



SCOPE OF WORK

THIMARAFUSHI DOMESTIC AIRPORT

MAINTENANCE WORKS

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Mohamed Shifau

shifau@iasl.aero

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BACKGROUND AND PURPOSES

1. Island Aviation services limited has a requirement to do a maintenance work at Th.Thimarafushi Domestic Airport.

GENERAL REQUIREMENTS

1. The contractor shall provide personnel, materials, equipment and supervision to complete the technical requirement in this scope of work. The contractor shall be responsible for hiring labor, equipment vendor and shall follow safety and security directives.
2. The contractor shall not be admitted to areas of the property outside the areas designated for the project except with permission. The contractor shall address the impact of the consequent disruption cause by the proposed work.
3. The contractor shall always clear the work site upon completion of work and remove any excess material immediately from the site and maintain cleanliness.
4. Materials shall be approved by employer prior to installation.
5. Required measurements shall be taken during the site visit.
6. No variations will be accepted without approval from the employer and any alteration made without approval shall be rectified without any cost.
7. Provision for water and electricity will be provided by IASL.

SCOPE OF WORK

This scope consists of multiple maintenance tasks with details. Maintenance tasks for the following premises shall be carried by the contractor.

1. Fire and Rescue Building.
2. Accommodation block
3. Passenger Terminal
 - a. Office Area
 - b. Boarding gate checking area.
4. Powerhouse / RO plant building.
5. Security fence.
6. Security gate.

FIRE AND RESCUE BUILDING

1. Replacing Roofing Sheets and Glass wool.
 - 1.1. Remove existing roofing sheets.
 - 1.2. Remove existing glass wool.
 - 1.3. Disposal of removed roofing sheets and glass wools.
 - 1.4. Scratch rustic areas and paint entire frame with red oxide paint.
 - 1.5. Install glass wool supported by 2"x2" mesh.
 - 1.6. Galvanized roofing sheet shall be used for roof.
 - 1.6.1. Lysaght or equivalent.
 - 1.6.2. Color: Marine blue.
 - 1.6.3. Thickness: 0.40 – 0.71mm.
 - 1.7. Screw taps and edges of roofing sheets shall be painted with red oxide.
 - 1.8. Cover screw taps with tar tape.
2. Replacing existing gutter with PVC gutter system.
3. Ceiling Works.
 - 3.1. Remove existing ceilings boards entirely.
 - 3.2. Check electrical wires and its conditions. Replace any damaged wire.
 - 3.3. Install gypsum board on existing ceiling frame.
 - a. Application of putty and sanding.
 - b. Painting Entire ceiling with semi-glossed white. Double code shall be applied.
 - 3.4. Installing existing ceiling lights.
4. Wall Panting.
 - 4.1. Scratching peeled and scratching entire wall on room2 and painting.
 - 4.2. Let the wall dry or dry with heat gun.
 - 4.3. Painting entire wall with semi-gloss white paint. Double code shall be applied.
5. Toilet works.
 - 5.1. Connecting existing sewage lines to sewage ducts. Approximately 76 feet.
 - 5.2. Connecting freshwater connection.
 - 5.3. Replacing toilet doors with fiberglass door.
 - 5.4. Installing door lock system.

5.5. Details will be given on BOQ and Specification Sheet.

STAFF ACCOMODATION

1. Replacing Roofing Sheets and Glass wool.
 - 1.1. Remove existing roofing sheets.
 - 1.2. Remove existing glass wool.
 - 1.3. Disposal of removed roofing sheets and glass wools.
 - 1.4. Scratch rustic areas and paint entire frame with red oxide paint.
 - 1.5. Install glass wool supported by 2"x2" mesh.
 - 1.6. Galvanized corrugated roofing sheet shall be used for roof.
 - 1.7. Screw taps and edges of roofing sheets shall be painted with red oxide.
 - 1.8. Cover screw taps with tar tape.
2. Replacing existing gutter with PVC gutter system.
3. Replace rustic door locks.
4. Replace existing toilet doors with fiberglass door with lock system.
5. Details will be given on BOQ and Specification sheet.

PASSENGER TERMINAL

OFFICE AREA

1. Remove all tiles on AVSEC room.
2. Fix 600x600mm porcelain tiles with chemical cement.
3. Fixing Aluminum Partition on office area entrance.
 - a. Cutting 1" by ½" duct on tiles on every entrance

BOARDING SECURITY CHECKIN AREA

1. Remove tiles on this area.
2. Fix 600x600mm porcelain tiles with chemical cement.

POWER HOUSE / RO PLANT ROOM

1. Replacing Roofing Sheets and Glass wool.
 - a. Remove existing roofing sheets.
 - b. Remove existing glass wool.
 - c. Disposal of removed roofing sheets and glass wools.
 - d. Scratch rustic areas and paint entire frame with red oxide paint.
 - e. Install glass wool supported by 2"x2" mesh.
 - f. Galvanized corrugated roofing sheet shall be used for roof.
 - g. Screw taps and edges of roofing sheets shall be painted with red oxide.
 - h. Cover screw taps with tar tape.
2. Replacing existing gutter with PVC gutter system.
3. Replace concrete floor at the entrance.
4. Fixing damaged PVC inlet line for RO plant.

- a. PVC high pressure shall be used.
- b. 12"x12"x6" concrete blocks along with bolt shall be used for support.

SECURITY FENCE

1. Painting entire fence posts with sigma marine paint.
2. Laying 18"x24" concrete block on top of existing concrete footing.
3. Replace corroded top, mid and bottom railings.
4. Install wire mesh.

SECURITY GATE

1. Demolishing existing concrete columns.
 - a. Laying new concrete columns 8"x8"x8'.
 - b. 10mm re bar for re-enforcement 04 nos with band.
2. Fixing 2" Dia metal wheel on both gates.
3. 4" Hinges for gates.

BILL OF QUANTITY

SUMMARY

ITEM	DESCRIPTION	AMOUNT (MVR)
1	TOTAL OF BILL NO.01 (PRELIMINARIES)	-
2	TOTAL OF BILL NO.02 (FIRE AND RESQUE BUILDING)	-
3	TOTAL OF BILL NO.03 (STAFF ACCOMODATION)	-
4	TOTAL OF BILL NO.04 (PASSENGER TERMINAL)	-
5	TOTAL OF BILL NO.05 (POWER HOUSE)	-
6	TOTAL OF BILL NO.06 (SECURITY FENCE / GATE)	-
7	TOTAL BILL OF NO.7 (ADDITIONS)	-
8	TOTAL BILL OF NO.8 (OMISSIONS)	-
	GRAND TOTAL	-

BOQ

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL (MVR)
	Bill No: 01 PRELIMINARIES				
1.1	General Notes				
a.	<i>Abbreviations</i> m – meter nos – numbers m³ – cubic meter m² – square meter t – tons mm – millimeter Gi – galvanized iron ss – stainless steel in – inches lm – Linear meter				
1.2	Site Management Costs				
a.	Allow for all on and off site management cost including costs of foreman and assistants, temporary services, telephone, hoardings an similar.	1	item	-	-
1.3	Signboards				
	Allow for sign boards	1	nos	-	-
1.4	Clean – up				
a.	Allow for cleanup of complete work site upon completion of work.	1	item	-	-
b.	Allow for disposal of construction waste and removed items.	1	item	-	-
TOTAL OF BILL NO.1 (PRELIMINARIES) <i>(CARRIED OVER TO THE GENERAL SUMMERY)</i>					-
	Bill No: 02 FIRE AND RESQUE				
2.1	General				
a.	Rates shall include for: all labor in framing, notching and fitting around projections, pipes, light fittings, hatches, grilles and similar and complete with cleats, packers, wedges and similar and all nails and screws.				
b.	Rates shall include of dismantling roofing sheets, glass wools.	386	m ²	-	-

2.2	<u>Roof Covering</u>				
a.	MSP – Color Bond roofing sheets	386	m ²	-	-
b.	PVC Gutter	20	m	-	-
c.	Down Pipes / down spots with covers	13.5	m	-	-
d.	Fastener hex screw (AUTOTEKS) hex head	750	nos	-	-
2.3	<u>Roof Insulation</u>				
a.	Glass wool	386	m ²	-	-
b.	Wire mesh	386	m ²	-	-
2.4	<u>Ceiling, Interior & Exterior walls</u>				
a.	Rates shall include for: all labor in framing, notching and fitting around projections, pipes, light fittings, hatches, grilles and similar and complete with cleats, packers, wedges and similar and all nails and screws.				
b.	<u>Gypsum Board Ceiling</u>				
a)	EOC	34.2	m ²	-	-
b)	Toilets (5 nos)	27	m ²	-	-
c)	Room 1	13.1	m ²	-	-
d)	Room 2	13.1	m ²	-	-
e)	Room 3	13.1	m ²	-	-
f)	Room 4	13.1	m ²	-	-
c.	Interior & Exterior Walls				
a)	Scraping peeled paints on all walls.	1	item	-	-
2.5	<u>Painting</u>				
a.	Rates shall include for: the provision, erection and removal of scaffolding, preparation, rubbing down between coats and similar work, the protection and / or making floors, fittings and similar work, removing and replacing door and window furniture.				
b.	All painting work shall be carried in accordance with the specifications.				
c.	Nippon Weather bond for External Walls and Nippon super vinilex for internal walls and ceilings.				
d.	External Wall Painting 1 coat of wall sealer, & 2 coats of paints.	327.4	m ²	-	-
e.	Internal Wall painting, 1 coat of wall sealer, and 2 coats of paint.	665	m ²	-	-
f.	Ceiling painting, 1 coat of wall sealer, and 2 coats of paint.	113.6	m ²	-	-
2.6	<u>Others</u>				

a.	Door Lock Installation	11	nos	-	-
2.7	Allow lumpsum for silicon / Sealant / adhesives	1	item	-	-
TOTAL OF BILL NO.2 (FIRE AND RESQUE) <i>(CARRIED OVER TO THE GENERAL SUMMERY)</i>					-
Bill No: 03 <u>ACCOMODATION BLOCK</u>					
3.1	<u>General</u>				
a.	Rates shall include for: all labor in framing, notching and fitting around projections, pipes, light fittings, hatches, grilles and similar and complete with cleats, packers, wedges and similar and all nails and screws.				
b.	Rates shall include of dismantling roofing sheets.				
3.2	<u>Roof Covering</u>				
a.	MSP – Color Bond roofing sheets	243	m ²	-	-
b.	Glass wool supported by 2"X2" mesh	243	m ²	-	-
c.	PVC Gutter	70.7	m	-	-
d.	Down Pipes / down spots with covers	24.4	m	-	-
e.	Fastener hex screw (AUTOTEKS) hex head	557	nos	-	-
3.3	<u>Others</u>				
a.	Door Lock Replacement	15	nos		
b.	Light Replacement (6"x6" white led)	36	nos		
TOTAL OF BILL NO.3 (ACCOMODATION BLOCK) <i>(CARRIED OVER TO THE GENERAL SUMMERY)</i>					-
Bill No: 04 <u>PASSANGER TERMINAL</u>					
4.1	<u>General</u>				
a.	Rates shall include for: all labor in framing, notching and fitting around projections, pipes, light fittings, hatches, grilles and similar and complete with cleats, packers, wedges and similar and all nails and screws.				
b.	Rates shall include removing 600x600 tiles and cement layer.	100	m ²	-	-
4.2	<u>Tiling</u>				
a.	600x600mm porcelain tiles (white)				

b.	Fixing tiles with chemical cement				
a)	Body check area	67.2	m ²	-	-
b)	AVSECOM Office	15	m ²	-	-
c)	Meeting Room	12.5	m ²	-	-
4.3	<u>Aluminium Partition / Door</u>				
a.	All Aluminum sections shall be as per the drawings.	1	nos	-	-
b.	All glazing shall be min 10mm clear glass				
c.	<u>Door</u>				
a)	Rates shall include for: locks, latches, closers, push plates, pull handles, bolts, kick plates, hinges.				
b)	Door D1	1	nos	-	-
TOTAL OF BILL NO.4 (ACCOMODATION BLOCK) <i>(CARRIED OVER TO THE GENERAL SUMMERY)</i>					-
	<u>Bill No: 05</u> <u>POWER HOUSE AND RO PLANT ROOM</u>				
5.1	<u>General</u>				
a.	Rates shall include for: all labor in framing, notching and fitting around projections, pipes, light fittings, hatches, grilles and similar and complete with cleats, packers, wedges and similar and all nails and screws.				
b.	Rates shall include of removing roofing sheets.				
5.2	<u>Roof Covering /Gutter</u>				
a.	MSP – Color Bond roofing sheets	280.5	m ²	-	-
b.	PVC Gutter	49.6	m	-	-
c.	Down Pipes / down spots with covers	12.2	m	-	-
d.	Fastener hex screw (AUTOTEKS) hex head	687	nos	-	-
e.	Glass wool supported by 2"x2" mesh.	280.5	m ²	-	-
5.3	<u>Concrete Screed</u>				
a.	Rate shall include for: placing in position; making good after removal of formwork and casting in all required items; additional concrete required to conform to structural and excavated tolerances.				
b.	75mm Concrete Flooring with a mix 1:3:2 with wire mesh reinforcement	4.304	m ³	-	-
c.	Floor re-enforcement using 25mmx25mm wire mesh	28.3	m ²	-	-
5.2	<u>Roof Covering /Gutter</u>				

a.	Rate shall include for: placing in position; making good after removal of formwork and casting in all required items; additional concrete required to conform to structural and excavated tolerances.				
a.	PVC pipe	Nos	12	-	-
b.	Concrete blocks 12"x12"x6" with bolt	Nos	15	-	-
TOTAL OF BILL NO.5 (POWER HOUSE AND RO PLANT ROOM) <i>(CARRIED OVER TO THE GENERAL SUMMERY)</i>					-

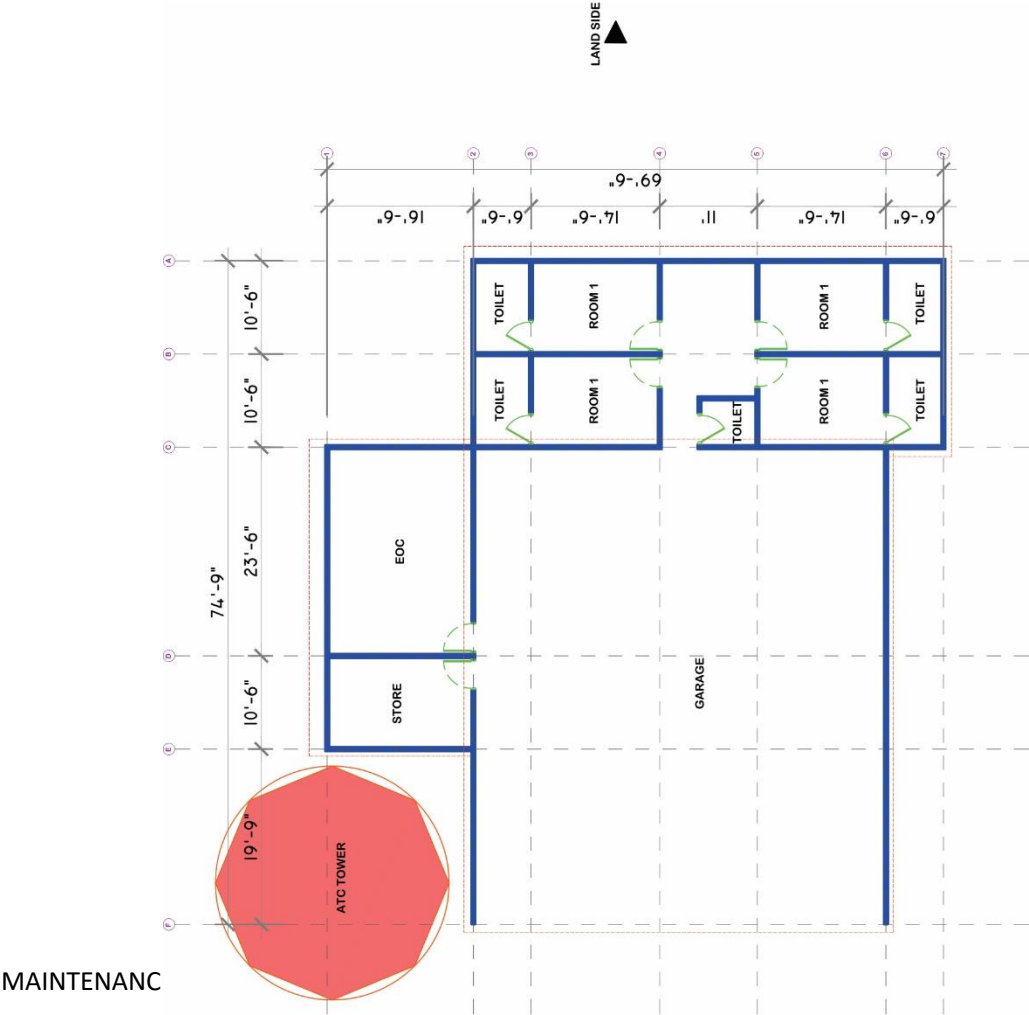
	Bill No: 06 <u>SECURITY FENCE / GATE</u>				
6.1	<u>General</u>				
a.	Rate shall include for: placing in position; making good after removal of formwork and casting in all required items; additional concrete required to conform to structural and excavated tolerances.				
b.	Mix ratio for reinforced concrete shall be 1:2:3				
a)	RC foundation pads,	6.8	m ³		
6.2	<u>Metal Works / Wire Mesh</u>				
a.	Rate shall include for: all necessary boarding, supports, erecting, framing, temporary cambering, cutting and welding.				
b.	1" Gi pipe shall be used for railings				
c.	Replacing Corroded railings.	95.4	m	-	-
d.	Repairing broken wire mesh with metal thread.	1	item	-	-
6.3	<u>Painting</u>				
a.	Rate shall include for: all necessary equipment, labor, scaffolding, tools for painting.				
b.	Sigma Marine paint shall be used.				
c.	Minimum 02 coat of paints.				
d.	Painting entire fence posts, railings.	80	m ²	-	-
6.4	<u>Gate</u>				

	Rate shall include for: all necessary equipment, labor, scaffolding, tools.				
a.	1" heavy duty gate wheel with suspension shall be used.				
b.	Fixing Wheel on both gate	02	nos	-	-
c.	Demolishing existing columns	02	nos	-	-
d.	Laying concrete columns with 04 nos of 10mm rebar re-enforcement 8"x8"x8'	02	nos	-	-
e.	4" hinges for gate	10	nos	-	-
TOTAL OF BILL NO.6 (SECURITY FENCE AND GATE) <i>(CARRIED OVER TO THE GENERAL SUMMERY)</i>					-

	<u>Bill No: 07</u> <u>ADDITIONS</u>				
Bill No: 1					
Bill No: 2					
Bill No: 3					
Bill No: 4					
Bill No: 5					
Bill No: 6					
TOTAL OF BILL NO.7 (ADDITIONS) <i>(CARRIED OVER TO THE GENERAL SUMMERY)</i>					-
	<u>Bill No: 08</u> <u>OMISSIONS</u>				
Bill No: 1					
Bill No: 2					
Bill No: 3					
Bill No: 4					
Bill No: 5					
Bill No: 6					
TOTAL OF BILL NO.8 (OMISSIONS) <i>(CARRIED OVER TO THE GENERAL SUMMERY)</i>					-

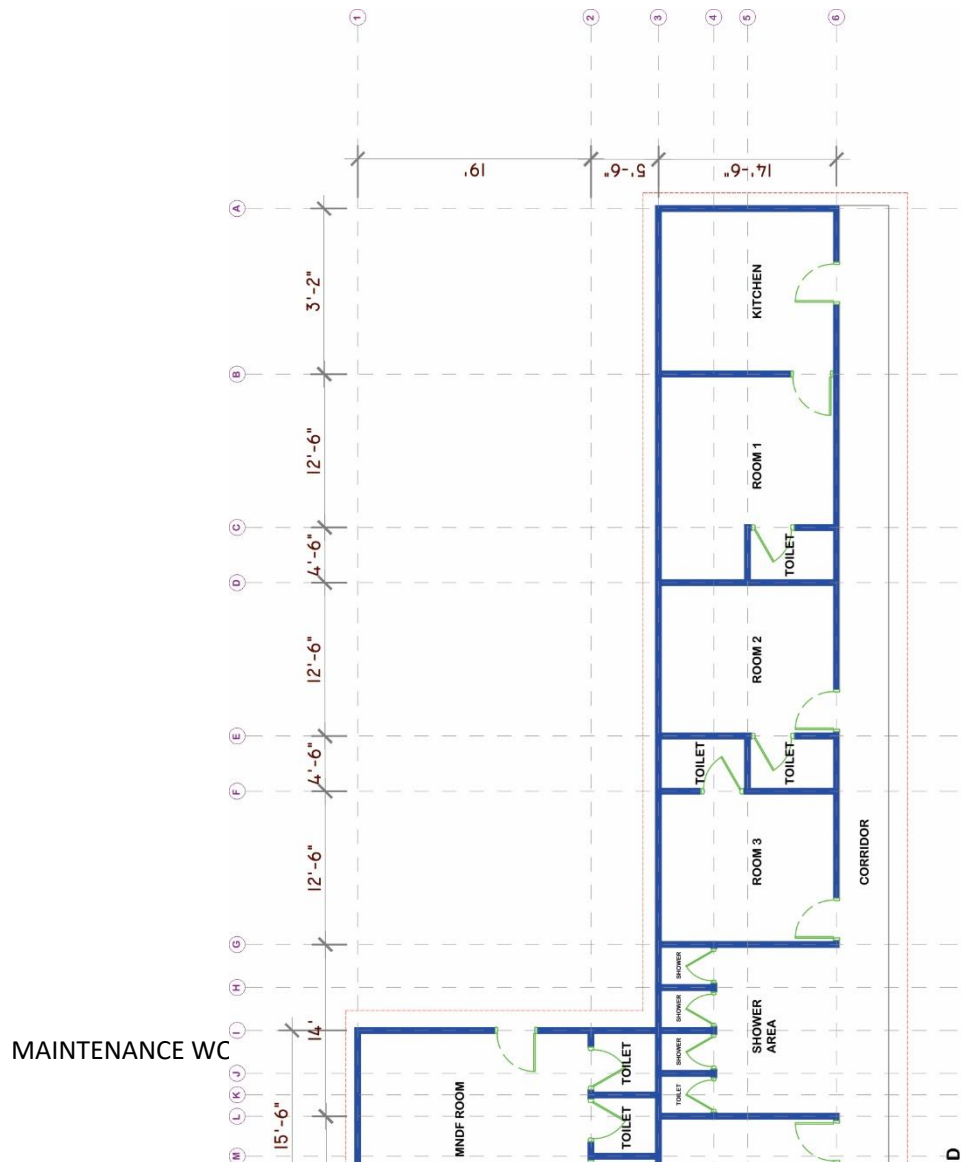
DETAILED DRAWINGS

FIRE AND RESCUE BUILDING



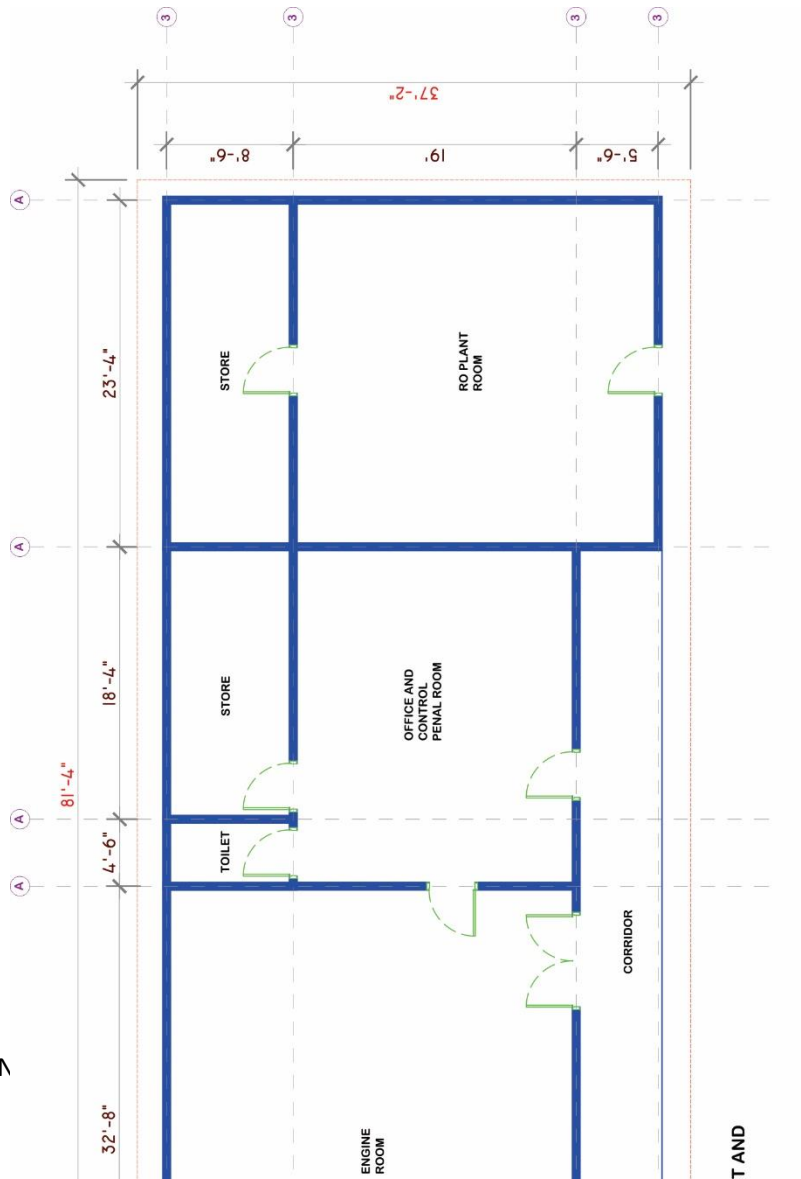
MAINTENANC

ACCOMODATION BLOCK



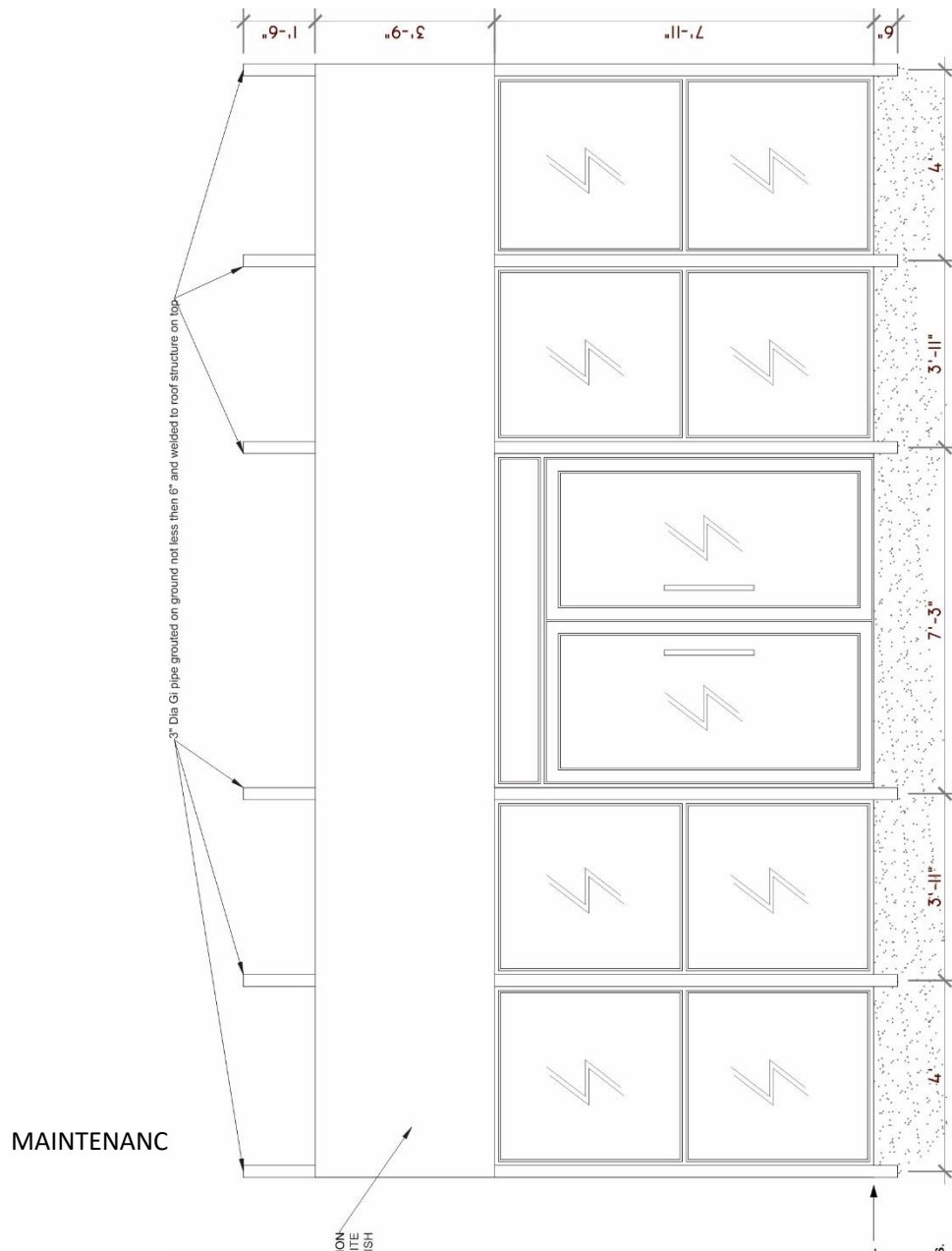
POWER HOUSE

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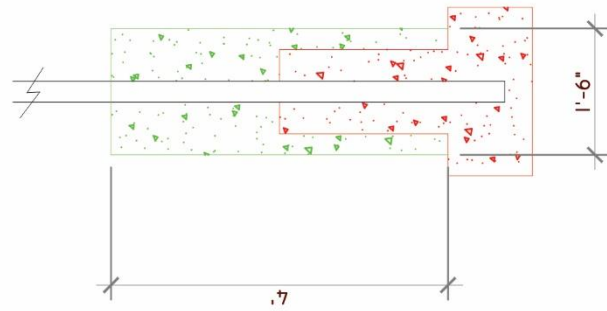


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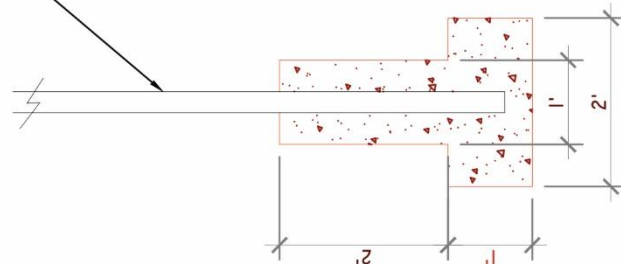


FOOTING



FENCE POST AFTER RE-ENFORCEMENT

3" Dia Gi pipe



EXISTING FENCE POST

MAINTENANCE V