

**SITE VISIT TO OBSERVE AND VERIFY
PHYSICAL DETAILS**

*Supporting Producers to upgrade Processing Infrastructure to
Obtain GMP*

Technical Report



Submitted to UNIDO – WTO – TSC Project

Introduction

Based on understanding between the following proprietors and UNIDO – WTO – Spice Council Project a two member team was deployed to visit cinnamon processing facilities and/or plantations of these candidates on 31st January 2014. Overall purpose of this mission was to provide technical information to the project to implement a support scheme for cinnamon producers to upgrade processing infrastructure to obtain GMP.

Following two personnel were appointed by the project for this mission.

- Wijitha de Zoysa Jayathilake, Grower Representative of The Spice Council of Sri Lanka/ UNIDO Consultant
- Shanka Dharmapala, Technical Analyst, UNIDO

The mission studied the existing physical structure of the processing facilities and identified gaps between the present status and the minimum standards required for obtaining GMP or ISO22000 certification as per prescriptions of international certification bodies to cinnamon industry in Sri Lanka.

Five candidates were selected for this mission. Names of these candidates are:

- Mrs. Girlie Lankage
- Mr. R.R. de Silva Amarasekera
- Mr. K.T.J. Kumara
- Mr. Mangala Gamage
- Mr. Gamini de Zoysa

Premises of all these candidates were visited. However, observations were duly carried out by the mission at premises except the premise of Mr. R.R. de Silva Amarasekera. The mission was unduly disturbed by a worker at Mr. Amarasekera's factory. Some of the candidates were able to share some of the required particulars such as architectural building plans, survey plans, approvals from local authorities, bills of quantities, etc.

Following the field visit, the team reflect on the observations, assessed discussion contents, and reviewed available necessary documents pertaining to required approvals, technical drawings, etc. in compiling this report.

This report is submitted to the project for consideration of further actions.

Reporters:

Wijitha de Zoysa Jayathilake, Grower Representative of The Spice Council of Sri Lanka/ UNIDO Consultant
Shanka Dharmapala, Technical Analyst, UNIDO

Date: 7th March 2014

Name of Proprietor/ Enterprise: Mrs. B.R.A. Fernando; was contact person during the field visit was Mr. Mangala Gamage, spouse of the proprietor

Address: Kirimetiya, Batapola

Contact Number: +94 77 368 48 11

Legal Status: To be registered as a Private Liability Company under Companies Act of Sri Lanka

Background: The proprietor holds six acres of cinnamon plantation as a family property through her spouse. According to field observations, this plantation and its processing unit have a traditional management system and culture.

Observations and Assessment Results:

A. Construction:

1. **Approval obtained from local authorities for building plan and construction:** Yes/ ~~No~~
2. **Obtained bank loan:** Yes/ ~~No~~; *if Yes, then details:* Although at present the proprietor has not barrow bank loan, intended to do so as the proposed project starts.
3. **Received assistance from government/ international development agency/ NGO, etc.:** ~~Yes/~~ No; *if yes, then details:* Not applicable

B. Present status of infrastructure: Processing carries out in a permanently built building with basic facilities.

C. Present status of operations and management: Processing is carried out in conventional fashion. Basic operations management that mainly comprise informal style of management.

D. Present status of quality and food safety compliance and management: Lack of formal arrangement in quality and food hygiene management. Informal management style.

E. Critical observations and recommendations:

1. The proprietor (candidate) plans to construct a new factory and obtain food safety certification (GMP or ISO22000). Already architectural plan developed following ISO22000 certification requirements. Architectural drawings of building plan, which submitted by the candidate, is attached in Annex.
2. Total estimated cost of construction (BOQ value) of new factory is LKR6.738million. *Recommendation: Submission of details of as to how the candidate plan to raise needed capital for constructing infrastructure is required.*
3. Approval of Ambalangoda Pradeshiya Sabha has been obtained for the building plan (Reg. No. BA/2013/129).
4. The proprietor's proposed operations management plan is as follows: (a) Establish a supply base of 10 to 20 acres supply extent comprises presently abandoned or improperly cultivating, neighboring cinnamon plantations through contract management; (b) In addition

to produce of six acres own cinnamon plantation, purchase cinnamon trees as green produce (bought trees) to be processed at the proposed factory; (c) Hire field/ factory manager who would be managing all field operations including proposed out-grower network and factory; and (d) locally sourced workers for the operations. *Recommendation: Submission of detail operational plan, including human resource management plan by the candidate.*

Name of Proprietor/ Enterprise: M/s K.T.J. Kumara and Brother (Pvt) Ltd.

Address: Meetiya goda (opposite to Meetiya goda weekly fair)

Contact Number: +94 77 791 10 55

Legal Status: Operates under registration of M/s K.T.J. Kumara & Brothers (Pvt) Ltd

Background: The proprietor, an experienced cinnamon grower and exporter of cinnamon oil, self-financed constructing a cinnamon factory few years ago.

Observations and Assessment Results:

A. Construction:

1. *Approval obtained from local authorities for building plan and construction:* **Yes/ No**
2. *Obtained bank loan:* **Yes/ No; if Yes, then details:** Not applicable
3. *Received assistance from government/ international development agency/ NGO, etc.:* **Yes/ No; if yes, then details:** Not applicable

B. Present status of infrastructure:



Figure 1. Front elevation view (part of building from left side)



Figure 2. Interior view of building (from left to right)



Figure 3. Interior view (from right to left)



Figure 4. Outside drying racks

A firmly and extensively built premise with physically separated components for processing, worker changing and resting, and toilets. Critical physical requirements for food safety compliance were present. Basic facilities for workers were also present.

C. Present status of operations and management: Physical environment observed to be enabling improved processing management. However, space for improvements were also observed. *Recommendation: The management and workers of the factory would benefit from technical assistance to improve work station layout arrangement and process flow planning. .*

D. Present status of quality and food safety compliance and management: Food safety compliance certification was not obtained. However, existing physical environment observed to be encouraging clean production quality. *Recommendation: The management and workers would benefit from training and management coaching to improve practices against food safety compliance requirements.*

E. Critical observations and recommendations:

All observations and recommendations are referring to Figure 5.

1. Mark A: Worker entrance. Length of foot bath was not up to standard and should be extended up to a length exceeding two strides of a worker. The entrance was exposed to outside and susceptible to dust; therefore, should fix a plastic curtain.
2. The premise did not have an outlet for removing peeled cinnamon wood and scrapped outer bark. Therefore, it is recommended fix a roller window at point of wall that is mark as B in the sketch.
3. Gap between premise's wall and roof was open thus, susceptible for intrusions of animals into processing area. This gap to be fill-up with plastic mesh.
4. Mark C: There was a door on partition wall between the processing area and workers' rest area. Keeping this door compromises hygiene of processing area thus, it to be filled and sealed. A sealed glass window to be fixed on this partitioning wall.

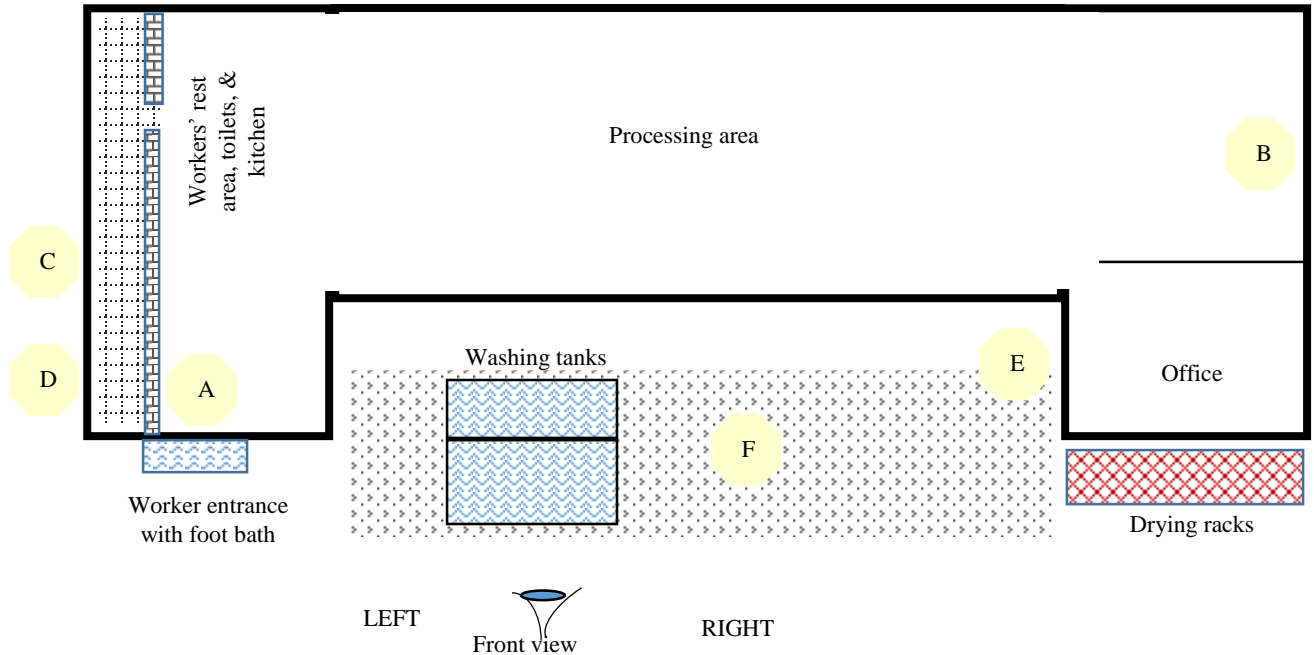


Figure 5. Sketch of building floor plan (not drawn to scale)

5. Present entrance to the workers rest rooms, kitchen, and toilet area was not appropriate and thus, to be changed to point mark as D.
6. Some places of existing floor of building were damaged. These place should be repaired.
7. Windows of building are not up to standard. Therefore, require to be changed by fixing louvers and removable mesh replacing grills.
8. Existing brought in cinnamon trees washing tanks were not suitable to proper operations of the factory. These tanks to be revamp and constructed at a suggested place in appropriate size and required finishes (e.g. interior walls tiled with large, gloss finished, glazed marble tiles).
9. Premised did not have a proper utility area to unload and draining excess water of cinnamon tree bundles before taken inside the factory. Recommended to build a utility area and required offloading platform in area marked as F and that to be concreted and cemented according to standard. Furthermore, this area to be demarcated with a half high boundary wall to restrict unauthorized access of workers.
10. Replacement of drying rack from the existing position to a suggested place.
11. The premise did not have a boundary fence. Therefore, suggested to build a half-wall wire-mesh fence surrounding the premise.

12. Required racks, clock hangers, tables, stools, slippers, clocks, caps, drying towels, etc., for workers' and guests' hygiene in entering factory were lacking. These required materials and equipment to be provided.

Name of Proprietor/ Enterprise: Mrs. Girle Lankage

Address: Karandeniya

Contact Number: 011 271 0289

Legal Status: Could be as a proprietary operation

Background: The proprietor, an experienced cinnamon grower with financial assistance of Export Development Board (EDB) and personal investment constructed a cinnamon factory few years ago.

Observations and Assessment Results:

A. Construction:

1. Approval obtained from local authorities for building plan and construction: ~~Yes~~/ No
2. Obtained bank loan: ~~Yes~~/ No; if Yes, then details: Not applicable
3. Received assistance from government/ international development agency/ NGO, etc.: Yes/~~No~~; if yes, then details: EDB

B. Present status of infrastructure:



Figure 6. View of entrance to factory



Figure 7. View of outdoor washing and drying area of factory



Figure 8. View of quill making area of factory



A firmly built premise with physically separated

Figure 9. View of peeling and scrapping areas of factory

components for processing, worker changing and resting, and toilets. Critical physical requirements for food safety compliance were present. Boundary of premise was demarcated and physically separated from surrounding by a wire mesh fence. Basic facilities for workers were also present.

C. Present status of operations and management: Physical environment observed to be enabling improved processing management.

D. Present status of quality and food safety compliance and management: Food safety compliance certification was not obtained. However, existing physical environment observed to be encouraging clean production quality. *Recommendation: The management and workers would benefit from training and management coaching to improve practices against food safety compliance requirements.*

E. Critical observations and recommendations:

All observations and recommendations are referring to Figure 10.

1. Windows at front entrance area to be changed from wire mesh grills to sliding glass windows with louvers. Fix notice board on front entrance wall. Fix auto door-closure on slashes of door to enter to processing areas from front entrance. Remove wooden slashes, which are on just above foot bath area of front entrance and replace with sealed glasses. Foot bath in front entrance to be modified reducing width by filling up and fixing stainless steel hand rail to guide guests entering to processing areas.
2. Outer door of the entrance to be changed by fixing auto door-closure and top half of the slash fixed with glass and bottom to be fixed with a suitable sheet. Provide rubber and clothes mats at entrance for drying feet after immersing in foot bath.
3. Provide fully covered plastic shades for lightings in processing areas.
4. Replace existing hand operated taps with foot operating taps at all wash basins.
5. Gap between wall brim and roof to be filled with wire mesh to prevent animals entering to processing areas.

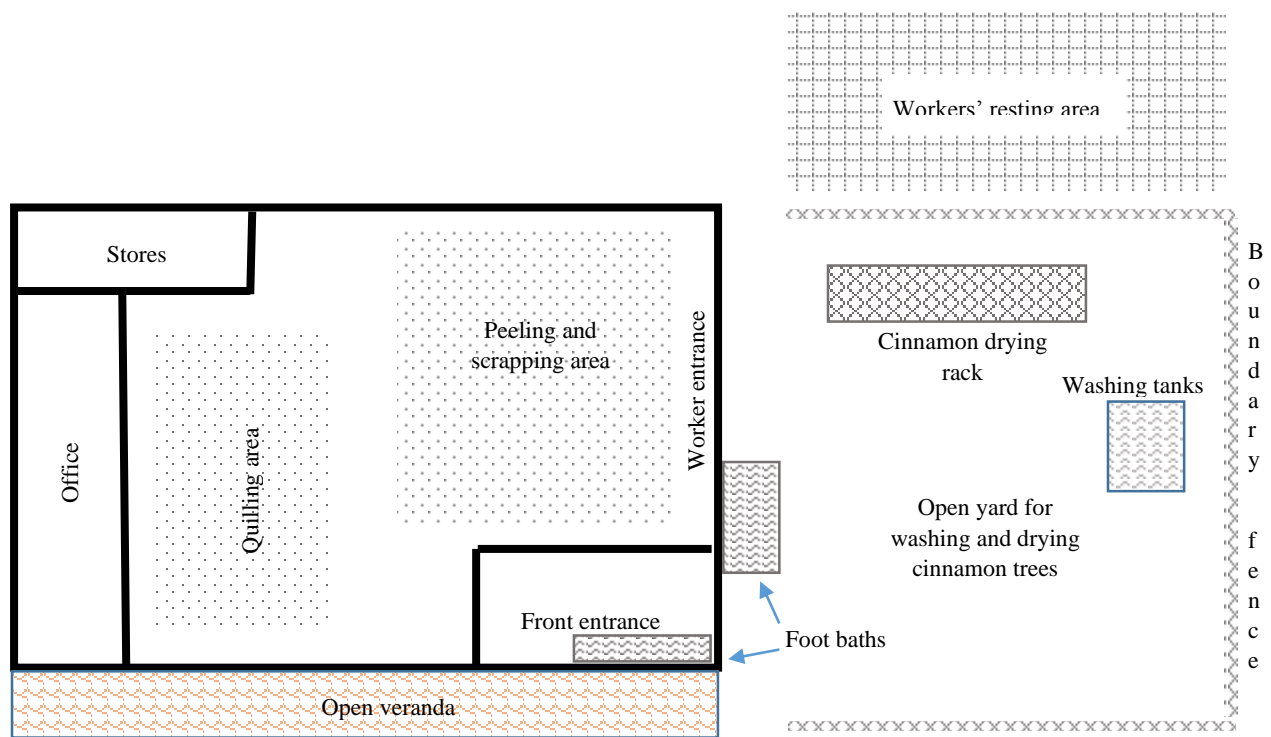


Figure 10. Sketch of factory layout (not drawn to scale)

6. Required racks, clock hangers, tables, stools, slippers, clocks, caps, drying towels, etc., for workers' and guests' hygiene in entering factory were lacking. These required materials and equipment to be provided.
7. Ceiling of premise to be built by using approved and suitable materials.
8. Colour washing of premise's walls.
9. Use rubber carpets to cover factory floor.
10. Replace center column tiles.
11. Gully of worker cleaning area that is in outside drying area to be repaired.
12. Washing tanks to be chipped off the existing plaster and tiling with large, gloss, and glazed marbles. Floor of outside drying area to be cemented for smooth finish. Boundary wall to be improved by constructing half wall and wire mesh the boundary.
13. Gate to worker resting area from factory to be closed. 21' x 11' area to be demarcated at suggested position and fence with wire mesh and half wall in "L" shape to allow easy handling of cinnamon wood. A new gate (inlet) to be fixed at a suggested position and fix an unloading plat form.
14. Change the existing drying racks according standards.

Name of Proprietor/ Enterprise: Mr. Gamini de Zoysa

Address: Kosgoda

Contact Number: 072 471 58 84

Legal Status: Could be as a proprietary operation

Background: The proprietor, an experienced cinnamon grower with financial assistance of Export Development Board (EDB) and personal investment constructed a cinnamon factory few years ago.

Observations and Assessment Results:

A. Construction:

1. *Approval obtained from local authorities for building plan and construction:* Yes/ No
2. *Obtained bank loan:* Yes/ No; if Yes, then details: Not applicable
3. *Received assistance from government/ international development agency/ NGO, etc.:* Yes/ No; if yes, then details: EDB

B. Present status of infrastructure:



Figure 11. Front and lateral view of factory



Figure 12. View of peeling and quill making areas of factory

A firmly built premise with physically separated components for processing areas. Critical physical requirements for food safety compliance were present, but not at expected operational level.



Figure 13. Scrapping section of factory



Figure 14. Back side view showing separate entrances to scrapping section and room used for resting and office work

C. Present status of operations and management: Physical environment observed to be enabling improved processing management, but with areas of improvements.

D. Present status of quality and food safety compliance and management: Food safety compliance certification was not obtained. Physical structures were partially completed and thus, there was a gap with the relevant standards. *Recommendation: The management and workers would benefit from training and management coaching to improve practices against food safety compliance requirements along with completion of building up to standard.*

E. Critical observations and recommendations:

All observations and recommendations are referring to Figure 13.

1. Size of existing scrapping section was not enough for effective work. Expansion of this section of building according to standards is needed.
2. There was no washing tank for factory. Build washing tank at suggested place.
3. Roof was incomplete. Fix gutters, drains, and skirting according to standards for completion.
4. The premise did not have electricity and pipe borne water supply, which support effective and efficient implementation of food safety measures. Obtain electricity to premise and plumbing to standard.
5. There was no boundary fence demarcating premise. Built boundary fence.
6. Door of store room of the factory was lacking a slash. This to be fixed.

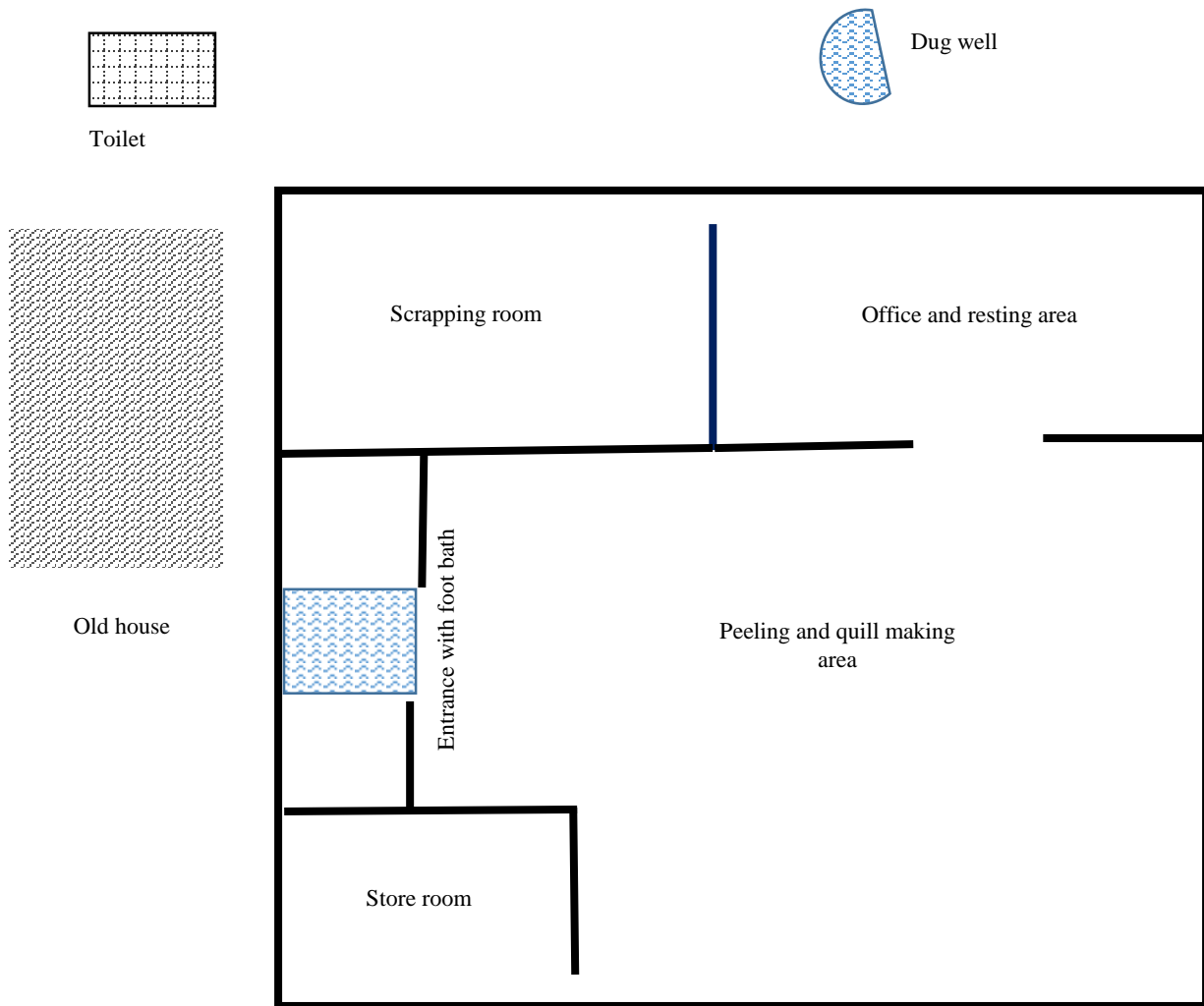


Figure 12. Factory lay out (a sketch no drawn to scale)

7. Required racks, clock hangers, tables, stools, slippers, clocks, caps, drying towels, etc., for workers' and guests' hygiene in entering factory were lacking. These required materials and equipment to be provided.
8. Gap between wall brim and roof to be filled with wire mesh to prevent animals entering to processing areas.

Overall Recommendations

- In an event the candidates were found acceptable to the project, they should make available a competent technical person (e.g. Technical Officer) to work with expert appointed by the project for preparing bills of quantities for works to be done. Exception should be made to candidate Mrs. B.R.A. Fernando due to new construction of building.
- As a best practice in international development practice, in an event a candidate request, the project should share this report with the candidate for accountability.
- The project should appoint a committee comprising suitable people from The Spice Council to review this report and give opinions to Chairman of The Spice Council and Project Manager of UNIDO.
- In an event of accepting the opinions of the above proposed committee by the Chairman and the Project Manager, the project should inform these decisions to the candidate for transparency and accountability.

Annex: Architectural Drawings of Building Plan of Mrs. B.R.A. Fernando

FRONT ELEVATION

SECTION A

SIDE ELEVATION

SECTION B

FLOOR PLAN

SCHEDULE OF DOORS, WINDOWS & EANLIGHT

TYPE	WIDTH (ft)	HEIGHT (ft)	DESCRIPTION	NO'S
01	2'0"	6'0"	WOODEN DOOR WITH GLASS PANEL	01
02	2'0"	6'0"	WOODEN DOOR WITH GLASS PANEL	01
03	2'0"	6'0"	WOODEN DOOR WITH GLASS PANEL	01
04	2'0"	6'0"	WOODEN DOOR WITH GLASS PANEL	01
05	2'0"	6'0"	WOODEN DOOR WITH GLASS PANEL	01
06	2'0"	6'0"	WOODEN DOOR WITH GLASS PANEL	01
07	2'0"	6'0"	WOODEN DOOR WITH GLASS PANEL	01
08	2'0"	6'0"	WOODEN DOOR WITH GLASS PANEL	01
09	2'0"	6'0"	WOODEN DOOR WITH GLASS PANEL	01
10	2'0"	6'0"	WOODEN DOOR WITH GLASS PANEL	01
11	2'0"	6'0"	WOODEN DOOR WITH GLASS PANEL	01
12	2'0"	6'0"	WOODEN DOOR WITH GLASS PANEL	01
13	2'0"	6'0"	WOODEN DOOR WITH GLASS PANEL	01
14	2'0"	6'0"	WOODEN DOOR WITH GLASS PANEL	01
15	2'0"	6'0"	WOODEN DOOR WITH GLASS PANEL	01
16	2'0"	6'0"	WOODEN DOOR WITH GLASS PANEL	01
17	2'0"	6'0"	WOODEN DOOR WITH GLASS PANEL	01
18	2'0"	6'0"	WOODEN DOOR WITH GLASS PANEL	01
19	2'0"	6'0"	WOODEN DOOR WITH GLASS PANEL	01
20	2'0"	6'0"	WOODEN DOOR WITH GLASS PANEL	01

NOTE:

- 1. ALL WORK TO BE DONE IN ACCORDANCE WITH THE S.P. SPECIFICATIONS.
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PROPOSED CINAMON PROCESSING FACTORY FOR MR. G.G. MANGALA AT KIRIMETIYA, BATAPOLA

DESIGNED BY: ENR.K.K.SARANTHAKAR

CLIENT: MRS. B.R.A. FERNANDO

DATE: 20/11/2011

SCALE: 1/20

PROJECT NO: 11/11/11

DATE: 20/11/2011