrete building – concrete block wall corrugated iron roof s			lls, with				No. of Le	No. of Levels: 1			
Dimer	nsions	Length (m): 37.50			Width (m):	6.70		Height (n	ո)։ 2.60		
Existir	ng State of E	Building									
REF. No.	Building C	Component	Good ¹	Faii	r² Poor³	Structure	e Type ⁴		Comme	ents	
1	Roof Linin	g	✓			Steel		Good cond	ition		
2	Roof Stru	cture		✓		Timber		Concealed			
3	Walls			✓		Concrete		Good condition			
4	Columns			✓		Steel		Good condition			
5	Beams			✓		Timber		Good condition			
6	Floor			✓		Concrete		Good condition			
7	Handrails							N/A			
8	Walkway(s)		✓		Concrete		Space Ok			
9	Services -	- water supply	✓					OK			
40	A ! . .		✓					# of taps: 2			
10	Available	taps for general use	•					Student –	Гар ratio =	33 : 1	
11	Services – electricity		✓					Not all lights and fans are working		s are working	
12	Services – communication (internet)		✓								
13	Drainage		✓								
Comm	onto					1					

Comments

Surface cracks are visible along the floor slabs along the corridor and staircase of each levels.

- Missing gutters fastenings and damage downpipes
- Missing louvre blades
- Doors and windows functional
- Floor tiles non-slippery minor damage
- Cyclone shutters not provided to some of the exposed glazed areas in classrooms.
- A sample classroom was taken, the dimensions are as follows:
 - Length (m): 7.50, Width (m): 6.70, Height (m): 2.6

PROJECT NAME: PROJECT NUMBER: 22403058 SCHOOL NAME:

INFRASTRUCTURE PLAN FOR SUVA NAUSORI URBAN SCHOOLS



Good - No additional works / intervention required

BUILDING 3:

CLASSROOMS, LAB/PRAYER ROM/OFFICE/SICKBAY:

Building Index		CLASSROOMS/COI	MPUTER	LAB/0	OFFI	Year Bui	ilt:	(Age:	years old)		
Type:		Concrete building – slab, concrete block corrugated iron roof	walls, wi			No. of Levels: 1 Split-level 2					
Dimen	sions	Length (m): 51.60			Wid	dth (m): 7	7.45		Height (n	n): 2.60 / 6	5.20
Existin	g State of E	Building									
REF. No.	Building C	Component	Good ¹	Faii	r²	Poor ³	Structure	e Type4		Comm	ents
1	Roof Linin	ng	✓				Steel		Good cond	ition	
2	Roof Stru	cture		✓			Timber		Concealed		
3	Walls			✓			Concrete		Good condition		
4	Columns			✓			Steel		Good condition		
5	Beams			✓			Timber		Good condition		
6	Floor			✓			Concrete		Good condition		
7	Handrails								N/A		
8	Walkway(s)		✓			Concrete		Space Ok		
9	Services -	- water supply	✓						OK		
40	A ! - - -		✓						# of taps: 2	!	
10	Available	taps for general use							Student – 7	Гар ratio =	= 33 : 1
11	Services -	- electricity	✓						Not all light	s and fan	s are working
12	Services – communication (internet)		✓								
13	Drainage		✓								

Comments

Floor

Surface cracks are visible along the floor slabs along the corridor and staircase of each levels.

- Missing gutters fastenings and damage downpipes
- Missing louvre blades
- Doors and windows functional
- Floor tiles non-slippery minor damage
- Cyclone shutters not provided to some of the exposed glazed areas in classrooms.
- A sample classroom was taken, the dimensions are as follows:
 - Length (m): 8.10, Width (m): 7.45, Height (m): 2.60 / 6.20

PROJECT NAME: IN
PROJECT NUMBER: 22
SCHOOL NAME: SU

INFRASTRUCTURE PLAN FOR SUVA NAUSORI URBAN SCHOOLS

22403058

² Fair - Remedial works required – min CAT 3 standard

³ Poor - Demolition and replace with new - min CAT 4 standard

⁴ Type of structure - Timber/concrete/steel



Good - No additional works / intervention required

BUILDING 4:

CLASSROOMS (KINDERGARTEN)/STORAGE ROOM

Buildin	g Index	CLASSROOMS (KIN	IDERGAF	RTEN)	STORAGE	ROOM	Year Buil	t:	(Age:	years old)
Type:		Concrete building – concrete block wal corrugated iron roof s	ls, with				No. of Le	vels: 1		
Dimen	sions	Length (m): 35.25		,	Width (m): 1	12.70		Height (n	n): 2.6	
Existing State of Building										
REF. No.	Building C	Component	Good ¹	Fair²	Poor ³	Structure	e Type⁴		Commo	ents
1	Roof Linin	g	✓			Steel		Good cond	ition	
2	Roof Struc	cture		✓		Timber		Good cond	ition	
3	Walls			✓		Concrete Timber		Good cond	Good condition	
4	Columns			✓		Steel		Good condition		
5	Beams			✓		Timber		Good condition		
6	Floor			✓		Concrete		Good condition		
7	Handrails							N/A		
8	Walkway(s)		✓		Concrete		Space Ok		
9	Services -	- water supply	✓					OK		
10	Available	tone for general use	✓					# of taps: 3	4	
10	Available	taps for general use	V					Student - 7	Гар ratio =	: N/A
11	Services – electricity		✓					Not all light	s and fan	s are working
12	Services – communication (internet)		✓							
13	Drainage		✓							
Comm	ents									

Comments

- Floor
 - Surface cracks are visible along the floor slabs along the corridor and staircase of each levels.
- Missing gutters fastenings and damage downpipes
- Missing louvre blades
- Doors and windows functional
- Floor tiles non-slippery minor damage
- Cyclone shutters provided to all the exposed glazed areas.

PROJECT NAME: PROJECT NUMBER: 22403058 SCHOOL NAME:

INFRASTRUCTURE PLAN FOR SUVA NAUSORI URBAN SCHOOLS

² Fair - Remedial works required – min CAT 3 standard

 $^{^{3}}$ Poor - Demolition and replace with new - min CAT 4 standard

⁴ Type of structure - Timber/concrete/steel



Good - No additional works / intervention required

BUILDING 5:

CLASSROOMS & ADMIN OFFICE

Buildin	g Index	CLASSROOMS & A	DMIN OF	FICE			Year Bui	ilt:	(Age:	years old)
		- Double storey, concrete floor slab, alls, with gable roof structure and sheets			No. of Levels: 2					
Dimen	sions	Length (m): 29.20			Width (m): 7	7.00	Height (m): 6.20			
Existin	g State of E	Building								
REF. No.	Building C	component	Good¹	Fair	Poor ³	Structure	e Type⁴		Comm	ents
1	Roof Linin	g	✓			Steel		Good cond	lition	
2	Roof Struc	cture		✓		Timber		Concealed		
3	Walls			✓		Concrete Timber		Good cond	lition	
4	Columns			✓		Steel		Good cond	lition	
5	Beams			✓		Timber		Good condition		
6	Floor			✓		Concrete		Good cond	lition	
7	Handrails							N/A		
8	Walkway(s)		✓		Concrete		Space Ok		
9	Services -	- water supply	✓					OK		
40	A							# of taps: 4		
10	Available	taps for general use	✓					Student –	Tap ratio =	= N/A
11	Services -	- electricity	✓					Not all light	ts and fan	s are working
12	Services - (internet)	- communication	✓							
13	Drainage		✓							

Comments

- - Surface cracks are visible along the floor slabs along the corridor and staircase of each levels.
- Missing gutters fastenings and damage downpipes
- Missing louvre blades
- Doors and windows functional
- Floor tiles non-slippery minor damage
- Cyclone shutters not provided to some of the exposed glazed areas in classrooms.
- A sample classroom was taken, the dimensions are as follows:
 - Length (m): 7.30, Width (m): 7.00, Height (m): 6.20

PROJECT NAME: PROJECT NUMBER: 22403058 SCHOOL NAME:

INFRASTRUCTURE PLAN FOR SUVA NAUSORI URBAN SCHOOLS

² Fair - Remedial works required – min CAT 3 standard

³ Poor - Demolition and replace with new - min CAT 4 standard

⁴ Type of structure - Timber/concrete/steel



Good - No additional works / intervention required

TOILET BLOCKS (BOYS & GIRLS)

Building	g Index	B5 – Students	Male & Fe	male Toile	ts.						
,,,		ure with concrete floor slab, concrete block wall and No. of Levels: 1									
D'	1 14/04	timber gable roo		1AC 101 /	\ 0.00			11111	() 00		
	sions WC1	Length (m): 15.	10	Width (i	m): 8.30			Height	Height (m): 2.6		
Existing	g State of Bu	ilding									
REF. No.	Building C	component	Good ¹	Fair ²	Poor ³	Structure Type ⁴	Co	unt ⁵	Comments		
1	Roof lining	3				N/A			Good condition		
2	Roof struc	ture		✓		Timber			Concealed		
3	Wall			✓		Concrete			Good condition		
4	Columns/li required)	peams (where				N/A			Good condition		
5	Floor			✓		Concrete			Fair conditions, all inside floor non-slip tiles.		
6	Handrails					N/A					
7	Walkway					N/A					
8	Services -	Water		✓					OK		
9	Service - I	Electricity		✓					OK		
10	Service – (internet)	communication				N/A					
11	Toilet Bay	s – female				N/A		13	Extra 3 cubicles required & washbasin		
13	Toilet Bay	s – accessible		✓		Concrete		12	Washbasin required		
14	Entry to th	e toilet building		✓		Concrete			ok		
15	Menstrual facilities	Hygiene							Good condition		

PROJECT NUMBER: 22403058

SCHOOL NAME: SUVA MUSLIM PRIMARY SCHOOL

² Fair - Remedial works required – min CAT 3 standard ³ Poor - Demolition and replace with new - min CAT 4 standard

⁴ Type of structure - Timber/concrete/steel

 $^{^{\}rm 1}\,\mbox{Good}$ - No additional works / intervention required

 $^{^2}$ Fair - Remedial works required – min CAT 3 standard 3 Poor - Demolition and replace with new - min CAT 4 standard

⁴ Type of structure - Timber/concrete/steel

⁵ Count - Used for identifying number of toilet bays and menstrual hygiene facilities



Comments -

- Others:
 - Ventilation was good & lighting ok.
 - Some of the toilet wall requires new coat painting.
 - Decaying of timber door frames

5. PHOTOGRAPHIC REPORT

B1 - CLASSROOMS

Client	TETRA TECH INTERNATIONAL DEVELOPMENT (PTY) LTD	School name:	SUVA MUSLIM PRIMARY SCHOOL
Project:	INFRASTRUCTURE PLAN FOR SUVA – NAUSORI URBAN SCHOOL	Site Location:	MEAD ROAD, NABUA.



PHOTOGRAPH No. 1: FRONT VIEW



PHOTOGRAPH No. 2: REAR VIEW







PHOTOGRAPH No. 3: SIDE VIEW PHOTOGRAPH No. 4: INTERIOR CLASSROOM CEILING/FAN PROVIDED

PROJECT NAME: INFRASTRUCTURE PLAN FOR SUVA NAUSORI URBAN SCHOOLS

PROJECT NUMBER: 22403058

SCHOOL NAME: SUVA MUSLIM PRIMARY SCHOOL

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BUILDING INDEX - B2 CLASSROOMS

Client	TETRA TECH INTERNATIONAL DEVELOPMENT (PTY) LTD	School name:	SUVA MUSLIM PRIMARY SCHOOL
Project:	INFRASTRUCTURE PLAN FOR SUVA – NAUSORI URBAN SCHOOL	Site Location:	MEAD ROAD, NABUA.



PHOTOGRAPH No. 1: FRONT VIEW



PHOTOGRAPH No. 2: REAR VIEW



PHOTOGRAPH No. 3: INTERIOR CLASSROOM CEILING



PHOTOGRAPH No. 4: INTERIOR CLASSROOM



BUILDING INDEX - B3 CLASSROOMS

Client	TETRA TECH INTERNATIONAL DEVELOPMENT (PTY) LTD	School name:	SUVA MUSLIM PRIMARY SCHOOL
Projec	: INFRASTRUCTURE PLAN FOR SUVA – NAUSORI URBAN SCHOOL	Site Location:	MEAD ROAD, NABUA.



PHOTOGRAPH No. 1: FRONT VIEW CLASSROOM



PHOTOGRAPH No. 2: SIDE VIEW



PHOTOGRAPHS No. 3: INTERIOR CEILING CLASSROOM



PHOTOGRAPH No. 4 REAR VIEW



BUILDING INDEX – BUILDING 4 SCHOOL HALL, STAFF ROOM & ABLUTION

Client	TETRA TECH INTERNATIONAL DEVELOPMENT (PTY) LTD	School name:	SUVA MUSLIM PRIMARY SCHOOL
Project:	INFRASTRUCTURE PLAN FOR SUVA – NAUSORI URBAN SCHOOL	Site Location:	MEAD ROAD, NABUA.



PHOTOGRAPH No. 1: FRONT VIEW & VERANDAH TO FIRST FLOOR



PHOTOGRAPH No. 2: FRONT CONCRETE STAIRCASE



PHOTOGRAPH No. 3: REAR VIEW



PHOTOGRAPH No. 4: ENTRANCE TO SCHOOL WITH CONCRETE STAIRCASE



BUILDING INDEX - B5 CLASSROOMS, CANTEEN & ADMIN

Project: INFRASTRUCTURE PLAN FOR SUVA – NAUSORI Site Location: MEAD ROAD, NABUA.	Client	TETRA TECH INTERNATIONAL DEVELOPMENT (PTY) LTD	School name:	SUVA MUSLIM PRIMARY SCHOOL
CREAT COTOCE	Project:	INFRASTRUCTURE PLAN FOR SUVA – NAUSORI URBAN SCHOOL	Site Location:	MEAD ROAD, NABUA.



PHOTOGRAPH No. 1: TOILET BAYS



PHOTOGRAPH No. 2: WC SYSTEM



PHOTOGRAPH No. 3: WASHROOM WASHBASIN



PHOTOGRAPH No. 4: WC FOR STAFFS

Appendix B – Excel Scoring Sheet

	WEIGHTED CRITERIA		
1	PART A - CLASSROOM OVERCROWDING (40%) Classrooms facilitating students beyond room capacity, determined through number of students per classroom and classroom size		
	Poor - most to all classrooms are accommodating students above capacity.	32 to 40	40
	Criteria Item Score		40.0
2	PART B - WASH FACILITIES (20%) WASH- Student ratio based on the Fiji National Building Code (FNBC) Infrastructure Standards (10%)		
	Good - WASH-Student ratio for school toilet blocks meets or exceeds the ratio in the standard specified by FNBC.	0 to 5.9	0
2.1	Quality of facilities and current condition such as funtionality and maintenance (10%)		
	Good - generally school toilet facilities are maintanined well with minimal disturbances from the physical infrastructure to the end users.	0 to 5.9	0
	Criteria Item Score		0.0
3	PART C - CONDITION OF INFRASTRUCTURE (20%) Building structure and condition of walls, floors, ceilings, overall structural integrity (10%)		
	Good - most building structures are in good condition, however some may need repairs to improve structural integrity.	0 to 5.9	0
3.1	Maintenance and assessment of the upkeep of facilities including painting and repairs (10%)		
	Good - generally school facilities are maintanined well with minimal disturbances from the physical infrastructure to the end users.	0 to 5.9	0
	Criteria Item Score		0.0
4	PART D - DISABILITY ACCESSIBILITY (10%) Accessibility features such as the presence of existing ramps, handrails, accessible toilets etc		
	Good - most school buildings have accessible features, however some facilities are not currently accessible.	0 to 5.9	0
	Criteria Item Score		0.0
5	PART E - DISASTER RESILIENCE (10%) Presence and quality of measures for disaster resilience of buildings including structural measures, cyclone shutters and fire safety systems		
	Good - most or all school buildings structures are resilient to natural disasters and have partial safety systems in place. More systems or structural intervention would need to be implemented	0 to 5.9	0
	Criteria Item Score		0.0
	TOTAL CRITERIA SCORE		40.0

Appendix C – Land Available for Expansion













NRW MACALLAN (FIJI) LTD CONSULTING ENGINEERS

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SCHOOL NAME: