

Restoration of Fast Food Building

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T I T L E P A G E

This report had been prepared to explain the restoration process taken to an existing commercial (free standing) building located in the parking area of an "L" shaped strip mall. The subject building was built sixteen years ago as a fast food restaurant, and was closed and boarded up nearly 9 years ago. In the late fall, early winter of 1993 the owner/developer elected to reopen the store for its initial intended use (a fast food restaurant.) The building is located at 1520 Sycamore Rd. in DeKalb, Illinois. A brief Descriptive Statement has been prepared in the form of a "Scope of Work". However, the scope of work was prepared after-the-fact. As the information became available, the scope was constantly changing.

The initial degree of restoration required was not as involved (intense) at commencement as it became once we actually started doing the work which is many times the case. This was due to the fact that the owner/developer did not come to terms with any particular fast food restaurant franchisee before the work began.

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S C O P E O F W O R K

(After the Fact)

The building facility, an old "Long John Silver's" fast food restaurant has been closed for business since 1985. The building has been vacant without connected utilities and any general or scheduled preventive maintenance pulled on it since its closing. A complete removal and replacement of all HVAC, plumbing and electrical systems was required, including all interior surface finishes. The Toilet Rooms were upgraded to meet new ADA requirements. The total square foot of the building was increased from 1780 to 2036. The size of the Dining Area remains the same. The Serving, Cooking, Storage and Prep Areas changed partially in size and location. The existing exterior walk-in cooler/freezer unit was removed and replaced with a new and larger unit. An 8'x 22' Storage Area was added to the back of the building. Behind this an 8'x 20' slab was poured for the new freezer/cooler unit. A new 8'x 10' Drive-Thru addition with concrete curbs and cutters, and an asphalt paved Drive-Thru lane was also added onto the side of the building. Although an old style building, the interior layout (floor plan) was modified along with the interior decor (finishes) and exterior building enhancements (lighting, signage, and a cupola) to resemble the most modern and up to date store being build within the Long John Silver franchise system today.

The building having a footprint (outside dimensions) of 34'x 52'-4" equaling approximately 1780 square feet was built in 1978 by the existing developer of the strip mall and was leased back to Long John Silver's as a corporate owned store. The lease term was for 15 years which ended this past September. The store was managed poorly from the beginning and never did the annual sales volumes required of a corporate owned store. Added to this the store was never maintained in the proper manner necessary for a building of this type and use. Long John Silver's made a corporate decision to close this store in the fall of 1985. At that time they removed some interior equipment, fixtures, the seating package and smallwares to be used at other stores where needed within the area. All utilities to the building were disconnected, antifreeze was put into the plumbing traps, the windows and doors were boarded up with plywood. At this point the building was left to stand vacant for the next eight years.

During the later years of the lease period when the building was closed, Long John Silver's was still obligated to pay the landlord a monthly lease payment and to maintain the interior and exterior of the building. The owner tried several times to break the lease and reopen the building for either another fast food restaurant or some other use. However, Long John Silver's refused to break the lease. Due to its location and design, the buildings highest and best use was still a fast food restaurant. Long John Silver's knew this and refused a lease buyout.

When the lease finally ran out the owner tried to renegotiate with Long John Silver's to reopen the store. After 3 (mid December) months of consideration Long John Silver's declined and the owner/developer elected to become a Long John Silver's franchisee himself.

Since the tenant failed to maintain the building and prevent its rapid deterioration during this long time of sitting vacant Long John Silver's had to make compensation to the owner for the necessary cost of repairs to restore the buildings condition back to a marketable property. Obviously, the amount was never paid out in cash money, but negotiated out in trade for initial franchise fees, and the monthly 4% royalties due Long John Silver's were waived for an agreed period of time.

I was asked by the developer to scope the job and give him my opinion and estimate as to the time and amount of work necessary to restore this building back to a condition where it could once again function as its initial intended use.

The owner was keen enough to realize the existing building, in its present condition would never make it through another winter.

The cause and effect of the damage was clearly not a matter to be handed the insurance adjuster.

Due to the time of year, and existing building condition

this became a time-is-of-the-essence job in order to prevent further damage to the structure.

The owner/developer elected to absorb these costs initially himself and seek Long John Silver's for negligence in their preventive maintenance program, or lack thereof.

The owner and I performed our initial site visit on a cold and damp day in mid November. As soon as we opened the door the smell of stale moist air was nearly overcoming. Mold, mildew and rust were visible throughout. The electrician had been there the day before and got just a few temporary lights in operation. Standing water was present on the floors. The roof had several holes/openings allowing the daylight and outside weather to penetrate the building. Saturated ceiling tile, drywall and insulation were hanging from the ceiling structure and decomposing on the floor in the water.

It was clear that a long period of neglect had caused these conditions, this was not recent damage. A building will deteriorate much more rapidly when closed up and left vacant than when used daily under normal wear and tear operations.

I was given full control of this restoration project and allowed to use my own judgment and personal experiences to restore the building. Due to the amount of deterioration, concealed conditions and unknowns this work could not be bid without several contingencies and exclusions. A preliminary budget was

established to correct the immediate problem, but carried little weight over the long term. It was only a benchmark, a starting point to which we kept adding. It was agreed to perform the work on a time and material basis.

Since the owner/developer is also a general contractor, a broker would be a better term since he has three office employees, my involvement was to act in the capacity as working project manager, and job superintendent. We used all the owners mechanical, roofing, and finishing subcontractors; all on a time and material basis. My scope included all the demolition, new building layout, rough and finish carpentry, and general labor work for all the subs.

As previously mentioned, because of its location and design the highest and best use was still to return the building to a fast food restaurant. At this point the owner had no particular end user (franchisee) in mind. The building could be restored and converted to meet the needs of almost any one particular franchise. The Drive-Thru addition could only go on one side of the building, so that was cut and dry (no option). It was up to the owner to find that particular tenant.

At the time the building was constructed the utility of choice was electricity, and only electricity. It was built with 600 amp service. Natural gas was never run to the building. However, this is not the case today.

Our initial objective was to stop the roof from leaking and dry out the building interior.

Our first plan of action was to get air movement and heat throughout the building. This was achieved by removing the board-ups on the windows and doors.

The two packaged roof-top-units and make-up-air-unit were beyond economic repair, the fans would not turn so we were forced to bring in auxiliary air movers and temporary heaters. (See Note #1 of the picture schedule and pictures #5-21)

Once the electrician got us enough temporary lighting I surveyed the damage to see the real extent. There was at least 1 to 1 1/2 inches of standing water over the entire floor. Since they were all quarry tile, I elected to remove all the interior doors and squeegee the water out the exterior doors in lieu of using extraction equipment. Before we could squeegee we had to scoop up the wet ceiling tile and drywall from the floors.

The roof structure consisted of a 9/12 pitched roof over the front of the store (see drawings A-5,6& 7 of existing drawings, Exhibit-B.) This roof was constructed of wood roof trusses on 24" center covered with 1/2" CDX fir plywood covered with 30# felt having a finished surface of metal pans and battens to give the effect of a standing seam roof.

1/2" CDX fir plywood covered with a 2 ply asphalt built up roof covered with pea gravel.

Besides the visible holes in the roof, delaminated and deteriorating plywood was present. Obviously the worse condition being where the two roofs came together. Water was getting under the metal ridge cap and under the cupola on the pitched (metal) roof and running down under the flashing at the junction of the flat roof. Beside this, soft areas were present around all the rooftop equipment curbs. (See pictures #5-13) Also, the majority of the vertical posts (4"x4") supporting the horizontal members of the picket fence (equipment screen) were rotten at the base where they penetrate the roof. The cause of this was that the asphalt tar in the pitch pods was not maintained. During the freeze/thaw cycles, and the sun, over the years the tar dried out and cracked allowing the water to penetrate thru the cracks.

The following is a sequence of operations necessary to restore the roofs to a dry condition;

Flat Roof

- All rooftop equipment was cut loose from its power source and mountings (See pictures 5-15)
- A crane was brought in to remove the two heavy RTU'S MUAU.
- The picket fence was removed along with all vertical supports.
- The balance of the rooftop equipment, i.e. condensers, compressors, exhausters, duct work, curbs, and blocking were removed.
- The built up roof was removed down to the roof sheathing.

- All roof sheathing was removed and replaced with 5/8" CDX.
- All existing roof penetrations were reframed and backing added in order to in-fill the openings.
- New treated wood 4x4 posts were reattached to the existing joist/rafters along the building perimeter. New pitch pods were then set.
- The roof sheathing was dried in using 1 layer of 45# felt and hot moping the lap joints.

Pitched Roof

- The metal ridge cap, cupola, battens and panels were removed.
- The bottom course of plywood at the juncture of the two roofs, was removed and replaced.
- The roof was redone with standard 135# 3-in-1 tab shingles in lieu of the metal standing seam effect. However, much to Long John Silver's later displeasure, we did not paint the shingles blue. (Shown in pictures #11,13,14& 15)

Keep in mind that this work was being done in mid November, Long John Silver's and the building owner were still negotiating on what the future outcome of the building would be. Our objective was to fix the roof and get heat into the building. Several steps within the normal construction process of a new building were being done, or not done out of sequence. We were basically fast-tracking without current plans for the new use of the building.

During the time of the roof repairs, site work for the new Drive-Thru addition onto the building, a traffic Drive-Thru lane and a new 2" service entrance for natural gas were being done. Again, without any specific plans or a new tenants needs. Loca-

tion of this work was not the issue, it was getting the work done before the hard weather set in. Which as you know it did. Time was money. We were using experience and like conditions typical of other fast food Drive-Thru operations. We were at that time receiving no support (drawings) from any fast food restaurant franchisee.

Since we were assuming the front of the store the Dining Area was not going to change in size we ordered a new packaged roof-top-unit to heat/cool this area. We set a new roof curb over the existing supply/return penetrations, and modified the plenum to adapt to the existing metal supply duct work in the attic above the Dining Area. (See pictures #23-24)

Once we were dried-in and could control the building temperature we began our selective demolition of the (exposed) finish surfaces. We started with the ceilings and worked our way down toward the floor. 12" square acoustical ceiling tile were glued to the drywall ceiling. (See pictures #16-20) The smell of the mold/mildew and grease had penetrated all porous materials. The ceiling and wall insulation was damp to the touch and had such a foul odor it was easier to remove and replace it in most cases with new. The walls were all finished with 16"x96"x1/4" dark blue and gray Marlite hardboard T/G planking in the dry areas and 1/16" Marlite FRP wall panels in the wet areas. As previously noted, a typical store upgrade conversion called for the planking, and post and beams to be painted an almond color. (See pictures #17-21) As we removed this from the walls the 1/2"

drywall backing board was very soft, and damp even to the point of being black as it got closer to the floors. In many instances the bottom wall plates of 2"x4" construction grade SPF were beginning to decompose like a dry rot.

We stripped all interior walls down to the studs, so as to allow everything to air-dry and return to a moisture equilibrium. This included removing the balance of the 6" quarry tile cove base which had not already fallen off the wall on its own. (See pictures #25-31) Water had penetrated the vertical grout lines, saturated the paper face of the drywall backing, softened the drywall and wicked its way up the wall behind the Marlite and FRP panels. This along with the darkness and summer heat contributed to the start of the mold and mildew process.

At this point we moved outside to remove /replace the decaying delaminating 5/8" T-111 siding panels. (Refer to Detail #3, on A-6 Exhibit-B). Nearly 75% of these panels had to be replaced, including the 1x3 furring strips nailed to the C.M.U. walls and the 1x3 cedar trim boards boxing the panels. This work was done in a logical order, i.e. one side (elevation) at a time in order to allow the painter to follow behind the carpenters. The finish was a solid, penetrating oil base (almost like paint) stain. We still had temperatures in the 40's to low 50's on good days.

While the carpenters were doing demolition inside, the painter was painting nearly 300 1"x4"x48" cedar pickets in his

shop in order to stay ahead and make his exterior work go smoother. He also painted the new vertical 4x4's on the roof. Once these were done we erected the horizontal 2"x6" members to carry the pickets, he then painted these members.

Once the exterior siding and trim boards were all replaced the carpenters moved back onto the roof to install the 1"x4" pickets, since these were already painted, the fence (equipment screen) was now complete. (See detail #4 on A-7 Exhibit-B). The carpenter then framed the Drive-Thru addition, cut the existing roof overhang and tied in the new roof to drain onto the existing as shown on (Roof Framing Plan Drawing A-1 of Exhibit-J.) About this time the painter was moving to this side elevation to finish the exterior work.

We then began the interior slab cutting and hammering out to meet the new ADA requirements of the Toilet Rooms and new Employee Toilet Room using a sketch which was pre-approved by the local building department. (See Exhibit-F) (See picture #28)

During this time period the owner/developer and Long John Silver's were beginning to come to terms. However, we were still unable to get preliminary or construction drawing from corporate. (See Exhibit-N) We were approaching a stopping point, because without new information we could not continue the interior wall and mechanical demolition. I had already suggested to the owner that Long John Silver's give us the location of their newest stores closest to us of which they want us to copy. I was con-

fident that with a camera, paper, and tape measure I could get the necessary information to continue our work.

It wasn't until the week before Christmas that the owner and corporate worked out the financial matters. This enabled him and myself to travel to Lexington, Kentucky to Long John Silver's corporate headquarters to work out all the details. On this day, the owner met with the CEO/CFO and franchise people while I met with the construction and development personnel.

I took pictures #25-33 to our meeting to show them the extent of our work. To prove to them that we were at a stand still until they released some drawings to us ASAP. Needless to say this got their attention.

My problem was this; we had an existing old (Type #7) store which corporate wanted to convert (because of the extent of the demolition work) or reconstruct into the latest (Type #28) store, having the latest interior finishes. This was fine, except our store was lacking nearly 765 square feet. All they had was a preliminary floor plan of our building (See plan on left side of Exhibit-D) with a new layout, obviously, everything was downsized. The preliminary plan had no dimensions, interior sections, details or elevations. The standard procedure which corporate wanted us to follow was; take this information back to our architect and have him complete the drawing for Long John Silver's to review. This was not feasible both time and cost wise for us at this point. (See Exhibit-N)

We were fast-tracking with the intent of opening the store in early to mid March. This would be a significant set back to stop now and go thru these additional steps. Once corporate learned of our (the developer and myself) experience in construction and our means of assembling this additional information without an architect they agreed to let us complete the project on our own without their continuous review procedure. (See Exhibit-N) Unlike the steps the average new franchisee coming on-board with them must do.

Once back from Lexington, we completed the balance of the interior wall and ceiling demolition (post and beam false work in the Dining Area) work. We also skinned down the exterior wall finish to the furring strips and rigid insulation. (See pictures #25-33)

Using the Preliminary Equipment Plan as a reference I (See Exhibit-E) began to lay out the new interior walls. My knowns and givens were; Toilet Room plumbing wall stays. Layout Toilet Room walls per city approved sketch (see Exhibit-F) using 36" wide doors. Layout for new Employee Toilet Room, one cross wall. These two items were not shown on the Preliminary Plan. I knew the Dining Area was to remain as is. I also knew the 3 electrical panels and raceways would remain along with its front/back walls. (See picture #25) With this information I already had over half the building laid out in my head.

I knew because of the extent of equipment rough-in required in the two Cooking Area walls that the studs had to be 2"x 6". I also knew these walls and the Toilet Room Corridor wall had to be located so as to conceal the structural posts in the new walls. All that was left was to locate door openings. With these in mind the walls were basically laid out.

I also could tell from the style of the Preliminary Plan that it had been done on AUTOCAD . I knew I could be reasonably safe (within 2 inches) in locating plumbing fixture center lines off the drawings with just an architectural scale.

With this information: I laid out the new plumbing so we could continue cutting the existing floor slab. The biggest chore was to dig up and relocate the grease trap, move it 12" to get it from beneath a new wall location.

This was my logic in using a Preliminary Plan without any dimension strings and a Toilet Room sketch to layout the entire store.

By the end of the year or six weeks into the job, we had the balance of the interior walls and ceiling beams (false work) gutted out, the exterior walls skinned down to the furring strips and insulation, the interior walls reconstructed to their new location, hollow metal door frames set, the Storage Area addition on the rear of the building framed, sided and dried-in, all new plumbing beneath the floor slabs had been run and the floors were

patched in with new concrete.

We started the new year by finishing up the wall framing and backing for new toilet room accessories and kitchen equipment. The mechanical subs were ready to start their rough-in work overhead and in the walls for new equipment in new locations.

With information from a Preliminary Equipment Plan and an Equipment Schedule, I did some cut and paste work to create Drawing EQ-1. (See Exhibit-E) By visiting an older store and a newer store within our area I got a visual conception of what pieces of equipment were suppose to go where in our store. During my visit to Long John Silver's corporate I was able to secure some equipment cut sheets to get me started. With these, I identified the equipment on the EQ-1 Drawing by giving them numbers inside the ovals which corresponded to the numbers on the Schedule. I quickly realized I was given only about half the equipment cuts I needed to identify and layout the equipment locations for the subcontractors to rough-in.

As this information was being provided to me by corporate, the Purchasing Cooperative, vendors, and suppliers, I was creating. (See Exhibit-H) a booklet of cut sheets, and other information requested and/or received to continue the job, basically, project reference books for everyone working on the job. If it was important, it was in those books.

I assembled the Equipment Cut Sheet Book in numerical order

corresponding to the equipment schedule.

The intent was to find the particular piece of equipment you were roughing-in on the plan, check the identifying number in the schedule and locate the cut sheet in the book.

My biggest challenge was communicating to the subcontractors and suppliers that we have an existing (older) building shell, which we completely gutted-out and are remodeling with plans, details, and larger dimension strings based upon plans from a new and larger building. Also, the old store was designed for different functions of operations.

In the industry we had what was typically called a "front-of-the-house-store", and we were now trying to convert it to a "back-of-the-house-store."

The owner and myself set up a meeting on 1/7/94 to review, tie up all loose ends, and order all the finish materials. During the week I was physically taking measurements for these materials, and using Drawing A-1 of Exhibit-I for reference.

We were also scheduled to meet with a Long John Silver's business consultant to review the equipment order, and staging of the order. However, this meeting was rescheduled for 1/12/94.

I received the equipment order forms and the Long John Silver's equipment price book from the Food Service Purchasing

Cooperative. This cooperative was used by several fast food chains to order their equipment, fixtures and replacement parts. This Cooperative is owned (a divisions of) by Kentucky Fried Chicken. My contact person was Jane Zaccarelli. With this information and the cut sheets I was provided from the design department at Long John Silver's I put together the initial equipment order. Some items needed additional information from outside sources, and further discussions with the owner and the Long John Silver's business representative before the order was finalized. We also went direct on the big items to expedite the lead times and deliveries.

Before Thanksgiving the front RTU (#1) was set on new metal support rails mounted to the roof and tied to the existing rooftop ductwork into the attic. (See picture #22 & 23)

In mid December RTU (#2) was set on a new metal curb over the existing roof openings with little modifications as an attempt to get heat into the building ASAP. With the new Long John Silver's store layout the old (front-of-the-house) plan being changed to a (back-of-the-house) new store RTU (#2) was now located over the new fryer-line hood. Mechanical codes require that the intake side of the air handler must be located a minimum of 10' from the nearest exhaust fan. This prevents the recycling of exhausted air (in lieu of fresh outside air) back into the building. This meant the new unit had to be relocated. This was done in early January. We planned the work so the unit would only be out of operation for less than two hours allowing the

front unit to take up the slack. This required close coordination with the three mechanical trades, the roofer and a crane operator.

Not only was the unit in the wrong location, but the supply air trunk for the branch duct ceiling diffusers were also in the hood area. The trunk line had to be removed and reinstalled on the other side of the load wall (fryer line). Luckily the branch lines were all run out in flex. The remove and replace work allowed these sections of ductwork to be thoroughly cleaned on the inside before being reinstalled.

At the same time we were reworking the RTU openings we were cutting through the roof for the two new hood exhaust ducts, and the supply plenum opening for the MUAU. This involved setting three more roof curbs. Also, at this time we were setting additional pitch pods for the new water heater, Employee Toilet Room exhaust fan and for the charge lines to the remote condenser located above the new ice machine, none of which was shown on any current plans. We also had to make a wooden support bracket to carry the weight of the front end of the MUAU which was nailed and tared into the roof.

Once all these new curbs and pods were mounted we had the roofer come back to seal coat the entire roof. The roof was now complete.

Our structural limitations did not allow us the cubic foot-

age the new stores have. The floor to structural ceiling height of a new store is 10'-4 1/2", where we only had 9'-0". Besides this, the newer stores had the flat roofs constructed of 24" tall engineered trusses on 24" centers, our construction consisted of 2"x 12" @ 16 o.c. The open web trusses allowed for mechanical equipment runs, i.e. duct work both flex and ridge, piping, both PVC, copper and electrical conduits to run in either direction where needed. We, on the other hand, were confined to running only inside the joist bays with duct work and PVC, and still we had to share the space with a minimum of a 6" insulation batt. As we went along during the rough-in stages, it was obvious that each room would have its own ceiling height and configuration of soffits. I added soffits in the Toilet Room Corridor and Serving Area (counter isle) to transition to different ceiling heights. (See pictures #33,34,35,& 36 showing various soffit constructions)

Since the kitchen hood comes a a complete (packaged) unit with the two supply air cut-outs in the 6" chase and two exhaust opening already cut in to go up thru the roof we had to do some major planning. I asked for shop drawings right away because I could see problems ahead. Because of restrictions in the existing joist bays we had to alter the typical factory cutouts in the hood. Actually the supply openings were cut in the field. (See pictures #37 thru 45) to better understand the time, planning, and effort above the hood. This was by far the single most involved item of the whole job. When you consider all the equipment on the roof, the roof penetrations, the fire suppression

systems and the test and balancing required of the hood.

In new stores, the syrup (pop) line running from the carbonate and bag-n-box rack supplying the drink towers are usually roughed-in underground. Obviously this was not feasible here, so 6" PVC electrical conduit with large sweep fittings had to be roughed-in overhead. Soffits or drops had to be built to conceal the runs. (See pictures #47,48,& 49)

Needless to say, it was certainly a coordination problem between the subs as to who could use what space first, who has to get from A to B, or, who must run out of their way so as not to run a soffit where a 2'x4' light or ceiling return air grill must be located. Then add to the fact that we didn't have a specific set of construction drawing to work with, but only the EQ-1 Plan showing physical locations of equipment.

The Drive-Thru was located on the side of the building based upon the following; first the chimney location - or where the hole could be cut thru the wall and still be in the Serving Area and not the Dining or Cooking Areas. Second, how the building was located on the lot in reference to the side yard boundary line and building set backs. (See Exhibit-A and D) Keep in mind this was done before any new layout plans were available. In other words, the location was determined by existing building restrictions, practicality, and common sense. The Drive-Thru was built (3 walls) and left standing until we got additional information. It wasn't until I knew approximately where the

Serving/Cooking Area wall was to be located that I cut the access (hole) doorway into the Drive-Thru. (See picture #32) We first received a set of Long John Silver's Drive-Thru plans after the foundation was in so there was no changing it at this point. The plans were a generic set for their Type #9 buildings and not job specific for us. I used the plans for reference (equipment placement) only. As it turned out we were deeper (front-to-back) than needed, but smaller in width (side-to-side) that required. This meant the Drive-Thru window would have to shift to allow enough room for the Drink Tower to fit in the counter on the right side. Due to the new location of the Serving/Cooking wall, and the opening in the wall to access the Drive-Thru Area I was unable to hold the 26" +/- for counters as shown in the plans provided for us. We had too many fixed conditions which couldn't be changed. Unless of course, we tore down the old CMU chimney which would not be used under the new plans. Since we had more depth in the Drive-Thru than required, I designed into the casework layout (counters) a smooth jog (offset) when passing from the Serving (cash register) Area to the Drive-Thru Area. (See pictures #50,51,52,& 81)

I designed the casework as follows; First I had a set of Equipment Plans for the Type #28 store. (See Drawing EQ-4 Exhibit-I) I reviewed the drawings for concept only, to see what they were trying to achieve for storage i.e. doors/drawers, shelving, etc. I then looked to see what specific items (equipment) were to go on or in the particular pieces of casework. This gave me the big picture.

I then took the finished wall dimensions (out-to-out) and began deducting for specific items of known size i.e. finish door openings (including frame size), pass thru shelf, reach in freezer, counter coolers and refrigerators and finally plumbing fixtures. I also allowed 3/4" for moving the particular piece of equipment in and out for cleaning. What was left became the finish length of the particular piece of casework. I sketched out the necessary elevations with dimensions and gave it to the draftsmen to make working drawings. (See Exhibit-K) When complete we put the drawing out for bid, the bids ranged from \$7,500 to nearly \$13,000. Once we selected the particular vendor we made minor changes, and added two free standing pieces; a condiment stand and drink tower cabinet. Also, by the time the vendor was selected, the drywall was hung and we could correct the drawings for true finish dimensions to begin fabrication.

Once the mechanical trades completed their rough-in work, we had one more major dirty job to do before we could insulate and drywall. This involved cutting out the old quarry tile and preparing the old floors for new tile. This was necessary where old walls previously existed and where we cut up the floor slab for new under slab plumbing rough-in work. Wherever there was less than a full tile showing (breaking the running bond of the tile) it had to be cut, chiseled or hammered out. I mounted a very thin 4" diamond blade on a 4 1/2" mini grinder to cut out the 1/2 grout joints. This was similar in fashion to a mason cutting out bad mortar joints before tuckpointing up a wall.

The blade cut like it was going through butter, it worked very well.

Once the tiles were removed, the old thin set mortar needed to be ground off so the new tile would lay-in level (flush-up) with the existing. Here we used a 7" hand held grinder with a stone grinding wheel designed for masonry use in the tight areas up against walls and door frames. For the larger open areas I rented a SPS floor scarifying machine. It has a metal drum with carbide chips projecting out of the drum. It works on the same principle as the large asphalt/concrete grinders we see on road resurfacing projects.

Needless to say, it was a loud, dusty, and dirty job. The workers had to wear eye, nose and ear protection. We did this work on Saturday when no other trades would be around. We shut down the air handlers and blocked off the returns. Also, we set two (30" diameter high volume) portable fans up. One in the front door supplying air, while the other one set in the rear door exhausting air. These fans were typical of what fireman use to exhaust smoke and odor from a building. However, the fans were set on low so as not to create a wind tunnel.

Once this work was complete the building was stocked with drywall. Because the outside temperature was so cold, we allowed the drywall 48 hours to come up to the inside temperature (65 degrees) of the building before it was hung.

Since the only walls not being covered with Marlite or FRP were the upper half of the Dinning Room, Toilet Room Corridor, and the two front Vestibules we elected to finish (three) coat the drywall in these areas, and two coat all others being covered with Marlite/FRP.

Once the drywall was finished, the walls were white coated (sealed) with a good quality primer. This was done for two reasons. One to allow the quarry tile cove base tile adhesive to bond with the paper face of the drywall and the other to allow the Marlite adhesive (which was a full spread trowel-on type) to also bond with the drywall. Otherwise the paper face will draw all the moisture out of the adhesive before it has sufficient time to set.

Since the FRP panels were detailed to set on top of the cove base (See details #4,5 & 6 on A-5 of Exhibit-I) we elected to start installing the Marlite planking in the Dinning and Toilet Room Corridor areas first. The owner elected to deviate from Details 5 and 6 and use 4" wood base in lieu of the tile cove base since these areas were all wood. This allowed the tile contractor to come in and start patching (in-filling) the quarry tile floors, laying new areas and laying 310 lineal feet of base cove in the back areas.

Once the floor tile was laid and grouted and the wall finishes were completed the tile contractor came in on two evenings

NIFR Report

and cleaned all the new and existing quarry tile floors. I had him first hand mop with hot water and a neutral detergent mix to remove all the construction dirt and dust. He then came back and mechanically cleaned with a floor scrubber using a nylon pad to lift any construction marks, adhesives etc. At larger heavier soiled areas a hand scraper was used along with mineral spirits to cut the adhesives. He then finished (rinsed) with a mild solution of acetic acid and water.

The old existing 6"x6" floors in the rear of the store came out looking good and blended in well with the new tile. The old 4"x8" tile (now discontinued) in the Dining Area also cleaned up well. All things considered the floors turned out better than expected considering all the abnormal abuse they had gone through over the last several years, and during the reconstruction phase.

Since the Dining and Toilet Room Corridor Areas were being trimmed out (including baseboards) in hard white maple, and being installed unfinished, I wanted the floor cleaning, scrubbing and acid rinse completed before we started installing the millwork to prevent any water or chemical stains to the wood.

As with the drywall, we brought the wood into the building on a very cold Friday, 1/21 and allowed it to come up to temperature over the weekend. We began installing the millwork on 1/24. There was noticeable evidence that the wood had moved (changed shape) from the time it was machined and allowed to set in a

controlled environment.

During the week of 1/24, the millwork was installed, the ceiling grid and perimeter tile were put in. The interior side of the windows and exterior door frames were all first coated only. The owner elected to paint the existing two hollow metal entry doors and two hollow metal Vestibule doors the new blue color in lieu of installing new Aluminum (storefront) doors. The painter had previously taken the doors to his shop for repairs and painting. This was done in two phases so we could always have one side open. The ceilings in the Toilet Rooms were painted along with the ceilings and walls in the Employee Toilet Room, and both front Vestibules. After this was done the plumber hung the fixtures. Electricians continued pulling wires and making up boxes. The tanners were installing new flex duct and 2'x 2' supply air diffusers and return air grills in the new grid ceilings. The only ceiling not girded out was in the Cooking Area, as the new hood had to be hung first to terminate the grid.

The week of 1/31 was less intense. The painting contractor was filling nail holes and finishing the millwork with two coats of semi-gloss polyurethane. All interior and exterior hollow metal door frames, metal window frames and mullions, were finish coated. After this was complete the paper hanger hung the vinyl-wall-covering;(VWC) (See Drawing A-1 Interior Finishes Exhibit-I) in the Dining Area, two front Vestibules and Toilet Room Corridor on all walls above the wainscoting and chair rail. (See pictures #54,55, & 56)

The pace was again picked up during the week of 2/7 as deliveries came in the first four days. First the 2'x 4' and 2'x 2' lay-in fluorescent light fixtures arrived, then the kitchen (fry-line) hood, then the casework, finally the interior swinging doors, the MUAU and the ceiling pendant lights arrived. Also, the ceiling contractor and Toilet Room compartment and accessories installer were on site. By Saturday, all the above mentioned work was completed and the Drive-Thru windows were both installed. Also on Saturday, the building interior was given its second major cleaning and wet moping of the floors.

During the week of 2/14, operations people were on site to begin interviewing and taking applications for employees. The weather broke allowing temperatures to rise in the 40's. The painter returned to finish the loose ends on the exterior, such as; painting the pipe bollards, the rear entry door and the exterior of all metal window sash mullions, paint the cedar trim around the Drive-Thru windows and the siding panels on the ends of the new Storage Area addition. New 2" rope was installed around the front deck poles to give a wharf railing effect (See Detail 2 Front Elevation of A-6 Exhibit-B) The Walk-In Cooler/Freezer was wired and powered up to run through its testing period. The Drive-Thru menuboard was also welded in place and wires run out thru the underground conduits. (See pictures #57, 58, 59, & 60)

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A 3'-0" wide by 1/4" thick rubber mat was laid over the 2"x6" deck boards up the side ramp and across the front deck. This was done to cover the large crack between the deck boards which have increased over the years as the boards have dried out and shrunk. The cracks were large enough to be dangerous to women walking over the boards wearing heeled shoes. Part of the exterior modifications to these older stores is to remove these wood decks and pour new concrete decks. This will probably be done here once the weather breaks in the spring.

The seating package arrived on Wednesday morning, it was uncrated and assembled on 2/16 and 2/17.

The two exhaust fans on the kitchen hood and the M.U.A.U were powered up, gas piping was run to the MUAU. These units were started and run through their cycles. The MUAU being gas fired, can supply tempered air at 70 degrees for winter operations, otherwise it will bring in the ambient outside winter air into the Cooking Area.

The same time the HVAC people were doing the initial start up on the fryer hood, they were doing their Test/Balance calculations to make sure the building has the proper air flow. During their testing they determined the front RTU was short on return air. It was determined that 1/4 of the return air was escaping into the ceiling area between the joist and the suspended ceiling because the roof opening was not properly sealed off.

The sign painter was on site Friday morning to paint the Drive-Thru logo on the front elevation of the Drive-Thru addition. (See picture #60) The standard building enhancement for the Drive-Thru addition has been to add a 3-sided nylon awning (canopy) with strip lights behind to illuminate the face side. It would be yellow with blue lettering similar to the logo we painted directly onto the wood siding. We chose this route because the Drive-Thru is only visible from one direction since it is not located on a corner.

After a slow Monday, the activity again picked up for the week of 2/21. This was to be the last week, all the equipment was to be coming, at least we were told by the Purchasing Cooperative.

The cupola arrived on Monday afternoon, it weighed over 500 pounds uncrated. I scheduled a crane for the first thing Tuesday morning. We set it in less than 30 minutes in a very stiff breeze. I secured it to the roof framing with 1/2" ready nuds in the four corners. The electrician powered it up in the afternoon. (See pictures #61 & 62)

On Tuesday morning, the truck arrived with 7000 pounds of kitchen equipment, miscellaneous fixtures (racking and shelving) and smallwares. We had several people, so it took about an hour to unload the truck, uncrate and get the equipment set inside the building and out of the cold and snowy weather. I had help

putting the legs and wheels on the bigger pieces and then setting them in the approximate location.

Once we got everything shook-out we could tell several items did not make this truck. The plumber, electrician and myself spent the next two days setting and hooking up the equipment. The new manager and his assistant assembled the food storage and dunnage racks and shelving for the new Storage Area and Walk-In Cooler/Freezer. When they were in between interviewing new employees, I had them remove all the protective wrapping from all the stainless steel items, which was almost 80% of the shipment.

On Friday, we were scheduled to receive the stainless steel worktables and hand sinks. The cash register, (POS System) printers, and monitors were also scheduled for installation. However, we had blizzard like conditions (whiteout). Needless to say no deliveries or vendors showed up. The electrician hung the balance of the ceiling pendants in the Dining Area, and I did punch-list work.

One Monday, 2/28 the equipment which was scheduled on Friday will be here, the installation people from Pepsi-Cola are scheduled to set up the bag-n-box rack for the syrup (pop), install the two drink towers, run the syrup lines and set the new CO2 tanks and carbonator.

On Tuesday, the exterior lighting (building enhancements) are scheduled for delivery. These are yellow strip lights which

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run under the two front doors and window, and above the siding panels up the gable end rakes. Another section will run above the siding panels on the side opposite the Drive-Thru under the flat roof overhang. For a visual idea of where these go, (See pictures #61& 62. Other outstanding activities include; the inspection by the Health Department and the City of DeKalb Building Department, delivery and installation of the exterior pole signs and new front ribbon sign, (See picture #14 for reference only) The gel panels for the interior menuboard above the Pass-Thru, and the lettering for the Drive-Thru menuboard. Also, the door between the Serving Area and Toilet Room Corridor, and the aluminum swinging door from the Serving Area to the Cooking Area are due on site. Finally, the food (industry term is product) to fill the Walk-In Cooler/Freezer and the paper products are scheduled for later in the week. If all this happens like it is scheduled; it should pretty much take up my whole week, along with additional punch list items. By Friday, I should be done and out of there, except for miscellaneous adjustments and installing back order items.

Also, on Monday 2/28 the new employees begin their hands on training for ten days at the St. Charles store. This is the nearest corporate store. During the last four days they will begin operating the equipment in this store and doing simple cooking.

A private (for new employees) grand opening party is scheduled for 3/13/94, while the invitation only grand opening for

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selected people is 3/14/94. The first day of business will be 3/15/94.

To see final (for this report) pictures taken through February 25, 1994 refer to #63 thru 89 in the Index of Pictures Exhibit-0.

CORPORATE STORE POLICY

I will close with some general information regarding a corporate store. The annual yield must be at least \$ If the store cannot produce this amount it will almost always be sold to a franchisee. Also, the store needs to do a minimum of \$ in annual sales. This amount is based upon doing an average daily volume during the week of a little over \$ per day and around \$ per day during the weekend. The DeKalb store was doing less than \$ when corporate elected to close its operation.

The average store today costs anywhere from \$ to \$800,000 depending upon the cost of the building pad. In our rural area, McDonalds Corporation just purchased a corner lot for \$ The actual building cost can exceed \$ site work is usually \$ per square foot. The balance of the cost being in store fixtures and kitchen equipment.

I recently read in "Nations Restaurant News" that Rally's (the leader in the double-drive-thru segment) per unit construction cost rose 25% in 1993. The per unit investment for a franchisee was between \$ and \$ That is a substantial investment when you consider the building is preconstructed and is delivered to the site on a trailer.

As I mentioned earlier, Corporate believes this store

(DeKalb) when back in operation can gross \$ What makes this franchise financially attractive to the owner/developer is that he already owns the building and surrounding strip mall. The major site work and building shell costs are not a factor here.

He can more easily afford to make the improvements, since it will enhance the value of his building and the total mall area. We estimated back in early January that the total remodeling cost plus equipment would range between \$ \$ As of February 25 we were at \$. The cost overruns are attributed to not identifying all the miscellaneous equipment and smallwares.

This site is located on a major highway with two large supermarket chains located one block away on either side. It has a Wal-Mart 1.5 miles away and a K-Mart 2.3 miles away. A new Red Lobster just opened in the parking lot of Wal-Mart. A new Target Store is slated to be under construction during the year in the same general area.

Right next door is a "Ponderosa Steak House" which was just given an interior face lift this past summer. It presently is the leading store within its region in sales volumes.

The average daily travel count in front of this store is 21,500 cars per day. The new Drive-Thru addition should contribute 35 to 50% of the gross sales alone. The owner recently hired

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a manager with 10 years experience managing corporate stores. He anticipates the store will do very well, however, the owner being more conservative hopes the store can do \$ the first year.

C O N C L U S I O N

This project was started the week of November 15, 1993. Construction and the installation of all equipment concluded on Friday March 4, 1994, except for small back ordered items. Giving a total construction duration of 16 weeks.

A total of ten 20 yard dumpsters were filled during the major demolition work and eight 6 yard containers during the reconstruction and finishing phase of the job.

Due to the slow start, caused by the lack of drawings, not having a tenant, and toward the end due to waiting on the equipment deliveries, I figure there was almost three weeks of either no or interrupted work. Realistically, the time line could have been reduce to 12 or 13 weeks.

I have tried to reconstruct this 16 week job in 2.5 weeks of early mornings and evenings sessions after working all day. The last few weeks it seem as though I was living this job.

I attempted to take the reader through the job on a weekly period or by each main event. Hopefully you (the reader) got a good feel of the job, as if you were on site working and feeling the job as it progressed.

The extent of the work inside at times exceeded that normal-

ly found on a typical fire job, being short of the char, melting and odor, I believe a fire job would have almost been easier, and faster than what we under took.

When looking back, all things considered the job went quite well. We had one of the most sever winters we have had in the last 6-8 years. There were several trades which had to work outside during the cold spells. They either tried to work, but became so non-productive that they quit, or they just waited it out. But there were days when we all just had to tuff-it-out.

Cost wise, the Schedule-of-Values pretty much tells the story regarding the costs per square foot. Basically, we had no site work to speak of, no foundation and building shell to construct, and of course, no building pad to purchase and we were still at \$ (See Exhibit-L) It is easy to see how the costs can approach \$ \$ on a new store. Even at these costs the owner spent almost \$ per work day.

I enjoyed the challenge and learning experience, when you consider what we started with and what we have now. It is job satisfying. The owner has received many positive comments regarding the building conversion.

It makes it especially rewarding when I stand back and look at the back counter and pass-thru area and see the parts and pieces fitting together as I had them pictured and planned in my mind.

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Although not as challenging, I would still like to build a new store from the ground up, and be able to work with a complete set of plans and specifications which were designed for the particular building you are constructing.

I hope you enjoyed the report, and found the content interesting. You now qualify as a Certified Long John Silver's Restorer in store conversions and reconstruction. You are entitled to wear the two color visor while in Orlando enjoying the sunshine and golf.