

# INFRASTRUCTURE ASSESSMENT AUDIT FOR SUVA – NAUSORI URBAN SCHOOLS

YAT SEN PRIMARY SCHOOL (REG 2360)

## SUMMARY REPORT



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## 1) INSPECTION SUMMARY

<b>School Inspection Summary</b>						
<b>School name:</b>		YAT SEN PRIMARY SCHOOL				
<b>Overall condition state:</b>		GOOD				
<b>Key recommendations:</b>						
<ul style="list-style-type: none"> <li>- Overcrowding – 7 new classrooms required based on FNBC standards</li> <li>- Overcrowding – 0 new classrooms required based on recommended sizing (1.5m<sup>2</sup>)</li> <li>- WASH – Further to NRW's school visit on 2<sup>nd</sup> July 2024, it was observed that the school's general use taps and female and male cubicles are within the FNBC requirements regarding student to wash ratio.</li> <li>- Accessibility –All buildings require accessibility ramps, accessible doorways, railing support</li> <li>- Disaster resilience – Existing glazed windows have 225 mesh for burglary prevention purpose. Roof frame &amp; cladding could not be determined as there were no access provided.</li> </ul>						
<b>Comments:</b>						
<ul style="list-style-type: none"> <li>• There were no major defects observed at the time of NRW's visit. It was advised that the school carries out maintenance as and when required, for major defects these are raised up to the management.</li> </ul>						
<b>Aerial view of school</b>			<b>General view of school</b>			
						
						
						
<b>School type:</b>	Primary	✓	Secondary		Year levels	ECE, 1,2,3,4,5, 6,7,8
<b>School address:</b>	FLAGSTAFF SUVA					
<b>2024 School enrolment and staff figures</b>	No. of Students (Male)	No. of Students (Female)	No. of Students with Disability	No. of Teachers (Male)	No. of Teachers (Female)	
	271	305	0	5	12	
<b>School building arrangement</b>	TOTAL NUMBER OF BUILDINGS: 5 B1-2 storey   B2-2 storey   B3-2 storey (Split level)   B4-1 storey   B5-2 storey (split level)					
<b>Local government area:</b>	FLAGSTAFF SUVA					

Date of inspection:	2 <sup>ND</sup> JULY, 2024				
Inspection team:	DONNIS KAINAMOLI (DK) MERELITA DUMUKURO (MD) ERONI AISAKE (EA) ANISH LAL (AL)				
Data collection methods	Visual inspection		✓	Onsite measurement	✓
	Interviews with school staff		✓	Drone / aerial imagery	✓
	Survey form		✓	Desktop research	✓
	Other:	Correspondences via email and office landline calls			
Assumptions:	None				
Limitations:	Existing documentation from the school, such as infrastructure plan, budgeting plan, building plans, site plan, school background and history.				

## 2) ASSESSMENT OF OVERCROWDING

An assessment for overcrowding was undertaken based on FNBC 1990 standards and 2024 enrolment data. The table below summarises the data collected through visual inspection and interrogation of enrolment data and this is compared against the FNBC standard of of 2 m<sup>2</sup> per student.

The results of the assessment are based on the recommended sizing (1.5m<sup>2</sup>), according to 2024 data, no additional classrooms are required for Yat Sen Primary School.

Year	Stream	Number of students	Current number of classrooms	Number of extra classrooms required based on FNBC on 2024 data
ECE	4s	71	4	0
1	101	24	3	0
	102	24		
	103	24		
2	201	36	2	0
	202	36		
3	301	41	2	0
	302	40		
4	401	35	2	0
	402	36		
5	501	40	2	0
	502	40		
6	601	37	2	0
	602	37		
7	701	40	2	0
	702	39		
8	801	32	2	0
	802	35		



### 3) EXISTING INFRASTRUCTURE CONDITIONS

Given the outlined procedure, the following observations were made:

Block Code	Length (m)	Width (m)	Height (m)	No. of Levels	Type	Room List
B1	34.00	6.70	6.20	2	Masonry building Roof frame could not be determined Kliplok roofing iron sheets Roofing screws	<b>Ground Floor</b> Chinese room, Remedial room, Advanced Maths room  <b>Top Floor</b> School office, Library & Computer Room, Year 101, Year 102
B2	63.20	7.90	9.00	2	Masonry building Roof frame could not be determined Kliplok roofing iron sheets Roofing screws	<b>Ground Floor</b> Male student toilet (15), Staff toilet (2), storage room  <b>1<sup>st</sup> Level</b> Female student toilet (16), Year 103, Year 201, Year 202, Year 203, Year 301, Year 302, Year 401, Year 402, Year 501, Year 502, Year 601, Year 602, Year 701, Year 702, Year 801, Year 802  <b>2<sup>nd</sup> Floor</b> Year 501, Year 502, Year 601, Year 602, Year 701, Year 702, Year 801, Year 802
B3	50.00	39.00	11.50	2	Masonry building Roof frame could not be determined Kliplok roofing iron sheets Roofing screws	<b>Split level type</b>  <b>Ground Level</b> Kindergarten, Toilets (Male-1, Female-1, Staff-1), School Admin office, Advanced English room, Computer lab  <b>Ground level +</b> School canteen, school hall toilets (Male-3, Female-4) school hall
B4	6.20	5.50	4.00	1	Masonry building Timber roof framing Corrugated roofing iron sheets Roofing screws	Science room, storage room
B5	11.00	11.00	6.50	2	Masonry building Timber roof framing Corrugated roofing iron sheets Roofing screws	<b>Ground Level</b> Staff room  <b>Top floor</b> Early Intervention room

**NOTE:** Toilets no.s mentioned in the table above 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 / no 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,	Fair
Disability	Accessibility	Poor
Ventilation and lighting	Ventilations, Natural Lighting, Artificial Lighting.	Good

### Observations on Structural Elements

#### ➤ Walls and Ceiling

- B1 – no major defects observed. Generally, in good condition;
- B2 – no major defects observed. Generally, in good condition;
- B3 – no major defects observed. Generally, in good condition;
- B4 – no major defects observed. Generally, in good condition; and
- B5 – no major defects observed. Generally, in good condition

#### ➤ Floors and Foundation

- B1 – no major defects observed. Generally, in good condition;
  - B2 – no major defects observed. Generally, in good condition;
  - B3 – no major defects observed. Generally, in good condition;
  - B4 – no major defects observed. Generally, in good condition; and
  - B5 – no major defects observed. Generally, in good condition
- Foundation, could not be determined as buildings are supported by mass concrete on ground.

#### ➤ Roofs

- B1 – Roof framing could not be determined due to inaccessibility of framing; roof sheets are in good condition based of drone images;
- B2 – Roof framing could not be determined due to inaccessibility of framing; roof sheets are in good condition based of drone images;
- B3 – Roof framing could not be determined due to inaccessibility of framing; roof sheets are in good condition based of drone images;
- B4 – Roof framing could not be determined due to inaccessibility of framing; roof sheets are in good condition based of drone images; and
- B5 – Roof framing could not be determined due to inaccessibility of framing; roof sheets are in good condition based of drone images

#### ➤ Windows – Windows are louvre blade type with 225 mesh/ burglary prevention bars. They were in good condition.

#### ➤ Earthquake – N/A

#### ➤ Cyclone –structural inspection on existing roof framing required to determine cyclone resilient capacity of the structures.

### Existing Conditions of Building and Maintenance

- **Exterior** – the building is in fair condition as the wall, beam, column, window seal, doors, most of 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 are found in the Chinese room and school office. 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 during the school visit. All electrical systems are observed 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. Otherwise ventilation in classrooms were natural.
- **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

Yat Sen Primary School have one (1) toilet block for female and male students. This is located in Building 2. There were no major defects at toilet facility.

The WASH facilities ratio for both female and male students currently comply and meet the requirements for FNBC 1990. The table below provides data on wash facilities.

TOILET CUBICLE(S)	No. of Cubicles		Toilet Ratio (1 cubicle: students)		Compliance of Student to Toilet Cubicle Ratio (FNBC).	
	Female	Male	Female	Male	Female Requirement (1:20) Extra Toilets?	Male Requirement (1:30) Extra Toilets?
Building Index						
B2	16	15	20:1	19:1	0	0
HAND BASINS IN THE TOILET	No. of Hand Basins		Handbasin Ratio 1:#students		Compliance of Student to Hand Basin Ratio (FNBC).	
	Female	Male	Female	Male	Female Requirement (1:60) Extra Handbasins?	Male Requirement (1:60) Extra Handbasins?
Building Index						
B2	1	1	305	271	4	4
	Note: There are no handbasins in the toilet block, however there are general taps outside the toiletblock.					
GENERAL OUTDOOR TAPS	No. of General Outdoor Taps		Outdoor Taps Ratio 1: #students		Compliance of Student to Outdoor Taps Ratio Requirement (1:60) (FNBC)	



Building Index			Does it require additional hand basins?
B1-B4	16	36:1	0

## 5) DISASTER RESILIENCE ASSESSMENT

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: Not able to be determined due to inaccessibility of roof framing.
- Central Location: The school is centrally located, allowing easy access to main streets and relief services.

### Structural

- Material Quality: The school buildings are constructed using reinforced concrete and presumed to 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: There were not sufficient and adequate fire safety equipment in the school. The school does have an assembly point; most classrooms have two external doors should there be an event of a fire.

## 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 have adjustable seating arrangements, clear sightlines, however did not have 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) are not wheelchair-accessible or have grab bars and sinks at an appropriate height.
- Common Areas: the canteen spot and outdoor spaces are not designed inclusively. Benches, seating areas, and a 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, playground, and gathering spaces are not barrier-free and are without proper lighting and contrasting floor materials to aid navigation.

### SUMMARY OF FINDINGS

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

Categories of Assessment	Existing Condition / State	Required as per Standards	Gaps Observed
Existing Infrastructure Condition	<ul style="list-style-type: none"> <li><u>Structural Integrity</u> Columns, slabs, beams, rafters, purlins of adequate size.</li> <li><u>General upkeep</u> Minor irregular maintenance.</li> <li><u>Safety compliance</u> concrete handrail at top floor only.</li> <li><u>Disability</u> no consideration when constructed.</li> <li><u>Ventilation and lighting</u> missing lights at some room of buildings.</li> </ul>	<ul style="list-style-type: none"> <li><u>Structural Integrity</u> Columns, slabs, beams, rafters, purlins sizes to follow FNBC 1990.</li> <li><u>General upkeep</u> routine check-up as per MOE policies with major defects requiring immediate intervention.</li> <li><u>Safety compliance</u> Handrails, extra doors and signage where necessary.</li> <li><u>Disability</u> To comply with FDPF Disability audit tool</li> <li><u>Ventilation and lighting</u> Adequate windows and doors required as per FNBC 1990.</li> </ul>	<ul style="list-style-type: none"> <li><u>Structural Integrity</u> Columns, slabs, beams, rafters, purlins sizes to follow FNBC 1990.</li> <li><u>General upkeep</u> When required in accordance with MoE policy</li> <li><u>Safety compliance</u> Safety handrails were only present in top floors to building 2. FDPF requires signage to be placed for all rooms.</li> <li><u>Disability</u> Not fully compliant with FDPF Disability audit tool</li> <li><u>Ventilation and lighting</u> limitations in the count of windows and lightings compared to required FNBC.</li> </ul>
Assessment of Overcrowding	The classrooms are accommodating an average of 596 roll/17 classrooms of 33.89 students.	FNBC 1990 requires classroom occupancy to have 2m <sup>2</sup> per person. Based on that, the required roll per classroom was calculated.	0 classrooms were accommodating more roll than the required FNBC standard. Given the recommended sizing (1.5m <sup>2</sup> ), an additional of 0 classrooms are required to address overcrowding in school.
Water Sanitation Hygiene (WASH) facilities	<u>Toilets (students: Cubicle)</u> Boys – 19:1 (15 cubicles) Girls – 20:1 (16 cubicles)  <u>Taps (students: tap)</u> Students – 36:1 (16 taps)  <u>Menstrual Hygiene</u> Rubbish bins were present in the female toilet block. Separate room labelled Hygiene room, these had a shower, hand basin, toilet and sanitary bin.	<u>Toilets Ratio (students: Cubicle)</u> - Boys – 30:1 (9 cubicles) - Girls – 20:1 (15 cubicles) <u>Taps Ratio (students: tap)</u> - Students – 60:1 (10 taps)  <b>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.</b> - Menstrual Hygiene to be present in every female washroom block	Female and Male student toilet ratio are in compliance and meet the requirements of the FNBC 1990.  This may continue to grow later on with growing population.  The general outdoor tap ratio met the FNBC requirement.
Disaster Resilience Assessment	<ul style="list-style-type: none"> <li>Columns, beams, slabs had hairline cracks.</li> <li>Roof frame could not be inspected for B1-B5,</li> <li>Glazed windows have 225 mesh shutters placed for burglary prevention reasons.</li> </ul>	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.	Minimum to no shutters and proper connection contradicts achieving of a cyclone requirement.  Inspection of the roof framing will be required to determine requirements to a cyclone certification is met or not.



Accessibility Assessment	<p>Handrails are only found at top floors of B4.</p> <p>Classrooms have typical door size of 0.8 – 0.85m width.</p> <p>Stairway – average 2m+ width.</p>	<p><b>The following are requirements from Fiji Disabled People's Federation Access Audit Tool</b></p> <ul style="list-style-type: none"> <li>- Ramps – required wherever elevation with minimum 1:8 maximum 1:20</li> <li>- Walkway clearance - minimum 1.8m.</li> <li>- Handrails to be 0.76m to 0.9m.</li> <li>- Doors and Door size – minimum 0.9m.</li> <li>- Clearance required of 1.2m and tread width of minimum 310mm. (National Building Code Table D2.1)</li> </ul>	<p>The following facilities are missing.</p> <ul style="list-style-type: none"> <li>- Ramps and elevators for vertical access</li> <li>- Wide doorways and clear pathways</li> <li>- Proper signage</li> <li>- Wheelchair-accessible restrooms</li> <li>- Grab bars</li> <li>- Proper signage</li> <li>- Inclusive seating areas and pathways</li> <li>- Proper lighting</li> <li>- Contrasting floor materials</li> </ul>
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## 7) **RECOMMENDATIONS**

- In order to comply with the FNBC, the school will require the following:
  - Classrooms: An additional 7 new classrooms for students in years 1 to 8. This expansion aims to accommodate the growing number of students and provide them with an enhanced learning environment.
- WASH Facilities: Are within the requirement standard set in the Fiji National Building Code and are equipped with up-to-date WASH facilities (handbasins), catering particularly to the students.
- Weekly routine maintenance work and daily cleanup directive from MOE is also a critical component of the plan which includes:
  - Regular roof repairs required to maintain longevity.
  - Plumbing fixes due to algae buildup.
  - 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.

## 8) **COMPLIANCE**

Upon inspecting Yat Sen Primary School, the following conclusions were drawn:

- **MEHA Compliance:** Compliant
- **WASH Facilities:** Compliant
- **Land Availability:** There are no additional land, apart from playground area behind B2 and the school share with Yat Sen High School
- **NFA Compliance:** Not compliant.
- **WAF Compliance:** Compliant. Currently have water tank for back-up water cuts.
- **FNBC Compliance:** Not fully compliant with the occupancy requirements as well as the category 3 cyclone standards based on the windows and roofing requirements. Further investigation required for inaccessible areas.
- **NDMO Compliance:** Targeting NFA and NBC compliance for safety. The school is not listed as an evacuation centre.
- **EFL Compliance:** Assumed to be compliant with EFL standards.
- **DISABILITY Accessibility:** Not compliant.

## 9) APPENDIX

Appendix A - Site Inspection Report

Appendix B – Excel Scoring Sheet

Appendix C – Land Available for Expansion



# Appendix A - Site Inspection Report

# INFRASTRUCTURE ASSESSMENT AUDIT FOR SUVA – NAUSORI URBAN SCHOOL

YAT SEN PRIMARY SCHOOL (2360)

SITE INSPECTION REPORT



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### **3.0 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) **SCHOOL BACKGROUND**

Yat Sen Primary and Secondary School is a Chinese school located in Flagstaff Suva. It was opened on June 15 1936 under the name of “Chinese School”. In 1976, the name was changed to Yat Sen, after the Sun Yat-Sen, a Chinese revolutionary, and a founding father of the Republic of China. The school is supported and managed by the board of the Chinese Education Society, the PTFA and old ex-scholars. The school initially started with 17 students and have now grown to over 1000+ students for both primary and secondary school.

This report will focus on Yat Sen Primary School.

TABLE 1: SCHOOL DETAILS

NAME OF SCHOOL	YAT SEN PRIMARY SCHOOL
SCHOOL REGISTRATION NUMBER	2360
SCHOOL LOCATION	FLAGSTAFF SUVA
SCHOOL TYPE	PRIMARY SCHOOL
FEEDER SCHOOL	YAT SEN ECE & YAT SEN HIGH SCHOOL
DATE OF INSPECTION	2 <sup>ND</sup> JULY 2024
MILESTONE	2 (31 / 86 SCHOOLS)
INSPECTED BY (TEAM 3)	DONNIS KAINAMOLI (DK)
	MERELITA DUMUKURO (MD)
	ERONI AISAKE (EA)
	ANISH LAL (AL)

TABLE 2: SCHOOL ENROLMENT FIGURES

Year of Enrolment	Number of Students			Students with Disability	Number of Teachers			Comments
	Male	Female	Total		Male	Female	Total	
2024	271	305	576	N/A	5	12	17	<ul style="list-style-type: none"> <li>Total number of classrooms - 17</li> <li>Student to stream average ratio. Total roll of 576 / 17 = 33.89</li> <li>WASH ratio</li> <li><u>General Taps</u> Total no. of taps: 16 Student to tap ratio: 36:1</li> <li><u>Toilets</u> Total no. of cubicles at toilets <i>Female students:</i> 16 no. s   Ratio: 20 :1 cubicle <i>Male Students:</i> 15 no. s   Ratio:19: 1 cubicle</li> <li>School is not an evacuation centre</li> </ul>
2023	251	313	564	N/A	4	13	17	
2022	270	338	608	N/A	7	10	17	
2021	277	322	599	N/A	6	11	17	
2020	287	309	596	N/A	6	11	17	
2019	282	307	589	N/A	6	11	17	

**TABLE 3: 2024 CLASSROOM 2024 ENROLLMENT DETAILS**

GRADE	CLASS NUMBER	TOTAL STUDENT ROLL	NUMBER OF TEACHERS	DIMENSIONS (m)		ACCESS WAY COUNT		OVERCROWDING
				LENGTH	WIDTH	NO. OF DOORS	NO. OF WINDOWS	
<b>ECE</b>	KINDERGARTEN	71	4	34.41	9.2	1		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>1</b>	YR101	24	1	7.8	6.41	1	18	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>1</b>	YR102	24	1	7.8	6.41	1	18	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>1</b>	YR103	24	1	8	7.9	2	14	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>2</b>	YR201	36	1	8	7.9	2	14	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>2</b>	YR202	36	1	8	7.9	2	14	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>3</b>	YR301	41	1	8	7.9	2	14	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>3</b>	YR302	40	1	8	7.9	2	14	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>4</b>	YR401	35	1	8	7.9	2	14	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>4</b>	YR402	36	1	8	7.9	2	14	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>5</b>	YR501	40	1	8	7.9	1	16	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>5</b>	YR502	40	1	8	7.9	1	16	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>6</b>	YR601	37	1	8	7.9	1	16	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>6</b>	YR602	37	1	8	7.9	1	16	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>7</b>	YR701	40	1	8	7.9	1	16	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>7</b>	YR702	39	1	8	7.9	1	16	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>8</b>	YR801	32	1	8	7.9	1	16	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>8</b>	YR802	35	1	8	7.9	1	16	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

Note: Data above was taken on 2<sup>nd</sup> July, 2024 at the time of school visit.

Overcrowding here, is based on the Fiji National Building Code, whereby 2 square meter is allocated for each student. Therefor the required student ratio will be 1:2 sqm.

Classrooms that experienced overcrowding at the time of NRW's visit are as follows:

1. Year 201;
2. Year 202;
3. Year 301;
4. Year 302;
5. Year 401;
6. Year 402;
7. Year 501;
8. Year 502;
9. Year 601;
10. Year 602;
11. Year 701;
12. Year 702; and
13. Year 802

Classrooms that are within the FNBC requirement are:

1. ECE
2. Year 101
3. Year 102
4. Year 103; and
5. Year 801



## 4.0 SCHOOL SITE PLAN (DRONE IMAGERY OF SCHOOL)

### AERIAL VIEW



**Photo 1: Drone Imagery of the school. Digital Photograph taken on 19<sup>th</sup> August 2024 by NRWs Drone.**

Refer to annex 3 of this report for School Site Plan



## 5.0 VISUAL INSPECTION RESULTS

### a) EXISTING BUILDING INFORMATION

**TABLE 4: BUILDING 1**

Building Index		B1				Year built: 1945 (Age: 79 years old)	
Type:	CONCRETE GL – CHINESE ROOM, REMEDIAL ROOM, ADVANCED MATHS 1 <sup>ST</sup> LEVEL – SCHOOL OFFICE, LIBRARY&COMPUTER ROOM, YEAR 101 AND YEAR 102					No. of Levels: 2	
Dimensions		Length (m):34.00		Width (m): 6.7		Height (m): 6.20 (up to eaves)	
Existing State of Building							
REF. No.	Building Component	Good <sup>1</sup>	Fair <sup>2</sup>	Poor <sup>3</sup>	Structure Type <sup>4</sup>	Comments	
1	Roof Lining		✓		Steel	Kliplok roofing sheets with screws fixed at every crest	
2	Roof Structure	N/A	N/A	N/A	N/A	Roof structure access not available (N/A)	
3	Walls		✓		Concrete	200mm concrete walls, are in good condition. There was no visible sign of defect nor were there issues raised by the school at the time of the visit.	
4	Columns		✓		Concrete	Concrete column is in good condition. There was no visible sign of defect nor were there issues raised by the school at the time of the visit.	
5	Beams		✓		Concrete	Concrete beams are in good condition. There was no visible sign of defect nor were there issues raised by the school at the time of the visit.	
6	Floor		✓		Concrete	Flooring at Building 1 was of concrete type with 300 sqm floor tiles as finish floor material. They were in good condition with minimal damages.	
7	Handrails		✓		N/A	There are no handrails on walkways at ground nor top floor. Handrails were observed at staircase. Staircase from ground level to office level on the left side of the building and staircase from office level to first floor of building two. Handrail at staircase were less than a meter.	
8	Walkway(s)		✓		Concrete	Walkway at building 1 comprises of steel post, timber roof frame, trimdek roof sheets. Walkway is not structurally compliant.	
9	Services – water supply		✓		WAF	Water services into the building is used for the following: GL- Outdoor handwashing taps, indoor taps on hand basins and showers at toilet blocks. Top Level – None observed	
10	Available taps for general use		✓		WAF Outdoor taps	10 no.s of taps located outdoors, observed. 6 in building 1 and 10 in building 2	Student – tap ratio = 36: 1
11	Services – electricity		✓			Electrical service into the building is providing electricity to the classroom fans, lights, security camera and school intercom system.	

<sup>1</sup> Good - No additional works / intervention required

<sup>2</sup> Fair - Remedial works required – min CAT 3 standard

<sup>3</sup> Poor - Demolition and replace with new - min CAT 4 standard

<sup>4</sup> Type of structure - Timber/concrete/steel

						At the time of school visit we were advised that there hasn't been any issue with the current electricity flow.
12	Services – communication (internet)		✓			The school is currently using TFL as their internet service providers. Internet is supplied to office only.
13	Drainage		✓			At the time of inspection, we were advised that there has been no issue with building one drainage system.

**Comments**

- **Overcrowding – Fiji National Building Code: 1990**

Further to the data collected on 2<sup>nd</sup> July 2024 for Yat Sen Primary School and analysis carried out against the FNBC, it is found that year 101 and year 102 are in compliant with the FNBC requirement of 2sqm per student.

- **Disability accessibility**

Building 1 is not compliant with disability access. There is difference in finish floor levels from the student drop off zone to access the school/building 1. Classrooms/home room for building 1 are located at top floor. This includes the school office. To reach the top floor, one must go up two flights of stairs. Walkway clearance were measured at 2.5m. Doors were measured at 1.2x800mm opening.

- **Visual defects**

No major defects observed at the time of school visit.

At the time of inspection, there was not issue raised from the school.

- **Other observations**

Both home room/ classrooms i.e., Year 101 and Year 102 have good ventilation, 2-4ft tube lights for lighting, 2-electrical ceiling fan, and 1-projector. There were security cameras installed at the underside of the verandah ceiling and intercoms. These were all working at the time of the school visit.

There were 225 mesh installed on every external window for cyclonic/ burglary prevention purpose.

Fire extinguishers were installed at the school's office and Chinese room.

TABLE 5: BUILDING 2

Building Index		B2 :				Year built: 1945 (Age: 79 years old)	
Type:	CONCRETE GL – BOYS TOILET, MALE STAFF TOILET, STORAGE ROOM 1 <sup>ST</sup> LEVEL – GIRLS TOILET, YEAR 103, YEAR 201, YEAR 202, YEAR 301, YEAR 302, YEAR 401, YEAR 402 2 <sup>ND</sup> LEVEL – YEAR 501, YEAR 502, YEAR 601, YEAR 602, YEAR 701, YEAR 702, YEAR 801, YEAR 802					No. of Levels: 2	
Dimensions		Length (m):63.20		Width (m): 7.90		Height (m): 9.00 (up to eaves)	
Existing State of Building							
REF. No.	Building Component	Good <sup>5</sup>	Fair <sup>6</sup>	Poor <sup>7</sup>	Structure Type <sup>8</sup>	Comments	
1	Roof Lining		✓		Steel	Roof lining could not be accessed, but they appear to be Kliplok roofing sheets with screws fixed at every crest, this was observed through drone imagery. No major defects seen on the roof.	
2	Roof Structure	N/A	N/A	N/A	N/A	Roof structure access not available (N/A)	
3	Walls		✓		Concrete	200mm concrete walls, are in good condition. There was no visible sign of defect nor were there issues raised by the school at the time of the visit.	
4	Columns		✓		Concrete	Concrete column is in good condition. There was no visible sign of defect nor were there issues raised by the school at the time of the visit.	
5	Beams		✓		Concrete	Concrete raking beams are in good condition. There was no visible sign of defect nor were there issues raised by the school at the time of the visit.	
6	Floor		✓		Concrete	Flooring at Building 2 was of concrete type with 300 sqm floor tiles as finish floor material. They were in good condition with minimal damages.	
7	Handrails		✓		Ground Level & 1 <sup>st</sup> Level – none 2 <sup>nd</sup> Level – Concrete handrails	There are no handrails on walkways at ground and 1 <sup>st</sup> level. Hand rails at 2 <sup>nd</sup> floor level are of concrete wall type with 150mm thickness and at a height of 900mm. 200mm above the concrete wall are 60mm diameter CHS post horizontally fixed along the wall. Handrails have minimal line cracks. Handrails were also observed at staircase, these were steel posts with horizontal laid timbers as railings.	
8	Walkway(s)		✓		Concrete	Walkway at building 2 comprises of concrete columns. There were no defects observed on the columns at the time of school visit.	
9	Services – water supply		✓		WAF	Water services into the building is used for the following: GL- Male toilets for students & staff 1 <sup>st</sup> Floor – Girl's toilet and general use taps. 2 <sup>nd</sup> Floor – none.	
10	Available taps for general use		✓		WAF Outdoor taps	10 no. s of taps located outdoors, observed. 6 in building 1 and 10 in building 2	Student – tap ratio = 36: 1

<sup>5</sup> Good - No additional works / intervention required<sup>6</sup> Fair - Remedial works required – min CAT 3 standard<sup>7</sup> Poor - Demolition and replace with new - min CAT 4 standard<sup>8</sup> Type of structure - Timber/concrete/steel

11	Services – electricity		✓			Electrical service into the building is providing electricity to the classroom fans, lights, security camera and school intercom system and hailer at the corridors. At the time of school visit we were advised that there hasn't been any issue with the current electricity flow.
12	Services – communication (internet)		✓			The school is currently using TFL as their internet service providers. Internet is not supplied to this building.
13	Drainage		✓			At the time of inspection, we were advised that there has been no issue with building one drainage system.

#### Comments

- **Overcrowding – Fiji National Building Code: 1990**

In terms of Students to space ratio where 2sqm is allowed for one student, Years 103 and Year 802 meet the FNBC requirements. Years 201 to Year 801 do not meet the requirements, these are a total of 13 classrooms that will require additional classroom per stream.

- **Disability accessibility**

Same as Building 1, Building 2 is not compliant for disability access. Building 2 can be accessed through building 1, which is near the student drop off or pick up zone and through the gate near the main road. Both access points have flight of steps which are not compatible to a wheelchair user. Walkway clearance were measured at 2m. Doors were measured at 1.2x800mm opening.

- **Dimensions of each classroom, labs etc**

Classrooms in building two is:

Ground Floor – Year 103, Year 201, Year 202, Year 301, Year 302, Year 401, Year 402

First Floor – Year 501, Year 502, Year 601, Year 602, Year 701, Year 702, Year 801 and Year 802/

Dimensions can be seen in “**Table 3: 2024 CLASSROOM 2024 ENROLLMENT DETAILS**” above.

- **Visual defects**

Damaged door knob at Year 402, Level 1.

Minor line splits/cracks on floor tiles at Year 802, Level 2.

No major defects observed and there was not issue raised from the school at the time at the time of school visit.

- **Other observations**

Level one and level two, have 2 fire extinguishers, there are also security cameras at each end of the building.

There were 225 mesh installed on every external window for cyclonic/ burglary prevention purpose.

TABLE 6: BUILDING 3

Building Index		B3				Year built: 1945 (Age: 79 years old)	
Type:	CONCRETE KINDERGARTEN, SCHOOL ADMIN OFFICE, ADVANCED ENGLISH CLASSROOM, COMPUTER LAB FOR HIGHER PRIMARY LEVEL, SCHOOL CANTEEN AND SCHOOL HALL,					No. of Levels: 2	
Dimensions		Length (m):50m		Width (m): 39		Height (m): 11.50(up to eaves)	
Existing State of Building							
REF. No.	Building Component	Good <sup>9</sup>	Fair <sup>10</sup>	Poor <sup>11</sup>	Structure Type <sup>12</sup>	Comments	
1	Roof Lining	N/A	N/A	N/A	N/A	Could not be accessed.	
2	Roof Structure	N/A	N/A	N/A	N/A	Roof structure at ECE, was not accessible.  Roof framing structure at school hall, were steel beams, columns, and purlins. These were all exposed.	
3	Walls		✓		Concrete	200mm external concrete walls, are in good condition. There was no visible sign of defect nor were there issues raised by the school at the time of the visit.	
4	Columns		✓		Concrete	Concrete column is in good condition. There was no visible sign of defect nor were there issues raised by the school at the time of the visit.	
5	Beams		✓		Concrete Steel	For areas where beams were visible, they were concrete and steel type.	
6	Floor		✓		Concrete	Floor type is concrete with tiles as finishing. Tiles varies in sizes. Floor finishing at Building 3 is 300 sqm tiles. No major defects were observed on them.	
7	Handrails	N/A	N/A	N/A	N/A	None	
8	Walkway(s)		✓		Concrete	Walkway at the front of the kindergarten, was measured at 2.6m clearance.	
9	Services – water supply		✓		WAF	Water services into the building is used for the following: GL- Male toilets for students & staff, general use taps, 1 <sup>st</sup> Floor – Toilet block for kindergarten students and office admin block.	
10	Available taps for general use		✓		WAF Outdoor taps	10 no. s of taps located at the front of the school hall, beside the canteen.	Student – tap ratio = Note: used by ECE, primary, and secondary
11	Services – electricity		✓		EFL	Electricity is used for classroom fans, lights, security camera and school intercom system and hailer at the corridors, printer, computers At the time of school visit we were advised that there hasn't been any issue with the current electricity flow.	
12	Services – communication (internet)		✓		TFL	The school is currently using TFL as their internet service providers. Internet is supplied to the school admin office.	
13	Drainage		✓			At the time of inspection, we were advised that there has been no issue with building one drainage system.	

<sup>9</sup> Good - No additional works / intervention required<sup>10</sup> Fair - Remedial works required – min CAT 3 standard<sup>11</sup> Poor - Demolition and replace with new - min CAT 4 standard<sup>12</sup> Type of structure - Timber/concrete/steel



**Comments**

- **Overcrowding – Fiji National Building Code: 1990**

In terms of Students to space ratio where 2sqm is allowed for one student, the classroom area is in compliance. ECE classes were distributed into 4 classes, whereby one teacher has 17 students. There were 4 teachers

- **Disability accessibility**

A disabled student or teacher is able to access kindergarten classroom. The walkway clearance is 2.6m, however there are no railings in place. The double door opening was more than a meter, the entry to the classrooms were also accessible, despite the 50mm floor level difference. However, they will not be able to use the toilets, door entry at the toilets were 800mm. Other rooms in this are not in compliant with the disability access.

- **Dimensions of each classroom, labs etc**

Classrooms in building three is: ECE, advanced English and Computer class. ECE was measure at 35m in length and 9.2m in width.

- **Visual defects**

No major defects observed and there was not issue raised from the school at the time at the time of school visit.

- **Other observations**

Level one and level two, have 2 fire extinguishers, there are also security cameras at each end of the building.

There were burglary shutters installed on every external window for security purpose.

Building 3 had fire extinguishers and fire hose reels, hooked up on the wall.

TABLE 7: BUILDING 4

Building Index		B4				Year built: 1945 (Age: 79 years old)	
Type:	CONCRETE' SCIENCE ROOM, STORAGE ROOM					No. of Levels: 1	
Dimensions		Length (m):6.2m	Width (m): 5.5			Height (m): 4 (up to eaves)	
Existing State of Building							
REF. No.	Building Component	Good <sup>13</sup>	Fair <sup>14</sup>	Poor <sup>15</sup>	Structure Type <sup>16</sup>	Comments	
1	Roof Lining		✓			Corrugated roofing iron. No visible damages were observed.	
2	Roof Structure	N/A	N/A	N/A	N/A	Roof structure access not available (N/A).	
3	Walls		✓		Concrete	200mm external concrete walls, are in good condition. There was no visible sign of defect nor were there issues raised by the school at the time of the visit.	
4	Columns	N/A	N/A	N/A	N/A	N/A	
5	Beams	N/A	N/A	N/A	N/A	N/A	
6	Floor		✓		Concrete	Floor type is concrete with tiles as finishing. Tiles varies in sizes. Floor finishing at Building 4 is 300 sqm tiles. There were missing tiles observed, however no major defects were noted.	
7	Handrails	N/A	N/A	N/A	N/A	None	
8	Walkway(s)	N/A	N/A	N/A	N/A	None	
9	Services – water supply		✓		WAF	Water services into the building is used for general use, washing and cleaning purpose.	
10	Available taps for general use		✓		WAF Outdoor taps	3 taps on the side of this building.	Student – tap ratio = 31:1
11	Services – electricity		✓			Electricity is used for classroom fans, lights, security camera and school intercom system At the time of school visit we were advised that there hasn't been any issue with the current electricity flow.	
12	Services – communication (internet)	N/A	N/A	N/A	N/A	None	
13	Drainage	N/A	N/A	N/A	N/A	None	
<b>Comments</b> <ul style="list-style-type: none"><li><b>Overcrowding – Fiji National Building Code: 1990</b> There are no classes going on in this building. Currently used as storage room.</li><li><b>Disability accessibility</b> Not compliant. There is a 1meter floor drop from rear verandah of building 2 to building 4.</li><li><b>Dimensions of each classroom, labs etc</b> Dimensions are 6.2mX5.5m.</li><li><b>Visual defects</b> Missing louvre blades, missing tiles No major defects observed and there was not issue raised from the school at the time at the time of school visit.</li><li><b>Other observations</b> None</li></ul>							

<sup>13</sup> Good - No additional works / intervention required<sup>14</sup> Fair - Remedial works required – min CAT 3 standard<sup>15</sup> Poor - Demolition and replace with new - min CAT 4 standard<sup>16</sup> Type of structure - Timber/concrete/steel

TABLE 8: BUILDING 5

Building Index		B5				Year built: 1945 (Age: 79 years old)	
Type:	CONCRETE & TIMBER BUILDING   GL – STAFF ROOM   TOP FLOOR – EARLY INTERVENTION					No. of Levels: 2	
Dimensions		Length (m):11		Width (m): 11		Height (m): 6.5 (up to eaves)	
Existing State of Building							
REF. No.	Building Component	Good <sup>17</sup>	Fair <sup>18</sup>	Poor <sup>19</sup>	Structure Type <sup>20</sup>	Comments	
1	Roof Lining	N/A	N/A	N/A	N/A	Could not be accessed.	
2	Roof Structure	N/A	N/A	N/A	N/A	Roof structure access not available (N/A).	
3	Walls		✓		Concrete	150mm external concrete walls, are in good condition. There was no visible sign of defect nor were there issues raised by the school at the time of the visit.	
4	Columns	N/A	N/A	N/A	N/A	N/A	
5	Beams	N/A	N/A	N/A	N/A	N/A	
6	Floor		✓		Concrete	Floor type is concrete with tiles as finishing. Tiles varies in sizes. Floor finishing at Building 4 is 300 sqm tiles. There were missing tiles observed, however no major defects were noted.	
7	Handrails	N/A	N/A	N/A	N/A	None	
8	Walkway(s)			✓	TIMBER, STEEL	Walkway from Building 2 to Building 5, comprises of concrete flooring, steel posts and timber roof frame. Roof framing do not comply with NBC.	
9	Services – water supply		✓		WAF	Water services into the building is used for general use, washing and cleaning purpose and toilets.	
10	Available taps for general use		✓		WAF Outdoor taps	2 Kitchen sinks.	
11	Services – electricity		✓			Electricity is used for classroom fans, lights, security camera and school intercom system At the time of school visit we were advised that there hasn't been any issue with the current electricity flow.	
12	Services – communication (internet)	N/A	N/A	N/A	N/A	None	
13	Drainage	N/A	N/A	N/A	N/A	None	

<sup>17</sup> Good - No additional works / intervention required<sup>18</sup> Fair - Remedial works required – min CAT 3 standard<sup>19</sup> Poor - Demolition and replace with new - min CAT 4 standard<sup>20</sup> Type of structure - Timber/concrete/steel

**Comments**

- **Overcrowding – Fiji National Building Code: 1990**

There are two classrooms at the top floor, where early intervention learning is taught to students that require in-depth learning before they are referred to the primary level.

- **Disability accessibility**

Not compliant.

- **Visual defects**

Roof framing and components at verandah requires further investigation and upgrading.

- **Other observations**

Ground floor level, is the school's staffroom. They have a kitchen, dining area and 1 toilet facility with shower and handbasin

Top floor level, a room they called early learning intervention. Burglary bars here, appeared to be corroded.

There is a water tank with gravity pump near building 5, this supply water to toilet and kitchen at top floor.

b) EXISTING BUILDING AND TOILET BLOCKS ACCESS INFORMATION FOR DISABILITY AUDITS**TABLE 9: DISABILITY AUDIT**

Building Index		Building 1 to Building 5						
Type:	B1 – CONCRETE BUILDING WITH TIMBER ROOF FRAME AND TRIMDEK ROOF SHEETS B1 – CONCRETE BUILDING WITH TIMBER ROOF FRAME AND TRIMDEK ROOF SHEETS B3 – CONCRETE BUILDING WITH STEEL/TIMBER ROOF FRAME AND STEEL ROOF SHEETS B4 – CONCRETE BUILDING WITH TIMBER ROOF FRAME AND CGI ROOF SHEETS B5 – CONCRETE/TIMBER BUILDING						<b>No. of Levels:</b> B1 – 2 LEVELS B2 – 2-3 LEVELS B3 – 2 LEVELS B4 – 1 LEVEL B5 – 2 LEVELS	
	Dimensions	Length (m): See building dimension in tables above		Width (m): See building dimension in tables above		Height (m): See building dimension in tables above		
	Existing State of Building							
	REF. No.	Building Component	Good <sup>21</sup>	Fair <sup>22</sup>	Poor <sup>23</sup>	Structure Type <sup>24</sup>	Dimensions (m)	Comments
	1	Ramps	N/A	N/A	N/A	N/A	N/A	N/A
2	Walkway clearance space		✓		Concrete	Ranges from 1.8m to 3m	Walkway flooring, show minor cracks.	
3	Handrails		✓		Concrete	1m approximately	Building 2, 2 <sup>nd</sup> floor level is the only level in the school that have handrails.	
4	Doors and Door Size (typical)		✓		B1-B5: Timber	They have door opening width of 800-900mm and a floor rise or drop that ranges from 70mm to 100mm.	Interior Door: There are no interior doors in any of the rooms. Except for toilet cubicles. Door size and dimension for this can be seen in the table Toilet Block  Exterior Door: Door handle/knob at Year 302 was damaged at the time of inspection. All other external doors in the school compound showed no sign of defects at the time of school visit.	
5	Stairway		✓		Concrete		Stairway width were 1.5m to 2m.	
6								
Comments								
<ul style="list-style-type: none"><li>Further to our audit of the school buildings, and as also advised by the school’s team, Yat Sen Primary School do not have any record on students with mobility access being enrolled into the school.</li><li>All buildings do not have railings on the walkways except for Level 2 of Building 2.</li></ul>								

<sup>21</sup> Good - No additional works / intervention required<sup>22</sup> Fair - Remedial works required – min CAT 3 standard<sup>23</sup> Poor - Demolition and replace with new - min CAT 4 standard<sup>24</sup> Type of structure - Timber/concrete/steel



c) TOILET BLOCKS (BOYS and GIRLS)

TABLE 10: TOILET BLOCK

Building Index	B2 – Toilet Block within Building 2						
Type:	B2: <ul style="list-style-type: none"><li>Ground level – Male/Boys Toilet &amp; Staff toilet (Female&amp; Male)</li><li>1<sup>st</sup> Level – Female/ Girls Toilet</li></ul>					No. of Levels: B2 – 2-3 LEVELS	
Dimensions	Length (m): 7.9		Width (m): 4.0		Height (m): 3.0 (up to eaves)		
Existing State of Building							
REF. No.	Building Component	Good <sup>25</sup>	Fair <sup>26</sup>	Poor <sup>27</sup>	Structure Type <sup>28</sup>	Count <sup>29</sup>	Comments
1	Toilet Bays – male		✓		Concrete	15	No defects were observed during the school audit. See notes.
2	Toilet Bays – female		✓		Concrete	16	No defects were observed during the school audit
3	Toilet Partition	✓			Timber	Girls – 15 Boys - 8	No defects were observed during the school audit
4	Shower bay		✓		Concrete	Girls – 1 Boys - 1	No defects were observed during the school audit
5	Toilet Bays – accessible	✓			N/A	N/A	Yes, accessible for primary students.
6	Entry to toilet building		✓		N/A	N/A	No issue found at the entry to the toilet area.
7	Exit to toilet building		✓		N/A	N/A	There is only one door to access the toilet building. From the entry point.
8	Menstrual Hygiene facilities			✓		1	Female/Girls toilet – have a toilet labelled hygiene room, this consist of a shower, sanitary bin and hand basin and toilet.  Male/Boys toilet – no hand basin nor bins
9	Students to <b>WASH</b> ratio	Toilet taps: 1 handbasin with tap inside 10 outdoor taps outside		Male	19:1	Female	20:1

<sup>25</sup> Good - No additional works / intervention required<sup>26</sup> Fair - Remedial works required – min CAT 3 standard<sup>27</sup> Poor - Demolition and replace with new - min CAT 4 standard<sup>28</sup> Type of structure - Timber/concrete/steel<sup>29</sup> Count - Used for identifying number of toilet bays and menstrual hygiene facilities

**Comments**

- At the time of school visit on the 2<sup>nd</sup> of July 2024, there was no visual defects observed. The properties officer, had advised if there were any minor defects in the toilet blocks, these would be immediately rectified by the school's handyman.
- Female Toilet
  - Main Door size (at entry) – 2.3mX0.6m
  - Passage – 0.9m width
  - Cubicle size (15no.s) – 1.5mX0.78m with a door opening of 0.6m
  - Hygiene room size (1no.) – 3mX .87m. this included shower area, sanitary bin, hand basin and a toilet.
  - Female/ girls cubicle were labelled for each classes. There were 15 cubicles and 1 hygiene room. 1 out of the 16 toilets was out of order.
  - 2 sanitary bins were placed in the toilet
  - General use taps were noted outside the female toilets. It was counted that 10 taps and 2 steel hand basins was placed here.
- Male/ Boys Toilet
  - There are 9 cubicles and 2 sets of urinal toilets that are located in the boy's toilet. 1 urinal is able to cater for 3 boys, therefore there is 15 in total for males.
  - Main door size – 2.3mX0.65m
  - Cubicle size – 1.5mX0.7m with door opening of 0.60m
  - No hand basin or rubbish bins were observed in the boy's toilet.
- Female/ Male Staff Toilet

The following was observed at staff toilet

  - Cubicle size – 1.7mX0.70mm with 0.60m door opening.
  - 2 toilet cubicles, one female staff and one male staff toilet
  - No sanitary bin noted in the toilets
  - 1 hand basin at common passage/area.

There were no issues or defects observed in the toilet blocks.

Building Index		B3 – Toilet Block within Building 3					
Type:		B3: <ul style="list-style-type: none"><li>Ground level – Female Toilets &amp; Male Toilets</li><li>1<sup>st</sup> Level – Female/Girls Toilet, Male/Boys Toilet, and Staff Toilet (Used for kindergarten)</li></ul>				No. of Levels: B3 – 2 LEVELS	
Dimensions		Length (m): 9.5		Width (m): 8.8		Height (m): 3.6 (up to eaves)	
Existing State of Building							
REF. No.	Building Component	Good <sup>30</sup>	Fair <sup>31</sup>	Poor <sup>32</sup>	Structure Type <sup>33</sup>	Count <sup>34</sup>	Comments
1	Toilet Bays – male		✓		Concrete	Ground level – 3 Male  1 <sup>st</sup> Level – 1 Boys 1 Staff	Ground level – toilets located inside the school hall. Used for hall events. 1 <sup>st</sup> level toilet block is used by ECE students and Staff. Staff toilet is unisex.
2	Toilet Bays – female		✓		Concrete	Ground level – 4 Female  1 <sup>st</sup> Level – 1 Boys 1 Staff	Ground level – toilets located inside the school hall. Used for hall events. 1 <sup>st</sup> level toilet block is used by ECE students and Staff. Staff toilet is unisex.
3	Toilet Partition between boys and girls.	✓			Concrete	Male – 4 Female - 5	No damages observed on toilet partitions. Toilet cubicle wall heights were measured at 2m high, does not reach the top of the roof layout.
4	Shower bay		✓		Concrete	Male – 6 showers Female – 5 showers	No damages or issues found at the time of site visit.
5	Toilet Bays – accessible	✓			N/A	N/A	Yes, toilet bays are accessible.
6	Entry to toilet building		✓		N/A	N/A	Entry of toilet is accessible. There is a 50mm floor drop at main entrance. There is one access point to the toilets.
7	Exit to toilet building		✓		N/A	N/A	Entry of toilet is accessible. There is a 50mm floor drop at main entrance. There is one access point to the toilets, for entry and exist. The toilet rooms/ convenience room are used only on hall event functions and sports
8	Menstrual Hygiene facilities			✓	Plastic bins	1	At the time of visit, there was 1 sanitary bin (at both F/M rooms) placed near the cubicles and wash basins. The toilets all have toilet paper holders, however they do not have paper rolls.
9	Students to <b>WASH</b> ratio	Toilet taps: <i>See comments</i>		Male	<i>See comments</i>	Female	<i>See comments</i>

<sup>30</sup> Good - No additional works / intervention required<sup>31</sup> Fair - Remedial works required – min CAT 3 standard<sup>32</sup> Poor - Demolition and replace with new - min CAT 4 standard<sup>33</sup> Type of structure - Timber/concrete/steel<sup>34</sup> Count - Used for identifying number of toilet bays and menstrual hygiene facilities

**Comments**

School hall is used only on special functions or for sports events.

There were no major damages upon our visual audit of the school hall.

**Students to WASH ratio:*****Taps at Toilets***

Female: 4 hand basins

Male: 4 hand basins

***Cubicles/ Urinal at Toilets*****Primary School:**

- If the year 2024 primary school female students use the school hall, then the ratio of a student per toilet cubicle will be 77:1
- If the year 2024 primary school male students use the school hall, then the ratio of a student per toilet cubicle will be 55:1

**High School:**

- If the year 2024 high school female students use the school hall, then the ratio of a student per toilet cubicle will be 48:1
- If the year 2024 high school male students use the school hall, then the ratio of a student per toilet cubicle will be 34:1

**Primary & High School Students:**

- If the year 2024 primary and high school female students use the school hall at the same time, then the ratio of a student per toilet cubicle will be 125:1
- If the year 2024 primary and high school male students use the school hall at the same time, then the ratio of a student per toilet cubicle will be 88:1

Building Index	B5 – Toilet Block within Building 5						
Type:	B5: <ul style="list-style-type: none"><li>Ground level – Unisex Toilet</li><li>1<sup>st</sup> Level – Unisex Toilet</li></ul>						No. of Levels: B5 – 2 levels
Dimensions	Length (m): --		Width (m): --			Height (m): 6.5 (up to eaves)	
Existing State of Building							
REF. No.	Building Component	Good <sup>35</sup>	Fair <sup>36</sup>	Poor <sup>37</sup>	Structure Type <sup>38</sup>	Count <sup>39</sup>	Comments
1	Toilet Bays – male		✓		GL/FF – Concrete		There is one toilet and bathroom in the same room at ground level and another at first floor.
2	Toilet Bays – female		✓		Concrete		
3	Toilet Partition between boys and girls.	N/A	N/A	N/A	N/A	N/A	None, the toilet area is an open space in one room. There are no partition.
4	Shower bay		✓		Concrete	1	Concrete flooring and walls with finish floor tiles were in good usable condition.
5	Toilet Bays – accessible	N/A	N/A	N/A	N/A	N/A	GL - Yes, accessible for working staff FF – Yes, for occupants/users of FF.
6	Entry to toilet building		✓		N/A	N/A	No issues nor damages found at the entry to the toilet area.
7	Exit to toilet building		✓		N/A	N/A	There is only one door to access the toilet building. From the entry point.
8	Menstrual Hygiene facilities			✓	Plastic bins	1	Toilet bin at female toilet, is of plastic type and had no cover. At the time of the visit there was no soap at the tap area in the toilet.
9	Students to <b>WASH</b> ratio	Toilet taps: GL – 1 FF - 1		Female & Male	GL – 17:1		
<b>Comments</b> <ul style="list-style-type: none"><li>Building 5, wash area is only used for the primary school staff. There is one toilet room that is used by both genders. Upon the property officer advise, the building is used for teachers during their break whereas the first floor is used for early intervention lessons before they move on to primary school.</li><li>There were no major damages, upon our visual inspections.</li></ul>							

<sup>35</sup> Good - No additional works / intervention required<sup>36</sup> Fair - Remedial works required – min CAT 3 standard<sup>37</sup> Poor - Demolition and replace with new - min CAT 4 standard<sup>38</sup> Type of structure - Timber/concrete/steel<sup>39</sup> Count - Used for identifying number of toilet bays and menstrual hygiene facilities



## 6.0 PHOTOGRAPHIC REPORT

### BUILDING 1

Client:	TETRA TECH INTERNATIONAL DEVELOPMENT (PTY) LTD	School Name:	YAT SEN PRIMARY SCHOOL
Project:	INFRASTRUCTURE PLAN FOR SUVA – NAUSORI URBAN SCHOOL.	Building Index:	B1



Photograph No. 1: Front Elevation



Photograph No. 2: Side Elevation



Photograph No. 3: Rear Elevation



Photograph No. 4: Side Elevation, B1 Ends Here, Then It Is Connected To B2 By A Walkway Shed



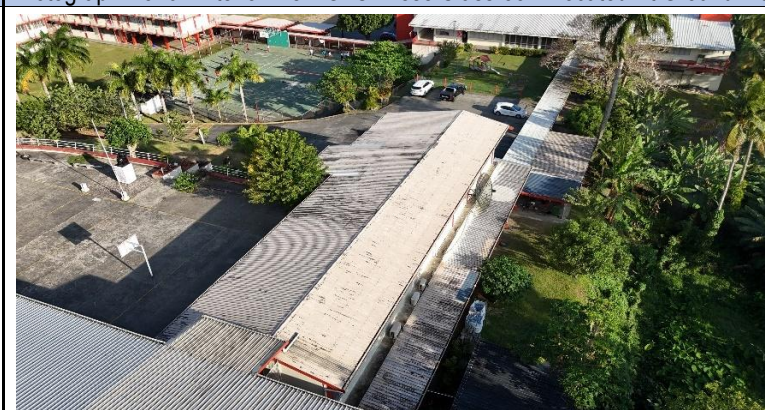
Photograph No. 5: Interior View Of Class 101 Located At Top Floor



Photograph No. 6: Interior View Of Chinese Classroom Located At Ground Floor



Photograph No. 7: Roof Lining



Photograph No. 8: Roof Lining

### BUILDING 2



Client:	TETRA TECH INTERNATIONAL DEVELOPMENT (PTY) LTD	School Name:	YAT SEN PRIMARY SCHOOL
Project:	INFRASTRUCTURE PLAN FOR SUVA – NAUSORI URBAN SCHOOL.	Building Index:	B2



Photograph No. 1: Front Elevation



Photograph No. 2: Rear Elevation



Photograph No. 3: Side Elevation



Photograph No. 4: Side Elevation

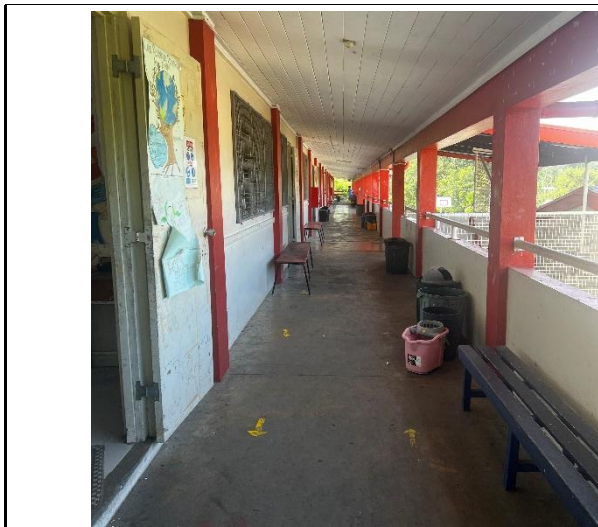


Photograph No. 5: Interior View Of Class 801 At Top Floor



Photograph No. 6: Interior View Of Class 302 At Ground Floor





Photograph 7: Typical Walkway. Shows Walkway At Top Floor Of B2.



Photograph 8: Roof Lining



Client:	TETRA TECH INTERNATIONAL DEVELOPMENT (PTY) LTD	School Name:	YAT SEN PRIMARY SCHOOL
Project:	INFRASTRUCTURE PLAN FOR SUVA – NAUSORI URBAN SCHOOL.	Building Index:	B3



Photograph No. 1: Front & Side Elevation



Photograph No. 2: Front & Side Elevation



Photograph No. 3: Side Elevation



Photograph No. 4: Side Elevation

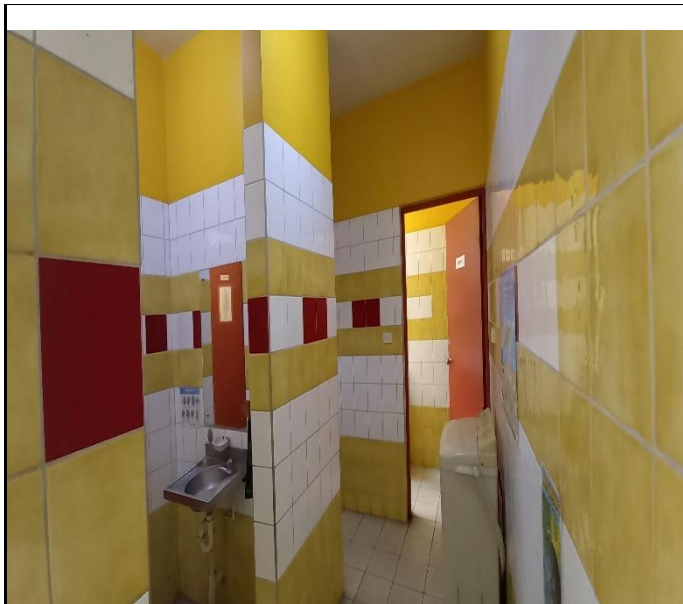


Photograph No. 5: Front Entrance To Kindergarten & School Administration Office



Photograph No. 6: Typical Interior Of 1 Of 3 Kindergarten Classrooms





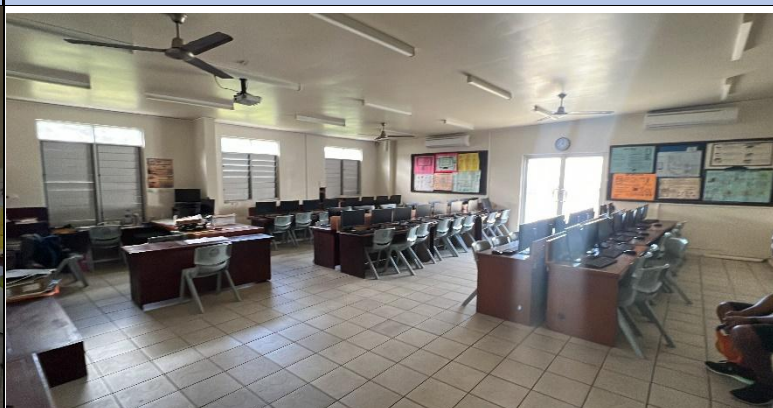
PHOTOGRAPH 7: SHOWS OVERALL VIEW OF THE KINDY TOILET ROOM, Seen Here Is Passageway To Female Toilet, Male Toilet And Staff Toilet.



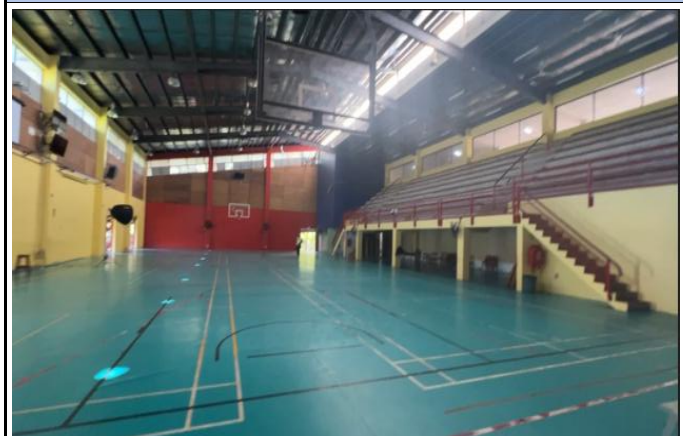
PHOTOGRAPH 8: TYPICAL TOILET AREA TO A CUBICLE. Seen Here Is Toilet Cubicle For Females. One Toilet Each



Photograph 7: Interior View Of Their Advance English Classroom



Photograph 8: Interior View The Computer Lab Currently Used For Upper Primary Level

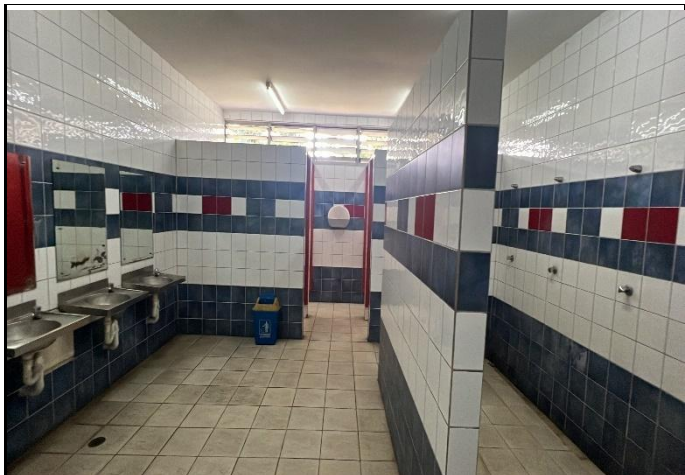


Photograph 9: Interior View Of School Hall



Photograph 10: Interior View Of School Hall

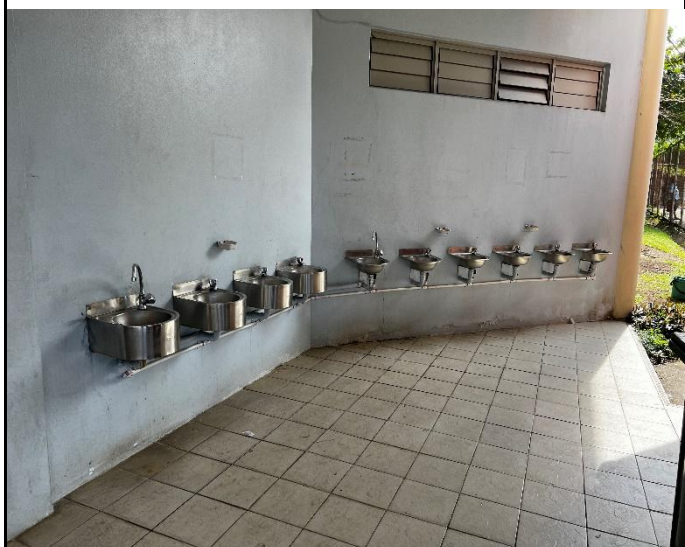




Photograph 11: Interior View Of A Typical Toilet Block



Photograph 12: Typical Toilet Cubicle & Amenities



Photograph 13: Outdoor Taps/Hand Basin Near The School Hall Entrance



Photograph 14: Fire Hose Reel & Extinguisher Placed Under The Staircase At The Front Of The School Hall Entrance



PHOTOGRAPH 15: INTERIOR VIEW OF ADMIN OFFICE, Located at Top Floor.



PHOTOGRAPH 16: FRONT VIEW OF SCHOOL CANTEEN, Located near the Entrance to The School Hall. Canteen Caters For Both Primary And Secondary Schools.



Client:	TETRA TECH INTERNATIONAL DEVELOPMENT (PTY) LTD	School Name:	YAT SEN PRIMARY SCHOOL
Project:	INFRASTRUCTURE PLAN FOR SUVA – NAUSORI URBAN SCHOOL.	Building Index:	B4



Photograph No. 1: Front View Of Science Lab/ Storage



Photograph No. 2: Side Elevation



Photograph No. 3: Rear Elevation



Photograph No. 4: Side Elevation



Photograph 5: Interior view of science/storage room



Photograph 6: Roof Lining



Client :	TETRA TECH INTERNATIONAL DEVELOPMENT (PTY) LTD	School Name:	YAT SEN PRIMARY SCHOOL
Project:	INFRASTRUCTURE PLAN FOR SUVA – NAUSORI URBAN SCHOOL.	Building Index:	B5



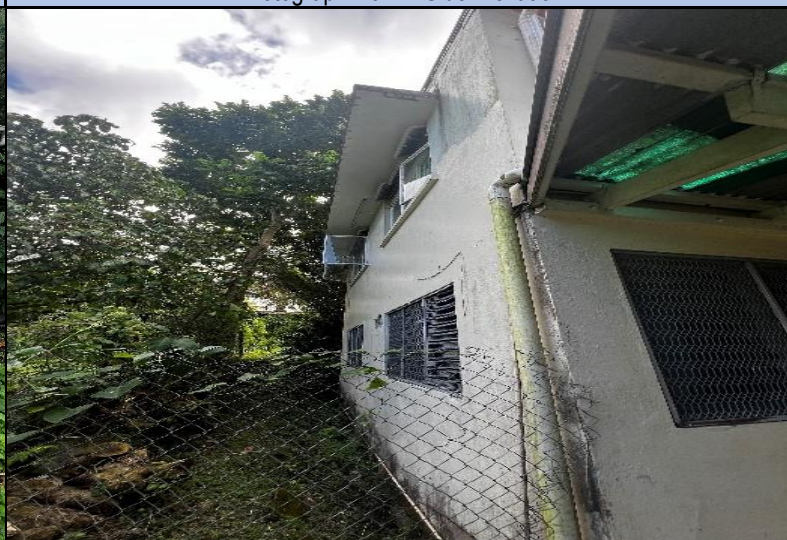
Photograph No. 1: Front Elevation



Photograph No. 2: Side Elevation



Photograph No. 3: Rear Elevation



Photograph No. 4: Side Elevation

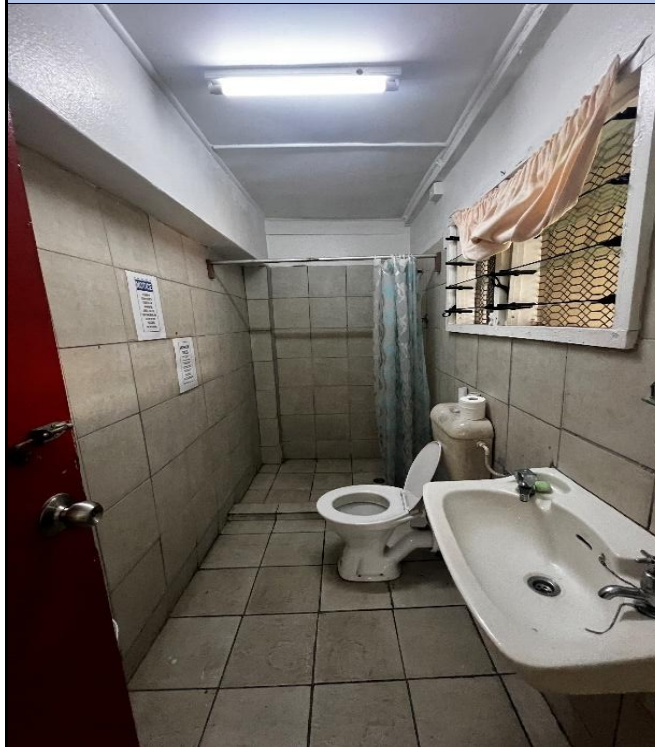




Photograph No. 5: Shows interior view of ground level



Photograph No.6: Shows kitchen area in ground level



Photograph No. 7: Toilet area at ground level



Photograph 8: Fire Safety equipment at kitchen area





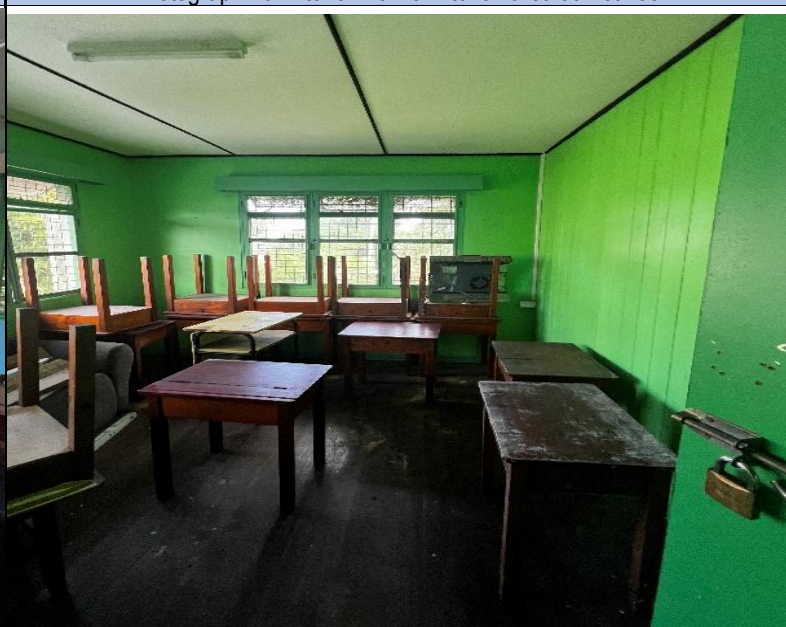
Photograph 9: Interior view of first floor (from main door)



Photograph 10: Interior view of kitchen area at first floor



Photograph 11: Shows interior view of 1 of 2 learning classrooms



Photograph 12: Shows interior view of 2 of 2 learning classrooms





Photograph 13: Shows interior view of toilet area at first floor



Photograph 14: Roof Lining

# Appendix B – Excel Scoring Sheet



WEIGHTED CRITERIA		
<b>PART A - CLASSROOM OVERCROWDING (40%)</b>		
<b>1</b>	<b>Classrooms facilitating students beyond room capacity, determined through number of students per classroom and classroom size</b>	
	Poor - most to all classrooms are accommodating students above capacity.	32 to 40
	<b>Criteria Item Score</b>	<b>33</b>
<b>PART B - WASH FACILITIES (20%)</b>		
<b>2</b>	<b>WASH- Student ratio based on the Fiji National Building Code (FNBC) Infrastructure Standards (10%)</b>	
	Good - WASH-Student ratio for school toilet blocks meets or exceeds the ratio in the standard specified by FNBC.	0 to 5.9
	<b>Criteria Item Score</b>	<b>0</b>
<b>2.1</b>	<b>Quality of facilities and current condition such as functionality and maintenance (10%)</b>	
	Good - generally school toilet facilities are maintained well with minimal disturbances from the physical infrastructure to the end users.	0 to 5.9
	<b>Criteria Item Score</b>	<b>0.0</b>
<b>PART C - CONDITION OF INFRASTRUCTURE (20%)</b>		
<b>3</b>	<b>Building structure and condition of walls, floors, ceilings, overall structural integrity (10%)</b>	
	Good - most building structures are in good condition, however some may need repairs to improve structural integrity.	0 to 5.9
<b>3.1</b>	<b>Maintenance and assessment of the upkeep of facilities including painting and repairs (10%)</b>	
	Good - generally school facilities are maintained well with minimal disturbances from the physical infrastructure to the end users.	0 to 5.9
	<b>Criteria Item Score</b>	<b>5</b>
	<b>Criteria Item Score</b>	<b>10.0</b>
<b>PART D - DISABILITY ACCESSIBILITY (10%)</b>		
<b>4</b>	<b>Accessibility features such as the presence of existing ramps, handrails, accessible toilets etc</b>	
	Poor - School buildings and facilities do not have accessibility features.	8 to 10
	<b>Criteria Item Score</b>	<b>10</b>
	<b>Criteria Item Score</b>	<b>10.0</b>
<b>PART E - DISASTER RESILIENCE (10%)</b>		
<b>5</b>	<b>Presence and quality of measures for disaster resilience of buildings including structural measures, cyclone shutters and fire safety systems</b>	
	Fair - some school building structures are not resilient to natural disasters and do not have safety systems in place.	6 to 7.9
	<b>Criteria Item Score</b>	<b>6</b>
	<b>Criteria Item Score</b>	<b>6.0</b>
<b>TOTAL CRITERIA SCORE</b>		<b>59.0</b>

# Appendix C – Land Available for Expansion





LEGENDS

B#	BUILDINGS
PG#	PLAYGROUND
WC#	TOILETS
T#	TAP/ WASH AREAS
WS#	WATER STORAGE FACILITY
SEP#	SEPTIC TANK
LA#	LAND AVAILABILITY
DR#	PONDS/CREEKS/DRAINAGE
H#	HOSTELS
ST#	STAFF QUARTERS
F#	DINING/FOOD AREA
EFL#	EFL POSTS/JUNCTION BOX
CP#	CAR PARK
WW#	WALKWAY

NOTE:

SCALE: NOT TO SCALE



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