

# BEHIND THE DESIGN

THE ESSENTIAL QUICK SERVICE RESTAURANT  
ARCHITECTURE AND DESIGN GUIDE

## *WHAT'S INSIDE?*

Why You Should Get A Site Audit,  
The 4 Design Stages Explained,  
Executing The Perfect Drive-Thru,  
*And More!*

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## **BONUS:** The Ultimate 50+ Point QSR Design Checklist

Everything You Need To Know To Plan, Design  
and Construct Your New Project

# SERVING UP THE GOODS ON EFFECTIVE QSR DESIGN

In the Quick Service Restaurant business, the trick is to strike the perfect balance between speed, quality and consistency.

When it comes to designing your restaurant, all of these things can suffer if you rush or skip key steps that are essential to the design process: such as conducting a site audit, choosing the right design firm or expertly planning the floorplan or drive-thru.

This edition of Behind the Design provides valuable tips and insights to help you get the most from your QSR design – and your design firm.

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# GETTING YOUR SITE RIGHT

## HOW A SITE AUDIT CAN SAVE YOU FROM CHOOSING THE WRONG PROPERTY

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*So, you're looking for the perfect location for your hot new fast food restaurant. There are a lot of great commercial realtors out there ready to help.*

*The good ones can provide you with invaluable advice on choosing a location with high traffic flow – maybe a corner lot with access to passing traffic on two main streets. They can likely recommend a vibrant neighbourhood that matches your customer demographic. However, a realtor's expertise only goes so far.*

Choosing the wrong site or building can have costly long-term repercussions that can affect your profitability – and in some cases, impact the very viability of your business.

When it comes to evaluating the suitability of a site, it's never too early to get your restaurant design consultant involved. Contracting your design/engineering partner to perform a site audit before you commit to buying or leasing is one of the smartest business decisions you can make, and here are six reasons why:

### **1. THINK OF YOUR SITE AUDIT AS THE COMMERCIAL EQUIVALENT OF A HOME INSPECTION.**

Those who buy a home without getting a home inspection first do so at their own risk. The same goes for a pre-existing restaurant site, vacant retail space or undeveloped lot.

The purpose of a site audit is to ensure you are getting a safe, structurally sound building/property that will align with your design plans – and does not contain any hidden surprises that can require expensive repairs. Ultimately, a site audit is an investment in peace of mind and risk management.

Sometimes a building that looks fine at first glance will require significantly more work than you anticipated – which can add to the price tag, set back your planned opening date by months and potentially limit the services you can offer.

One of the most important (and often overlooked) structural elements is the roof. Most commercial buildings are designed with flat roofs, which can really take a beating in a climate known for constant freeze/thaw cycles. Given that you’re about to invest heavily in your interior design, you don’t want to risk having it all ruined by water damage. Roof repairs can be notoriously complex and costly. Before signing the contract and investing in a renovation, it is essential to have the roof membrane inspected and assessed as part of the site audit. Additional inspections for hazardous materials may be recommended.

**2. HAVE THE EQUIPMENT EVALUATED – INCLUDING MECHANICAL EQUIPMENT.**

Good news... the property you are looking at seems to have a kitchen equipped with everything you need: double grill, deep fryers, walk-in coolers, even milkshake machines. ***But how do you know you’re not buying a lemon?*** A full-service design partner, will be able to assess the equipment and provide you with an idea of the expected lifespan. Conversely, you may be advised to invest in new equipment that will better serve your needs.

A prime example of this would be the roof-top HVAC unit (RTU). The RTU is one of the more expensive pieces of equipment in a commercial building. If the building was previous used for retail, and you want to turn it into a restaurant, chances are the RTU will need to be upgraded to handle the additional heating/cooling loads.

*“BEFORE SIGNING THE CONTRACT AND INVESTING IN A RENOVATION, IT IS ESSENTIAL TO HAVE THE ROOF MEMBRANE INSPECTED AND ASSESSED AS PART OF THE SITE AUDIT”*

### 3. COVER YOUR BASES. CHOOSE A FULL SERVICE DESIGN FIRM TO CONDUCT YOUR SITE AUDIT.

While a generalist will catch most things, it is always advisable to have your site audit completed by a firm comprised of specialists.

- » An **electrical engineer** will review the existing panels, switchgear and electrical service to ensure it can safely and efficiently meet your consumption demands.
- » The **structural engineer** will evaluate the integrity of the building. He or she will also determine if the existing structure requires an RTU upgrade – and whether the building could handle the required system.
- » **Mechanical engineers** can give a thumbs up or thumbs down to the HVAC systems.
- » **Plumbing experts** will look for signs of past or potential problems.

### 4. SITE AUDITS ARE JUST AS VALUABLE ON UNDEVELOPED (GREEN SITE) LOTS.

Site audits are equally important when buying an undeveloped property. Choosing the wrong lot can restrict your opportunities as a business owner. And don't forget, lots always look bigger when there are no buildings or parking stalls built.

Your design/engineering partner will go through a checklist to ensure the site meets your specific needs.

They provide in-depth understanding of all applicable codes and bylaws and can accurately determine the size of building you can realistically expect to build. They can also advise you if the property is suited to a multi-lane drive-thru or simply a single lane offering – or if a drive-thru is possible at all (*typically, municipalities frown upon having drive-thrus directly adjacent to a residential development.*)

## 5. INTRICATE ZONING GUIDELINES SOMETIMES REQUIRE DEEPER INVESTIGATION THAN COMMERCIAL REALTORS CAN PROVIDE.

In most instances, commercial zoning is relatively straightforward. However, properties zoned Direct Control (DC) are a notable exception.

DC zones are typically assigned to environmentally or historically sensitive areas of the city. Due to the unique nature of these areas, DC zones are created to provide a special set of rules and guidelines, as well as permitted/discretionary uses that are different from the typical Residential, Commercial, Industrial, and Agricultural zones. Each of these unique areas is typically assigned its own DC zoning, with specific guidelines that only apply for that particular area.

The good news is that DC properties are often approved for retail businesses. Unfortunately, the authorized land use is not black and white, as the “controls” can sometimes restrict development. On top of that, the rules around DC zoning can vary within a city or municipality.

There have been cases where business owners buy a property zoned direct control only to find out later that they are unable to install a drive-thru, or that only a limited number of parking spaces are permitted.

As part of the site audit, a design and consultancy firm will directly contact the city planning or municipal zoning department if there is cause for concern. Drawing on an understanding of the client’s plans for the property, pertinent questions can be asked and appropriate assurances obtained before the client commits to signing the real estate offer. If the zoning proves to be restrictive, your design firm can advise if it’s necessary to search for another location.

*“DC ZONES ARE CREATED TO PROVIDE A SPECIAL SET OF RULES AND GUIDELINES, AS WELL AS PERMITTED/DISCRETIONARY USES THAT ARE DIFFERENT FROM THE TYPICAL RESIDENTIAL, COMMERCIAL, INDUSTRIAL, AND AGRICULTURAL ZONES.”*

## 6. THE FOUNDATION FOR YOUR SUCCESS.

Don't be saddled with a restaurant site that limits your opportunities, or has the potential to become a bottomless money pit. Making the sale conditional on completion of a professional site audit is a valuable exercise in due diligence and investor/owner confidence.

When your site audit comes back with a glowing recommendation, and your offer is accepted, you can breathe easy and finally pop some champagne to celebrate new beginnings.



# YOUR BIGGEST DESIGN DECISION

## HOW TO CHOOSE A QUICK SERVICE RESTAURANT DESIGN FIRM

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Whether you are building a fast food restaurant using an existing corporate plan or template, or are creating an independent restaurant from scratch, you will require the services of a professional design consultant.

A design consultant will be able to customize your design plans to your exact needs and ensure they conform to the local codes and regulations.

So how do you go about choosing a design consultant? Here are five questions you need to ask.

### 1. IS THE DESIGN FIRM TRULY INTEGRATED AND FULL-SERVICE?

Designing a restaurant requires the expertise of a multidisciplinary team. An integrated firm will typically have the following specialists on staff:

- » Architects and Interior Designers
- » Engineers, Draftsmen and Technical Staff who are experts in the fields of:
  - » Electrical Design
  - » Mechanical Design
  - » Structural Design
  - » Civil Design
- » Stamping Engineers who are licensed and authorized to stamp blueprints within your jurisdictions – making it convenient and easy to complete any project wherever you operate.
- » A Project Manager will also be assigned to guide the team and ensure they are all working towards the same goal.



There are many benefits to choosing a design partner that offers all services under one roof, including:

1. Faster, more responsive service.
2. Clearer lines of communication and understanding between team members.
3. Superior coordination and the ability to reduce/shorten project timelines.
4. Integrated firms are typically cheaper than smaller firms, which sub-contract the engineering work out to third parties.
5. As a client, you will only need to deal with one firm, instead of multiple consultants.

Some firms claim to offer all key services in-house, but sub-contract these services to outside suppliers – typically at marked up prices. Do your homework and ensure that when they say they are full service, they truly are.

## 2. DO THEY HAVE PROVEN EXPERIENCE IN THE FAST FOOD RESTAURANT BUSINESS?

You don't want a design firm that is learning on the job. Especially when it's your job! Designing restaurants, especially those with drive-thrus, requires specialized knowledge and skillsets. Your project will benefit immensely from working with a design partner who is able to draw upon the experience they've gained on similar projects. Their wisdom and insights allow them to work more efficiently, to anticipate challenges, and avoid costly mistakes.

Ensure the design firm knows its way around a kitchen and understands the essential elements of efficient work flow. In many cases, as franchise owners move to smaller sites, it is more important than ever to have faith that the design team can translate the corporate look and feel into a customized solution that works.

*“THEIR WISDOM AND INSIGHTS ALLOW THEM TO WORK MORE EFFICIENTLY, TO ANTICIPATE CHALLENGES, AND AVOID COSTLY MISTAKES.”*

### **3. IS THE FIRM LICENSED TO PRACTICE CANADA-WIDE AND ARE THEY VERSED IN LOCAL CODE?**

This is an important question to ask if you plan on opening franchises in multiple provinces or different cities within the same province. It is vital that the firm is accredited in the province and is familiar with the local requirements around code, zoning and other pertinent regulations.

Codes and regulations differ dramatically from province to province. Some larger municipalities such as Vancouver and Toronto even have their own set of building regulations. It's imperative to ensure the design firm you are hiring is aware of what versions of codes and regulations are applicable based on the location of your project.

### **4. ARE THEY GENUINELY INTERESTED IN AND COMMITTED TO A LONG-TERM RELATIONSHIP?**

When you find a design firm that is truly engaged in what you are doing and is invested in your continuing success, it can be magical.

You should feel confident that you can rely on your design firm as a trusted advisor who will deliver as promised and provide honest advice and practical strategies for rolling out your restaurant(s) in an efficient and timely manner.

If something is not possible, your design firm should let you know upfront. It may mean telling you that the permitting process will take longer than you have allowed for in your project schedule. Or it could be a recommendation to reconsider the sequence of multi-restaurant builds to better meet site-specific conditions.

### **5. FINALLY, DOES IT FEEL LIKE A GOOD FIT?**

Before you choose a design firm, you should meet with them in-person if possible. Get to know their key people, their approach and values. Find out about their qualifications and capacity to handle your project. Ask questions; lots of questions! Make sure they have an appreciation of the scope and challenges of your project. Most importantly, always get references.

Choosing the right design firm will make your life infinitely easier and will save you from unnecessary stress and costs in your efforts to open for business.

# CTM DESIGN WALK-THROUGH

## THE FOUR KEY STAGES IN THE QSR DESIGN PROCESS

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What are the steps involved in the QSR design process? CTM would like to walk you through the steps using a *customized Tim Hortons new restaurant build* we worked on as an example: The 64th Avenue Tim Hortons in Calgary's Deerfoot City Mall. Pour yourself a double-double and read on...



## CONGRATULATIONS ON YOUR DECISION TO OPEN A QUICK SERVICE RESTAURANT! IT COULD BE THAT YOU HAVE PARTNERED WITH A FRANCHISE. OR PERHAPS YOU ARE BRINGING YOUR VERY OWN CONCEPT TO LIFE. EITHER WAY, IT IS AN EXCITING TIME.

Once you have secured your location (be it a standalone restaurant or retail bay), you'll need to partner with an accredited architecture and engineering firm to design your restaurant.

There are typically four stages to the design process:

### 1. THE PRELIMINARY DESIGN STAGE

To begin, the design firm will work with you to determine the scope of the project. Based on the footprint of your site, they will provide you with three sets of preliminary drawings:

- I. The Concept/Floor Plan – This is a basic framework of the building indicating roughly what goes where – eg. doors, kitchen, service area, seating area, washrooms.

Most franchises will provide the design firm with a template known as a Design Standard to work from. This will have to be tailored to meet the unique dimensional requirements of your particular space, and all applicable local bylaw/building code requirements.

For independent restaurants, the design firm will be starting with a blank page and will create a floorplan based on your needs and vision.

- II. The Site Plan – These drawings cover everything from parking to site access to utility tie-ins to pedestrian walkways. The site plan is guided by municipal zoning and land use requirements.
- III. Exterior Elevations – Exterior elevations are a set of drawings that show the building within the context of the overall development. This is where any architectural controls are taken into consideration.

In the case of the 64th Avenue Tim Hortons, CTM was required to bring some innovative thinking to the table in terms of both the floor plan and the elevations.

The two standard sizes for a Tim Hortons standalone restaurant are 2,400 sq. ft. or 3,000 sq. ft. This particular location required a 2,700 square foot design (right in the middle!) The design team at CTM adapted the design standard to fit this unique footprint, taking cues from both the larger and smaller restaurant layout. Once CTM put together the initial floorplan, it was reviewed with the team at Tim's, incorporating their feedback.

Deerfoot City Mall had very strict architectural controls in place to create a common look and feel for the development. This included wood paneling exteriors, decorative stonework and a contemporary wrap-around glass awning. CTM's challenge was to integrate these requirements within the design, while maintaining Tim Horton's brand-integrity.

Another challenge facing CTM's design team involved an elevated pedestrian pathway that looked down on the restaurant. This meant that the rooftop units and condensers would be visible to the public. To remedy this, CTM proposed a raised parapet on the roof. This false wall would hide the units from view to maintain a tidy, professional appearance. While CTM develops the site plan on 99% of projects, Tim Hortons has its own Civil Engineering department, so our expertise was not required in this instance.



## 2. THE DEVELOPMENT PERMIT PACKAGE STAGE

Once the client approves the Preliminary Design drawings, additional detail is added and the drawings are submitted to the municipality for Development Permit approval.

At this stage, the City is reviewing the plans for adherence to the Land Use Bylaw, facility use, and design 'form and function'. In addition, the planners will review the exterior design – including signage.

They will either approve the package as submitted or may require changes. Usually revisions are quite straight forward. In some cases, there may be several rounds. Experienced design firms will account for this possibility when developing their design schedule.

## 3. THE DETAILED WORKING DRAWING STAGE

Once the Development Permit package is approved, the design firm will integrate complete electrical wiring schematics and mechanical requirements into the drawings. If required, structural drawings will be provided. At this point, even greater attention goes into the exterior design. When it comes to the final drawings for a standalone restaurant, most municipalities require sign-off from an architect and engineers. An integrated architectural and engineering firm will have all capabilities in-house and will be certified to "stamp" the drawings.

In the case of our Tim Hortons project, architect Charl de la Harpe fought hard to retain Tim Hortons trademark window awnings and gooseneck lamps. While there were several rounds of communication with the landlord, it was an amicable, collaborative process. "There is always give and take on both sides. That said, a national franchise may have a little more leverage than an independent restaurant in negotiating accommodations within an architectural guideline," Charl de la Harpe explains.

CTM's engineering team was put to the test when it came to the roof. The raised parapet demanded extra reinforcement to handle Calgary's heavy snow loads. Additionally, this location sits along the flight path of Calgary International Airport. Birds and planes don't mix. To deter birds from gathering on the roof top, CTM was required to devise a solid ventilated rooftop enclosure to replace the standard mesh screens.

## 4. THE CONSTRUCTION STAGE

Once the drawings have been finalized, stamped and registered with the municipality, construction can begin.

That does not mean the design team’s job is done. Far from it! The engineering and design firm will make itself available to brief the contractor and answer any questions. Ultimately, the design firm is responsible for inspecting the contractor’s work throughout key phases of construction to ensure it conforms to the approved drawings.

While it was not required on this project, a full-service engineering company (such as CTM) can offer complete Tender Support. They will provide a detailed package to bidders that includes all drawings, scope of work, material specifications, lease agreements and other essential documents. The firm can answer any questions the bidders may have, review all bid submissions, provide a summary of each and offer an ultimate recommendation.

According to CTM Project Manager, Ryan Guanlao, there is more to evaluating a bid than just looking at the bottom line estimate. He shares some important advice for clients who are building a restaurant for the first time.

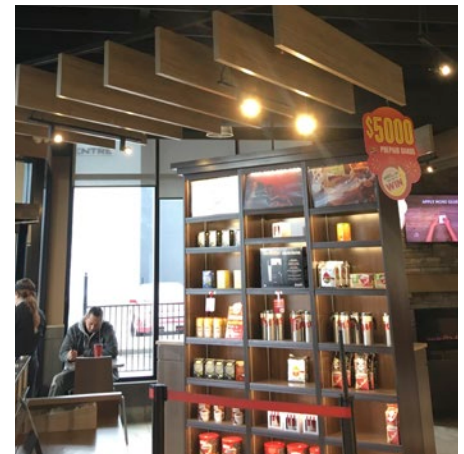
“Often, inexperienced contractors will miss things in their quotes that more experienced ones will account for. So, while one price may appear lower, the change orders can quickly add up. That low bid can end up costing you more in the long run, and can significantly set back your construction schedule.”



## SUPPORT AT EVERY STAGE

Chances are you won't be building in an airport's flight path, and your site may or may not be subject to architectural controls. But no matter how simple or complex your build is, it is important to team up with a design firm that inspires confidence every step of the way.

Before your hire, be sure to ask if they have the in-house resources and expertise to handle your project at every stage – and are committed to providing a premium customer experience.





# WHY LAYOUT PLANNING MATTERS

## FOUR KEY CONSIDERATIONS WHEN DESIGNING YOUR QUICK SERVICE RESTAURANT

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When a customer enters your restaurant or tries to navigate your parking lot, they generally don't pay much attention to whether the layout is well thought out. But if it is poorly planned, they will notice in a hurry. Awkward, inconvenient, and unsafe restaurant design adversely affects your ability to offer great service, and dissatisfied customers can be quick to take their business somewhere else.

Here are four key considerations that should guide your layout.

### 1. OPERATIONAL EFFICIENCY

Whether you're dining in or using the drive-thru, fast food is about quick, convenient service. Successful restaurants run like a well-oiled machine — with all moving parts working in unison. A well designed store allows each employee ample space to comfortably perform their specific task; it allows staff to work as efficiently as possible, with care and attention given to practical placement of coolers, equipment and supplies, so a cook doesn't have to walk 30 steps from the freezer to the fryer for example. It also ensures customers have plenty of room to line up, sit down and enjoy their meal.

Visit a poorly designed restaurant, and you'll notice a huge difference in the team's ability to get food out in a timely manner. *As a result, customers become impatient and management feels the pressure of poor service.*

The key takeaway is that good design and layout makes for a less stressful, more enticing environment for your employees and customers. Poor design puts everyone on edge.

## 2. SAFETY

Fast food service has many potential job hazards when a site is not properly designed.

**Inside layout considerations:** Special care and planning must go into the placement of grills and deep fryers to prevent your cooks from accidents that can cause serious burns. Design firms that specialize in fast food restaurant concept and layout are familiar with how restaurants work, and can anticipate how much space is required for safe and efficient food service. While much of it is dictated by code, experience and common sense are invaluable in getting it right.

**“Egress”** is a safety and fire code requirement that is in place to ensure staff and customers can easily exit the building in the event of a fire or other unforeseen incident. Your design firm is responsible for ensuring the blueprint conforms to egress requirements, but store managers also play a role. For example, pop or other goods cannot be stored in front of an electrical panel or exit ways. If an exit is even partially blocked and an inspector comes by, you will be subject to fines. This is why it is important to work with a designer to ensure you have adequate storage space and are not in a position where you are violating fire code and potentially endangering workers and customers.

**Outside layout considerations:** Drive-thru lanes and parking lots must be carefully laid out to prevent accidents, but also to minimize customer frustration. (See our article on Drive-Thrus).

## 3. THE LITTLE EXTRAS THAT MAKE A BIG DIFFERENCE

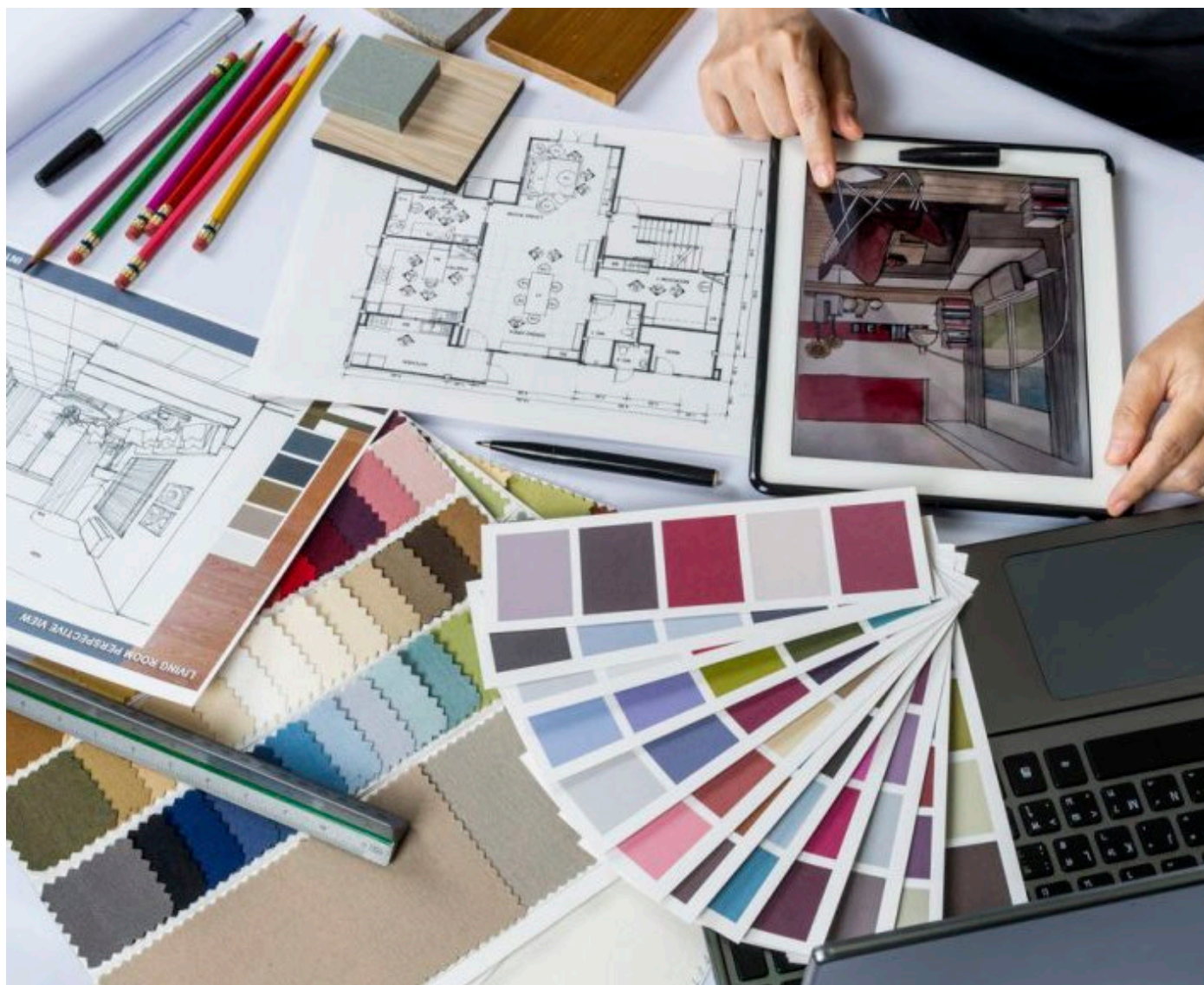
Smart design extends throughout the restaurant. Take the bathrooms for example: a little extra space will be welcomed by customers, and will make your restroom easier and faster to clean. Even the way in-store garbage cans and condiment areas are situated will improve efficiency and reduce mess.

There are also code requirements that must be incorporated. Restaurants must have at least one wheelchair accessible washroom that is barrier-free for ease of maneuverability. A good design firm will accommodate code and go beyond the bare minimum.

#### 4. GREAT DESIGN BEGINS WITH AN INFORMED CONVERSATION

When you first meet with your design firm, it is important to let them know your vision and priorities. For example, will the bulk of your business come from the drive-thru or in-store traffic? How many customers do you expect in your restaurant at peak times? Will the majority of customers eat-in or take out?

The decisions you make at the blueprint stage will impact your business for years to come, so be mindful how your design choices will impact your operations.



# DRIVEN TO SUCCEED

## EXECUTING THE PERFECT DRIVE-THRU

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A 2014 report on Canadian Quick Service Restaurants revealed that 75% of Quick Service Restaurants offered drive-thru service.\* Seventy-five percent! If you'll pardon the pun, it's all driven by the needs of a society that is constantly on the go — rushing to work, children's soccer practices and birthday parties, or to family and social gatherings.

As a result, the ability to offer convenient drive-thru service is becoming a make-or-break proposition for QSRs. Which is why it's crucial that the restaurant site is professionally designed by a firm with expertise and experience in this area.

Through proper planning, needs and challenges can accurately be anticipated in advance. Put your drive-thru in the fast lane to success with these five key considerations to building the perfect drive-thru:

### STEP 1: IT ALL BEGINS WITH A NEEDS ASSESSMENT

Before you even begin to develop a site plan, it is important to have a firm grasp on projected traffic volumes and expected sales. Consultants such as Site-Check Research Group can provide you with accurate sales projections based on current and future needs. Armed with this information, your design partner can start planning from an informed position.

*"A 2014 REPORT ON CANADIAN QUICK SERVICE RESTAURANTS REVEALED THAT 75% OF QUICK SERVICE RESTAURANTS OFFERED DRIVE-THRU SERVICE."*

## STEP 2: THE SIZE AND CONFIGURATION OF YOUR LOT DETERMINES DESIGN & LAYOUT

The size and configuration of your site will largely dictate the layout and the design of your drive-thru. Your design firm will help you determine what is possible based on numerous factors, including:

- » The size and shape of your lot
- » Street access—entrance and exit points
- » Safe onsite traffic flow
- » Overflow areas for queuing
- » Parking stall requirements
- » Integration with other onsite services (e.g. gas bar or car wash)
- » Visibility from street traffic

Municipal guidelines will play a significant role in determining what is and isn't possible, as regulations involving setbacks, parking, landscaping requirements, as well as fire, traffic and pedestrian safety come into play. Your design firm must have a thorough understanding of all applicable code and regulations associated with a drive-thru.



### STEP 3: TRAFFIC MODELLING SOFTWARE – THE DESIGNER’S SECRET WEAPON

Any good design firm that specializes in drive-thru layout and design will insist on using advanced CAD-based traffic modelling software as part of its design and planning process (such as AutoTURN). This amazing technology takes the guesswork out of site layout, and helps you plan for worst case scenarios to ensure your drive-thru is built right.

The design firm will run its proposed site plan through the software. An on-screen display will actually show how various types and sizes of vehicles will maneuver through the site. It will help identify:

- » Optimal layout to ensure fast, safe, and efficient service
- » Length of queuing lanes based on average wait times
- » Potential queuing problems and bottlenecks
- » High risk accident points
- » Ability of vehicles to maneuver around the site
- » Interaction of all onsite vehicles

The AutoTURN system includes over 800 vehicle types and models in its database. It can reveal if a large truck such as a Ford F-250 can safely negotiate your drive-thru without hopping a curb. It can even account for vehicles hauling trailers.

### STEP 4: SAFETY IS YOUR NUMBER ONE PRIORITY

Sales takes a back seat to safety when designing a drive-thru. If your customers feel unsafe—whether they are in their vehicle or on foot—they will simply stop frequenting your business.

Entranceways and pedestrian crosswalks must be carefully planned as not to intersect the drive-thru lanes. Bollards and curbs should be strategically placed to protect your building, menu boards and landscape features from damage.

Smart design will go a long way to preventing accidents, whereas, bad design can cause frustration and lead to impatient, unpredictable drivers.

### Step 5: Don't Forget Landscaping

Landscape planning is an important part of any site design. Placement of shrubs and trees isn't merely for ornamental purposes. Often it is done to create natural barriers for the benefit of neighbors, as foliage can provide an aesthetic visual screen and absorb traffic noise. Well-placed garbage bins will help keep your site tidy and clean.

Designing a safe and efficient drive-thru can be tricky, so make sure your design firm is up to the challenge.

\* Source: Statista.com





# READY TO TAKE YOUR ORDER

## AN INTERVIEW WITH SUNNY TANG OF CTM

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*For 25 years, CTM has specialized in quick service restaurant, c-store, gas bar and retail design. Based in Calgary, CTM has successfully designed countless QSR locations from Victoria to Ottawa. We sat down with CTM Project Manager, Sunny Tang to learn more about CTM's customer-focused approach.*

### **Q. What QSR franchises has CTM worked with?**

**A.** Over the years CTM has become a trusted design resource for Tim Hortons, McDonalds, A&W and Carl's Jr... just to name a few. We work both at corporate level and with individual franchise owners.

### **Q. What about independents?**

**A.** I'd say about 20% of our projects involve independent or small-chain restaurants. They are great to work with, and often allow us to showcase the talents of our architectural and interior design teams. We can even help independents establish the design standards that will apply to future locations when the business takes off.



**Q. With franchises, aren't the blueprints and designs all determined at the corporate level? Why do they need a design firm like CTM?**

**A.** Creating consistency from store to store is the key to the success of any major brand. All franchises will have a "Design Brand Standard" which provides detailed guidelines around restaurant layout and brand requirements.

Yet every building is slightly different, and building code and municipal bylaws vary greatly from province to province – even town to town. That's where we come in. Our job is to tailor the design to fit the individual space and marketplace.

**Q. What is CTM's recipe for success?**

**A.** I'd say there are three key ingredients. First, our integrated team. We have the all of the necessary design, architectural and engineering expertise under one roof – which makes things super easy for our clients – and allows for greater efficiency as the entire team is on the same page.

Second, we've worked in just about every small to large market across Western Canada and all major markets in Ontario. So we're familiar with the unique design requirements in each jurisdiction, and have a solid working relationship with municipal authorities.

Third, we go to great lengths to understand each client's needs, vision, workflow processes and priorities. As part of this, we put ourselves in the customer's shoes and really think through the things that matter most to them: such as the placement of menu boards, easy-to-navigate drive-thrus, well-placed condiment and beverage stations, community-friendly landscaping, waste receptacles and washrooms.

*"EVERY BUILDING IS SLIGHTLY DIFFERENT, AND BUILDING CODE AND MUNICIPAL BYLAWS VARY GREATLY FROM PROVINCE TO PROVINCE – EVEN TOWN TO TOWN. THAT'S WHERE WE COME IN. OUR JOB IS TO TAILOR THE DESIGN TO FIT THE INDIVIDUAL SPACE AND MARKETPLACE."*

**Q. Does CTM have experience renovating or rebranding multiple locations under tight timelines?**

**A.** Between 2012 and 2014, CTM handled the design work for over 50 Tim Horton’s locations (a combination of new builds, renovations and tenant improvements).

While most franchise groups typically allow six to eight weeks per restaurant to produce a working drawing package, Tim’s aggressive build schedule required the work to be done in four weeks!

If CTM wasn’t an integrated design firm, we probably could not have pulled it off. Fortunately, we had all of the expertise in-house. For example, if there was a question a mechanical engineer could walk a few steps to consult with the electrical engineering team to come up with a timely solution.

**Q. What is the tastiest project you’ve sunk your teeth into?**

**A.** No matter how big or small, we find them all pretty satisfying!

CTM offers a comprehensive menu of services to its QSR clients:

- » Site planning
- » Drive-thru planning and traffic modelling
- » Electrical, mechanical, structural and civil engineering
- » Landscape design
- » Architecture and interior design
- » Concept design (architectural drawings & 3D models)
- » Floorplan design and space utilization
- » Restaurant equipment
- » Menu boards, drive-thru ordering systems and signage
- » Food Service/Health Permit
- » Development and Construction Permits
- » And much more

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**ARE YOU PLANNING TO BUILD A NEW QSR STORE OR RENOVATE ONE OR MORE EXISTING LOCATIONS?**

Contact CTM for all of your design, engineering and planning needs.

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# THE CTM QUICK SERVICE RESTAURANT DESIGN CHECKLIST

*Based on nearly 20 years of experience providing engineering, design and architectural services for quick service restaurants throughout western Canada and Ontario, CTM has developed the QSR Design Checklist. Use this helpful resource to guide you through the key planning, design and construction phases of your project.*

## PRIOR TO SIGNING YOUR LEASE

- » **Market research:** Engage a professional research firm to identify pros, cons and opportunities of community and site where you are looking to build.
- » **Site audit:** Hire a qualified engineering firm to provide a 3rd party evaluation of the building, infrastructure, all equipment and mechanical systems.
  - Is this building/site suitable to your needs?  Yes  No
  - Are substantial renovations or upgrades required?  Yes  No
  - Are there architectural controls\* to be aware of?  Yes  No
  - Do utility placements and right of ways impact design?  Yes  No
  - Adequate parking? Setbacks? Site access?  Yes  No
  - Does existing mechanical & electrical service/equipment support a QSR?  Yes  No
  - Does existing HVAC system need to be upgraded?  Yes  No

\* Applicable to new developments only.

## CHOOSING A DESIGN AND ENGINEERING PARTNER

- » Choose a full-service engineering and design firm.
  - Do they have extensive QSR experience?  Yes  No
  - Are all services offered in-house? Electrical, mechanical, structural, civil engineering; architecture and design; drafting; permitting?  Yes  No
  - Do they have a detailed project management system in place?  Yes  No
  - Are they licensed to practice in your jurisdiction and familiar with applicable code and bylaws?  Yes  No
  - Are their proposed timelines and budget numbers realistic? Have they accounted for potential delays in the approval process?  Yes  No
  - Have you checked their references?  Yes  No

## PRELIMINARY DESIGN STAGE

- » **Pre-planning meeting:** to discuss your needs, wants, priorities and vision for the site (current and future).
  - Has the design firm demonstrated they understand my project?  Yes  No
  - Did they answer all my questions? Did they ask good questions?  Yes  No
  - Will they be providing a timeline with key milestones?  Yes  No
  - Have you shared the design standard (if applicable)?  Yes  No
- » **Concept/floor plan:** Drawings outlining basic framework and rough in of key components.
  - Do the drawings meet your requirements and approval?  Yes  No
  - Has a kitchen equipment supplier reviewed and approved the layout?  Yes  No
  - Has the design firm confirmed the concept floor plan complies with all applicable code requirements?  Yes  No

- » **Site plan:** Drawings covering the site (road access, parking, utility tie-ins, walkways, etc.)
  - Have all in-scope items been included?  Yes  No
  - Does parking count meet the municipal requirement?  Yes  No
  - Does drive-thru lane provide sufficient stacking spaces?  Yes  No (this is only applicable for a new development)
  - Does site design promote safe and efficient onsite traffic circulation?  Yes  No (this is only applicable for a new development)
  
- » **Exterior elevations:** Drawing indicating your building/space in context of surrounding development.
  - Are there any architectural controls\* to consider?  Yes  No
  - If applicable, has the landlord/developer approved the exterior design/signage locations?  Yes  No
  - If applicable, has restaurant franchise approved the exterior design/signage locations?  Yes  No

\* *Applicable to new developments only.*

## DEVELOPMENT PERMIT STAGE

- Have client-approved drawings been submitted to the municipality for the Development Permit?  Yes  No
- Do you need to prepare a presentation for a community open house or municipal approval process?  Yes  No
- Have you received your Development Permit?  Yes  No

## DETAILED WORKING DRAWING STAGE

- » Proceed with detailed electrical, mechanical, architectural, site civil and structural drawings.
- » Approvals
  - Has restaurant franchise reviewed and approved the working drawing package (if applicable)?  Yes  No
  - Has the landlord/developer approved the working drawing package (if applicable)?  Yes  No
  - Have the final “stamped” drawings submitted to municipality?  Yes  No
  - Has Building Permit approval been obtained?  Yes  No
  - Has Health Department approval been obtained?  Yes  No

## CONSTRUCTION STAGE

- » Seek tenders from construction contractors with tender support from your engineering partner.
  - Have you included the following in your bid package?
    - » Drawings  Yes  No
    - » Scope of work  Yes  No
    - » Project timelines  Yes  No
    - » GC vs. owner-supplied equipment/materials  Yes  No
    - » Evaluation process  Yes  No
    - » Materials specifications  Yes  No
    - » Lease agreement  Yes  No
    - » Other documents \_\_\_\_\_

- Have you given vendors an opportunity to ask questions?  Yes  No
- In your evaluation have you graded the vendor based on:
  - » Qualifications and experience  Yes  No
  - » Understanding of project  Yes  No
  - » Budget and timelines  Yes  No
  - » Are they realistic? All components accounted for?  Yes  No
  - » Do they factor in contingencies?  Yes  No
- Have you checked the contractor's references?  Yes  No
- Does all work conform to the approved drawings?  Yes  No
- Have all municipal inspections been scheduled and passed:  Yes  No
- Has the design/engineering firm conducted all inspections required for sign-off?  Yes  No
- Have all inspection deficiencies been resolved?  Yes  No
- Do you have the final Occupancy Permit?  Yes  No

## OPEN FOR BUSINESS!



## DESIGN FOR SUCCESS

For professional expertise and support through all phases of your QSR planning, design and construction, partner with specialists at CTM. Contact us today to discuss what we can bring to your project.

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