REPUBLIC POLYTECHNIC

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H3310C Foodservice Facilities Design

COURSEWORK ASSESSMENT

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Executive Summary

This report aims to create a detailed plan for a Singaporean family restaurant and kitchen. It will consider the principles of foodservice facility design and the desired dining concept and menu. The goal is to establish a new Singaporean family restaurant that offers a variety of appetizers, soups, main dishes, and desserts. The report will suggest suitable equipment for food preparation, which will influence the overall design and layout of the restaurant and kitchen. Additionally, it will incorporate principles of kitchen design and restaurant layout to ensure smooth operations and account for emergency situations.

Introduction

A Singaporean family restaurant will be introduced, offering a range of authentic Singaporean dishes such as Kimchi Stew, Ginseng Chicken Soup, Kimchi Pancake, Spicy Rice Cake, Black

Bean Sauce Noodles, Singaporean Mixed Rice, Sweet Pancake, and Shaved Ice. To prepare these dishes, the restaurant will need stoves, pots, saucepans, frying pans, woks, rice cookers, and ice shaver machines. To ensure the proper preparation of these dishes, this report suggests a variety of essential equipment that will be required. This extensive list of necessary tools encompasses stoves for cooking, pots for boiling or simmering ingredients, saucepans for heating sauces or liquids, frying pans for sautéing or frying foods, woks for stir-frying delectable dishes, rice cookers for flawlessly cooking rice, and ice shaver machines for creating refreshing shaved ice treats.

Applying principles of Kitchen Design

a. Flexibility and Modularity

The layout depicted in Annex A can easily accommodate any changes because certain items, such as the ice shaver machines and rice cookers, can be shifted and relocated. This flexibility allows for the addition of new equipment, thereby increasing the likelihood of creating new menus.

b. Flow of materials and personnel

The equipment is arranged in a way that facilitates easy movement for the staff and makes it convenient for them to prepare meals and coordinate other food serving activities as suggested by Birchfield and Birchfield (2007). Furthermore, the trash bin is positioned close to the back door and the preparation counter to prevent cross contamination and streamline the waste disposal process.

c. Ergonomics

Below the freezer will be positioned beneath the raw food counter because we do not need a fryer. Additionally, it is a preferable option as it minimizes movement and reduces the potential for injury by having an additional freezer near the cooking stations (Bender & Tan 2018).

d. Ease of sanitation

The flow will comprise two counters available, one for cooked food items and another for raw food items. This arrangement minimizes the risk of cross-contamination between the two types of food.

e. Ease of supervision

To ensure efficient supervision of the staff in the food service facility, the restaurant manager will not have a wall partition, facilitating easier movements and effective communication as well prompt coordination during meal preparation and distribution (Tufano et al., 2018).

f. Space efficiency

Installing an under-counter freezer for raw food will speed up the process of storing cold/raw food for workers, eliminating the need for repeated trips to the food preparation counter. This measure ensures the safety of already cooked food by reducing exposure to germs. Furthermore, storage space will be created under the stoves to optimize available area (Tufano et al., 2018; Suga, 2021).

g. Appropriate choice of equipment based on menu

The menu designed needs a minimal equipment given that it can be utilized for all types of food dishes, leading to space and cost savings.

Applying principles of Restaurant Design

a. Flow of materials and personnel

The equipment is arranged based on the way it will be easy for the staff to move around and easy for them to prepare meals. The dustbin is position at door back and preparation counter to reduce cross-contamination and it eases for to be accessed for waste disposal activities.

b. Ergonomics

Ensuring an appropriate distance between the dining tables and chairs can prevent potential injuries or accidents in the kitchen, such as accidentally hitting the person behind when moving the chair fast as maintained by Bender and Tan (2018).

c. Space efficiency

Given that there are no decorative pieces in the restaurant dining area, the restaurant has an opportunity to improve its dining space by adding more tables, ultimately attracting more clients. As proposed by Suga (2021)

d. Choice of furniture

The furniture selected consists of couches that resemble barrels and wooden tables. The reason for choosing the barrel-like couch is that they can serve as both seating and storage for customers' bags, preventing them from being in the way when placed on the table during mealtimes.

e. Choice of floorings

Vinyl Flooring is most preferred for flooring because it is easy to install, resistant to water and scratches, and comprises a 25-year warranty.

f. Choice of lightings

For this case, LED lights will be utilized to enhance the brightness of the restaurant, thereby fostering a more positive and inviting atmosphere for our customers. Moreover, decorative lighting will be installed on the restaurant walls, with the majority of the lights suspended from the ceiling to ensure they do not obstruct the space (Bender & Tan 2018).

g. Overall design and sustainability to the concept

The design and sustainability of this concept will ensure the restaurant can continue its operations. For example, the kitchen flooring is durable, scratch-resistant, and water-resistant, which will save the restaurant money by eliminating the need for frequent floor replacements.

Conclusion

The objective is to establish a distinctive design for foodservice facility for a Singaporean restaurant as illustrated in the appendix section. The restraint aims to attract a wide array of clientele from the large Singapore and Asian communities, particularly teenagers and families. The food-service strive to convert this establishment into more than merely a venue for relishing delectable dishes. Equally, it will also serve as a meeting place for loved ones to forge enduring memories. To guarantee longevity and cost efficiency. The food service facility aims to employ water and scratch-resistant flooring that surpasses conventional alternatives, eliminating the necessity for frequent replacements. Furthermore, the proposed dining space design will showcase inventive designs, including barrel-shaped couches with concealed storage compartments for customers to securely store their possessions.

References

Bender, N., & Tan, Y. S. (2018). Place setting: Restaurant serviceware design to reconnect the diner with the food system. In *Experiencing Food, Designing Dialogues* (pp. 101-104). CRC Press.

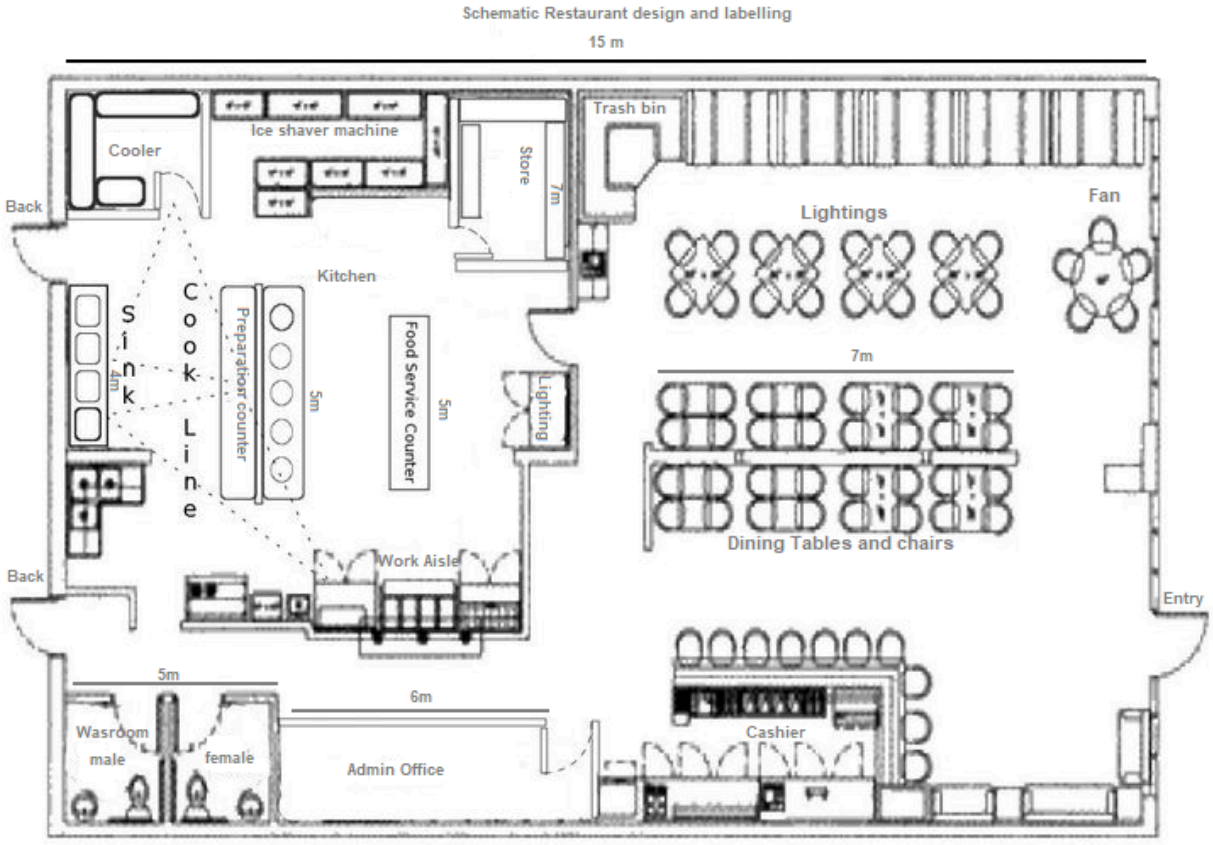
Birchfield, J. C., & Birchfield Jr, J. (2007). *Design and layout of foodservice facilities*. John Wiley and Sons.

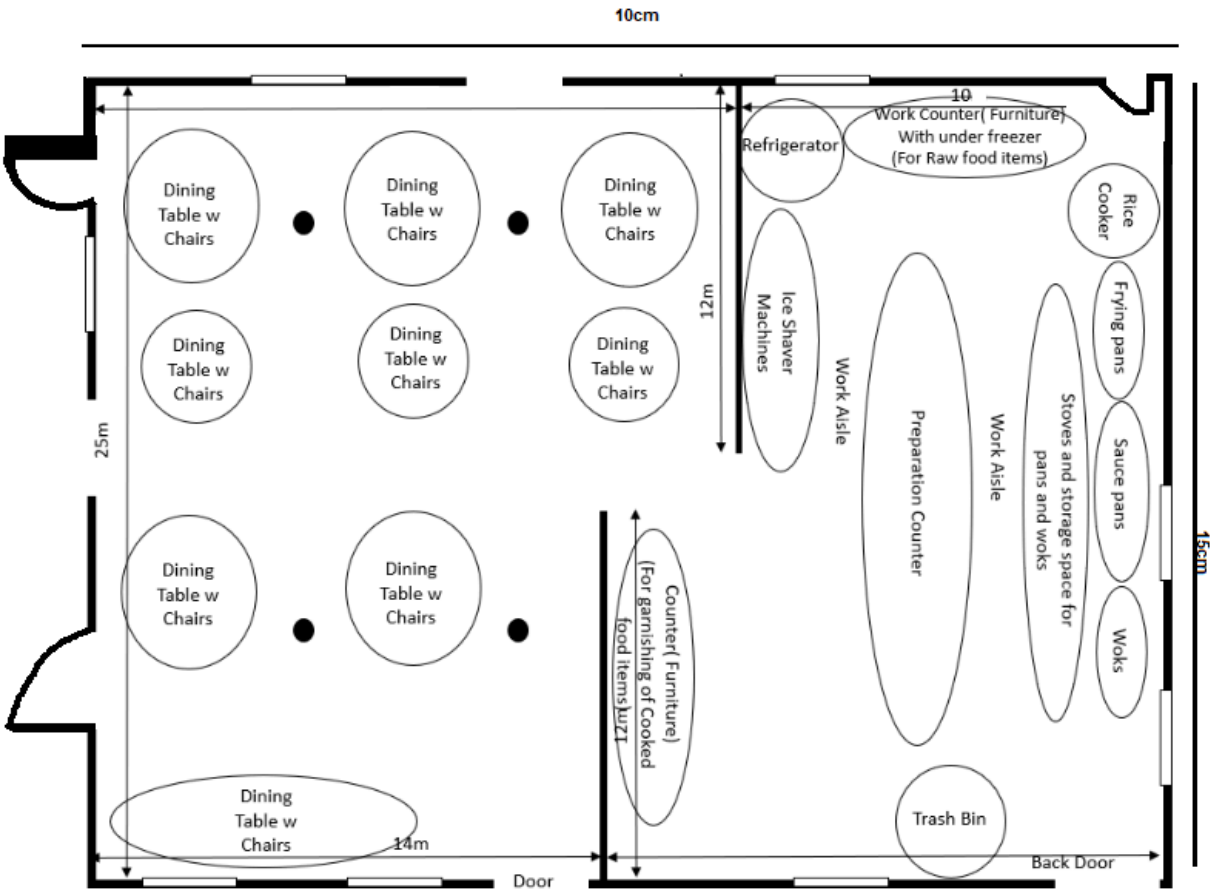
Tufano, A., Accorsi, R., Garbellini, F. and Manzini, R., 2018. Plant design and control in food service industry. A multi-disciplinary decision-support system. *Computers in Industry*, *103*, pp.72-85.

Suga, R., 2021. *Space Efficiency in Hotel Development* (Doctoral dissertation, Business Administration with a Specialization in Real Estate Management and Development, MODUL University Vienna).

Appendix

Schematic Restaurant design and labelling




10cm
Dining Table w Chairs
Dining Table w Chairs
Dining Table w Chairs
Dining Table w Chairs
Dining Table w Chairs
Dining Table w Chairs
Dining Table w Chairs
Dining Table w Chairs
Dining Table w Chairs
25m
12m
14m
Door
Refrigerator
10
Work Counter(Furniture) With under freezer (For Raw food items)
Rice Cooker
Ice Shaver Machines
Work Aisle
Preparation Counter
Work Aisle
Stoves and storage space for pans and woks
Frying pans
Sauce pans
Woks
15cm
Counter(Furniture) (For garnishing of Cooked food items)
12m
Trash Bin
Back Door