

# Worth the Wait

## The new headquarters building for the Waterford Police Department

By Wendi Sawchuk, Associate Editor

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For over 48 years, the citizens of Waterford Township have entrusted the Waterford Police Department with their safety and protection. During those 48 years, the department had been headquartered in numerous facilities including two double-wide trailers. After a few years, the trailers were no longer structurally fit to accommodate all of the personnel and equipment necessary to effectively run a police department. The most recent home for the department was the old Monteith Elementary School where they moved in 1982. When they moved in, the township had advised the department against spending funds to convert and renovate the school because it was only meant to be a temporary location. Almost 20 years later, the department was still housed in the

old elementary school while the number of sworn officers and civilian employees doubled. However, on July 18, 2000, ground was broken for the much needed, long overdue new headquarters building.

### PLANNING THE NEW BUILDING

"We had just completely outgrown that old school building and it was time for a new building," said Rick Crigger, administrative lieutenant at the Waterford Police Department. The initial idea was to build a combined fire and police facility to reduce the total cost of the project. When Redstone Architects were brought on board, they conducted a needs assessment for the proposed combined building. "When we were hired, we suggested that along with the needs

assessment we should take a look at the entire campus of the civic center, and develop a conceptual master plan since the two building types (fire station and police station) would have a definite impact on the civic center," said Dan Redstone, AIA, NCARB, president of Redstone Architects. As a result of the study, they found that a combined facility would not be ideal within the civic center. In order to respond to calls more quickly, fire stations need to be closer to the main road system. Because they are continually responding to calls, there is steady in-and-out from the central station. Police stations, however, have most of their calls answered by officers already out on patrol without having constant in-and-out traffic.

At the time of the study, the civic center

campus was composed of the town hall, courthouse, library, an old DPW facility and areas for sporting and recreational events. Many activities occur on the campus aside from the everyday civic functions. It was thought by Redstone Architects that having a central fire station located on the campus, constantly responding to alarms, would be disruptive to the civic center as a whole. Therefore, the fire station was designed to sit away from the main campus on the corner of Crescent Lake Road and Hatchery. This location greatly reduces disruption and allows the station direct access to the main roads. The push for a new police building did not go unnoticed by the citizens of Waterford Township. In the fall of 1998, they agreed to pass a bond issue of approximately \$14 million for new police and fire buildings. It was at that time that Redstone Architects were hired to design the building. Approximately \$4 million of the bond issue was used on the construction of the fire station, leaving \$10 million of the bond issue fund for the police station. The new fire station headquarters facility was dedicated in August 2000.

All of the existing buildings within the civic center followed a specific architectural pattern. The headquarters building is located to the north of the township hall and west of the courthouse. "From a design perspective, we wanted to make sure that the police building was integrated aesthetically into the entire campus," said Redstone. "It was designed to compliment the existing architecture with the choice of materials." One of the major goals for the building was to make it as "user-friendly" for the citizens of Waterford as possible because community policing has become a large part of today's police stations. Since they conduct training exercises, preventive courses and other programs for the community, the building was designed with community access in mind. The other important goal of the design was to integrate the internal departments for greater interaction and communication. "I've been to many police stations around the country and one of the biggest problems that they all have in common is that all of the different bureaus are completely isolated from each other," said Crigger. "It's usually due to the design of the building, itself, especially in the old school building that we were in." In that way, Redstone Architects wanted to make the building as comfortable of a place to work as an office building with easily accessible offices, rooms and open areas, even though it is a police station.

While the project was in the design phase, the Waterford Police Department had two chiefs in office. Both chiefs delegated the end-user's representative role to either captains or



**The front desk and main lobby area is spacious enough to accommodate citizens and guests.**

lieutenants, most recently to Lieutenant Crigger. There was input from all of the various department heads and interaction with Redstone Architects. The input of the end-users was obviously very important to the design because the finished product would directly impact their daily work lives. Now, three years later, everyone who was involved at the inception of the project is still involved at the completion. This way, they all knew what to expect and there were no surprises with the completed building.

### **MAKING IT HAPPEN**

Throughout the process of planning, design and construction, O'Brien Waterford Construction acted as the Owner's (Waterford Township) Representative. Although there was a strong presence on site by the end-user (Lieutenant Crigger), architect (Dan Redstone and Al Gittleman of Redstone Architects) and the general contractor (Rick Savage and George Wagner of The Bell Company), the owner, Waterford Township, needed a representative. "We just made sure that everything went as planned and answered questions from both sides (the owner and design/construction team)," said Tim O'Brien, president of O'Brien Waterford Construction.

Before construction could get underway, the design/construction team had to deal with relocating soccer fields. Part of the building was programmed to sit on existing soccer fields. The township itself took on the task of relocating the fields along a nearby lake. The relocation began before the 1999

soccer season had ended because construction on the new building could not start until the new fields were graded, seeded and fully operational.

Once the soccer fields were relocated and operational, the excavation process began. The building has two levels, the main level and a lower level below ground. The main level of the building was built slab-on-grade which must be supported by stable ground. The soil boring reports did show decent material upon which to build, and everything proceeded normally. As the team was excavating, they discovered that the soil, in fact, was not stable enough. "When we excavated, we discovered that they (the township) had filled on top of a swamp," said O'Brien. Plans initially projected excavating approximately 12 feet deep. Due to the soil conditions, they ended up digging about 27 feet down until non-organic soils were found. "The area was full of compost and just about everything you could imagine in there," said Wagner, project superintendent.

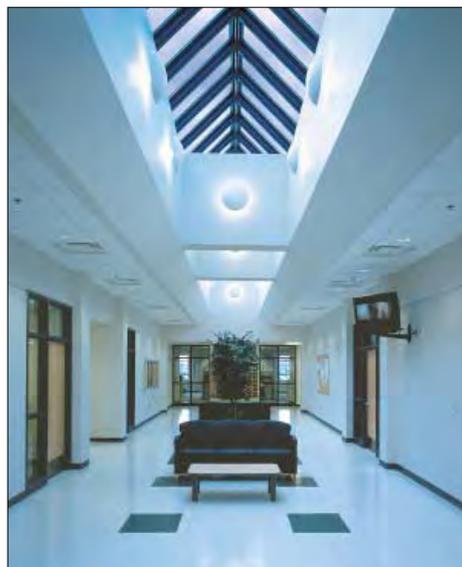
After the area was backfilled, the construction process continued as planned. One of the largest issues that the team had to deal with was a minor redesign of the prisoner lock-up area. In midstream of construction, the police department decided to change the holding time for prisoners. As it stood, the holding cells were meant for prisoners to stay for 24 hours or less. However, in order to suit the current and future needs of the police department, the cell area was converted to accommodate locking up prisoners for 72 hours or longer. In order to do this, the lock-up area

had to meet all of the building criteria of the Michigan Department of Corrections. "The redesign did not really delay construction as a whole, it just put things out of sequence for a while," said Al Gittleman, architect with Redstone Architects. Although the change in design came in midstream of construction, Wagner and his team continued to work around the redesigned area.

#### A NEW HOME AFTER 20 YEARS

The new 58,700-square-foot headquarters building is a tremendous improvement to the Waterford Police Department headquarters compared to what they've had in previous years. Not only is it a drastic change for the department itself, but also a step forward in the design and construction of all future police headquarters buildings. Many police departments have narrow hallways and other features that make staff feel cramped and uncomfortable, especially if they have to work there everyday. However, the Waterford Police Department staff is treated to a much more open and airy building that provides a larger amount of light.

Parking for the facility includes 100 new spaces for employees and visitors and a covered carport with 50 spaces for police vehicles directly behind the building. The covered carport is a simple luxury for the officers who have to carry equipment to and from the patrol vehicles. When the patrol officers come into work, they immediately change into uniform, get briefed and equipped for the road. They need to do this in a timely fashion in order to begin patrolling the streets of Waterford as soon as possible. For the most part, the covered carport eliminates the added time for the patrol officers to brush



**The linear skylight above the rear corridor adds extra light and gives the building an open feel.**

piles of snow off of the vehicle in the winter. In addition, since they do have all of their equipment (gun, laptop, sample case, brief case and portable radio) to load into the vehicles, the carport gives them coverage to do so without being pelted with rain or other elements.

Inside of the entrance is an expansive lobby for citizens and guests. At least one person is working the front desk at all times, and it is completely enclosed by bulletproof glass for security measures. In order for a person to walk past the front desk, they must be escorted by a secretary or receptionist to whom ever they need to see. All of the doors leading to the rest of the building are locked to the general public. The only other entrances are from the parking lot near the women's and men's staff locker rooms. Both entrances have both a proximity card reader and a fingerprint reader. No one can go beyond those doors without their own proximity card and it must match their fingerprint.

All of the administrative offices, various bureau offices and most other police functions are located on the main level. The location of these offices and the corridors, themselves, were strategically placed for easier interaction and communication between departments. There is one main corridor in the center that intersects the rear corridor and brings both sides of the building and people together. These corridors are wide and open to allow maximum foot traffic.

Down one of the corridors, in the rear of the building, is the mail center. The mail center consists of a maple wood structure that holds 156 individual mailboxes and a bulletin board for various notes and messages. Lieutenant Crigger actually designed the mail center because they could not find one that fit what he had in mind. "He (Dan Redstone) looked all over but he couldn't find anything like this anywhere, so I designed it and had it specially made," said Crigger. Not only does the mail center function as mail distribution tool, but, in a more subtle way, it also brings everyone together to congregate and converse. Above the mail center is a linear skylight for added light along the corridor.

Administrative offices and other bureaus are also located near the mail center in order to be easily accessible. The detective bureau's space is almost double what it was in the school building. The cubicles in the school were so cramped that the occupants felt as if they were working in a cardboard box. "By reconfiguring the available space, we had extra cubicle panels to add for more breathing and working room," said Crigger. Most of the chairs in the detective bureau had been re-upholstered and brought over from the



**Compared to the school building, the briefing room is larger with increased seating.**

school. Also centrally located is the exercise/workout room. The side of the room that faces the corridor has large windows. Like the mail center, it not only serves as a room to workout, but as a way to integrate people from all departments. "This exercise room was not just an afterthought to be put in the basement, it was strategically located on the main floor," said Redstone. "If a person is trying to find an officer or someone else and spots them working out, it's easy to just walk in and have a conversation."

In order to encourage the overall light and airy effect of the building, maple wood was primarily used throughout. However, the chief's office is a bit darker than the other offices. His office is primarily cherrywood with dark carpeting. In fact, almost every aspect of his office is different from the rest of the building, including new furniture. Although his office is also easily accessible, the reason for the difference is more for a psychological effect. "When someone is brought before the chief, he or she is in a different world from the rest of the building," according to Crigger. "There may or may not be a problem, but the bottom line is that it is the chief's office."

The other skylight is located directly above the circular atrium of the main level that looks down upon the lounge area on the lower level. A large replica of the Waterford Police Department shield is stitched into the carpeting in the center of the lounge. The small kitchenette is located off to the side and the tables and chairs are placed around the shield in the open area. This is another way that the building integrates the entire department. The shield represents the common goal of everyone associated with the department to serve and protect the citizens of Waterford

Township. By centering the lounge/break area around the shield, it brings people to a shared meeting place and symbolizes the overall goal.

Since a large majority of the everyday activity within the building occurs on the main level, the indoor firing range was placed underground and almost completely isolated from the rest of the building. Above the range is four feet of dirt and the area only shares one common wall at the lower level. On the other side of the shared wall are mechanical and storage areas. This way, the constant firing of weapons does not disturb any everyday police functions. "Not only is the range underground and separate from the rest of the building, there are no offices in the immediate area which gives us a sound buffer," said Crigger. Acoustical panels also hang from the roof for added sound-proofing. A control room for monitoring is located directly behind the range and is enclosed in bullet-proof glass. Aside from the control room, there is a work area and counter, ammunition storage room and weapons cleaning space. All of these areas are self-contained within the range. The counters that are used for weapons cleaning are composed of a rubber material to prevent scratching or damage.

The firing range was a bit of a challenge for Wagner and his team due to the fact that it is underneath four feet of dirt and vegetation. "During the warmer months, approximately 500 gallons of water per day is used to irrigate the surrounding landscape, including the ground directly above the firing range, so it was a challenge to waterproof it," said Wagner. In addition to the waterproofing issue, the team had to install a sophisticated mechanical system. Since the range is indoor and underground, there was a concern regarding lead, fumes and other toxic particles in the air from the discharged weapons. Used in many hospitals, the solution was to install the HEPA-filter system. It carries all of those toxins to the rear of the range, up to the roof and disperses them into the air. "All micro-particles and toxins are filtered out by the system so it's clean when dispersed into the air," said O'Brien. Because the range is isolated underground, the heating, cooling and filtering system is also separate from the HVAC of the rest of the building. A unique feature of the firing range is the bullet trap. Primarily composed of small pieces of recycled tires underneath a protective covering, it catches the bullets into a metal trap.

The building also addresses another problem common with many police stations. "We have found that any police department's evidence storage areas are a major problem due to lack of room for proper storage," said O'Brien. Sufficient space for evidence lockers



**This is the only lounge area in the building that centralizes all departments into one location.**

and long-term storage areas was allocated on the lower level. The actual lockers of varying sizes form one whole wall of a corridor. When police officers come in with any type of evidence, they immediately place it in a locker, which then can only be re-opened from behind by the person in charge. Because evidence must be stored for numerous years, the long-term storage area is an expansive room across from the lockers.

Dark blue is the universal color associated with police. The carpet throughout the building is dark blue and the outside windows are tinted blue as well. However, the only area where the color scheme does not prevail is the prisoner cell area. A lighter blue color scheme is a subtle way of letting prisoners know that they are not permitted beyond the cell area. It includes a male and female "drunk" tank, isolation cells and long-term cells that are equipped with a stainless steel toilet, sink and shower. There is also a sally port garage where police officers bring their vehicles when they have prisoners. The cell area on the lower level is where the police building is attached to the 51st District Court building.

One of the most integral divisions of any police department is dispatch. These people must be stationed at their desks at all times to communicate with the officers on patrol whenever a call comes in. "Dispatchers have to spend ten hours in one spot and can't move," said Crigger. "So, we gave them state-of-the-art furniture and amenities to make

their work area as comfortable as possible." Located on the lower level, the dispatch room is enclosed by two inches of glass allowing dispatchers to monitor the cell area in case an emergency arises. Each individual workspace is equipped with personal fans and floor heaters for temperature control. The state-of-the-art furniture includes desks that have a feature to elevate them to a specific height for a comfortable workspace. In addition, there is a television to entertain the dispatchers during slow periods.

### WORTH THE WAIT

Although the Waterford Police Department had to wait 20 long years for what they have now, it was definitely worth it. Throughout the course of the construction process, Lieutenant Crigger moved furniture from the school to the new building on a regular basis. Many of these moves left the staff without desks or chairs to work on and they had to use card tables and folding chairs. At one point, the records bureau employees were forced to sit and work on the floor the entire day. However, not one person complained because they all knew that they would have to sacrifice for a while until the new building was complete. When everyone finally made the move to the new building, the level of excitement could be compared to "kids opening presents at Christmas time because there was such a difference from the old accommodations," said Wagner. ☼