



LAKE IN THE HILLS POLICE DEPARTMENT

SPACE NEEDS ASSESSMENT



SUBMITTED TO:

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TABLE OF CONTENTS

SECTION 1 **Executive Summary**page 4

SECTION 2 **Project Understanding and Methodology**page 11

SECTION 3 **Project Goals and Questions to be Answered**.....page 14

SECTION 4 **Analysis of Space Needs**.....page 16
Police Department Growth Potentialpage 16
Why More Space Is Necessarypage 17
Parking Analysispage 27
Programpage 29

SECTION 5 **Project History and Existing Building Plans**page 40
Existing Building Planspage 42

SECTION 6 **Conceptual Solutions**.....page 46
Site and Building Concepts.....page 46
Concept 1page 46
Concept 2.....page 53
Concept 3.....page 59

SECTION 7 **Conceptual Project Budgets**.....page 76
Project Budgetspage 79

SECTION 8 **Recommendations**.....page 87

**SECTION 1
EXECUTIVE SUMMARY**



View of police station from northeast



View of police station from southwest



View of police station from south

Introduction

The Village of Lake in the Hills commissioned FGM Architects to prepare a space needs analysis for the Lake in the Hills Police Department. The goal of this study is to provide the village with information on how to best solve its facility needs for the next 30 years+.

During the course of this study, it became clear that the existing building is working against the police department. Not only is the building too small, but the design of the building is negatively affecting the police department's operations.

The space needs analysis finds that 33,704 sq. ft. – 35,704 sq.ft. of space is necessary for the police department to operate effectively. The existing areas used by the police department is only 17,642 sq.ft. Therefore, the department is currently operating with a 16,062 sq.ft. deficit. Approximately doubling the square footage of the building will provide the optimum amount of space for the department and includes provisions for long-term growth.

The issues of space and police operations will be discussed further following this section and in the report.

Summary of Needs Analysis

The Lake in the Hills Police Department has an authorized strength of 38 sworn police officers and 9 civilian employees, for a total of 47 staff. The potential for long term growth in the department is modest and includes the addition of 7 sworn officers, and 2 civilian positions. The potential for growth has been factored into the space needs analysis.

The existing police station was envisioned by the village as a short-term solution as evidenced by the space needs analysis performed in 2005. When the police department moved into the entire building in 2002, it was evident that the space was insufficient to meet the needs of the department. At this time, not only is the building too small, but the design of the building is negatively affecting the police department's operations.

During the study, FGM observed how staff members operate within in the building to witness first-hand how dysfunctional the building is for the department. It is unfortunate how the police department has had to adapt many of their procedures to work around building deficiencies. Many of the issues identified have a direct correlation with the amount of space required.

Examples of space and operational issues are discussed in Section 4 and include the following.



View of police station from south parking lot

- **Site and Parking Issues**

The existing site of the police station has several operational issues that affect operations and the neighborhood. Issues include parking security, insufficient parking, parking lot drives creating “cut-throughs” into the neighborhood, which is a safety issue, and confusion on which entries to use for nighttime reception.

- **Holding Facility**

The sally port, booking room, male cells, and interview rooms are as designed when the building was first constructed in 1992 with the exceptions of changes in furnishings made during the 2002 renovation. The holding facilities are outdated and pose safety and security issues for staff and detainees.

- **Evidence Processing and Storage**

The processing and storage of evidence has undergone significant changes since the building was remodeled in 2002. The changes include statutory (legal) and technological changes which require additional space.

- **Locker Rooms**

Since the building was constructed, the amount of gear issued to police officers has increased. Lockers now must store a multitude of items, including training manuals, bulletproof vests, specialized protective equipment, and weapons. This has necessitated a need for larger lockers.

There are no toilet facilities within the locker rooms. The toilets are located outside the locker rooms in the semi-public hallway and are shared with the public.

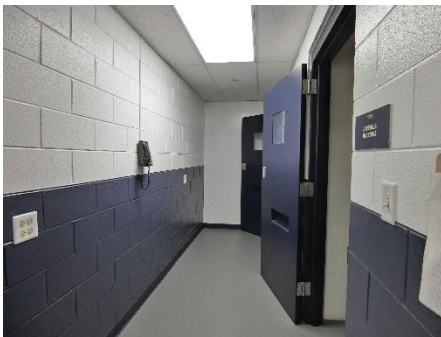
- **Patrol**

The patrol division is located on the lower level and is isolated from administration, investigations and records divisions. To access other areas from patrol requires moving through secure holding facility areas.

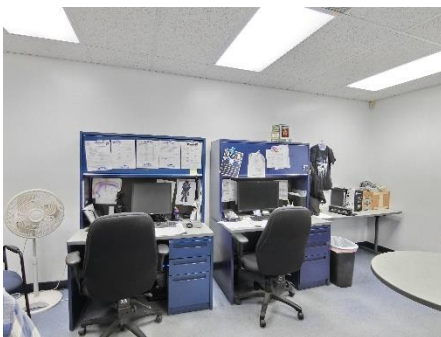
Officer workspaces are very small and areas such as report writing rooms to discuss issues with visitors privately are non-existent.

- **Investigations**

The investigations division is isolated from the patrol division. These two divisions often have to work closely together, therefore, the physical distance separating them is a hinderance.



Narrow corridors in holding facility



Sergeant's workstations



Records storage in mechanical room



Community relations workstation in investigations workspace



Administrative waiting area in main corridor

The office and workstations are very small and located too close together. Having simultaneous conversations on the telephone is problematic as is a private meeting between the sergeant and an investigator.

There are no provisions for computer forensics workspace. Federal agencies and regional crime labs assisting municipal law enforcement have been inundated by requests to obtain data from mobile devices, including cell phones, leading to long turnaround times, which is detrimental to solving a crime.

- **Records**

The records supervisor is losing his office as it is being converted for community relations use. Records clerks workstations are very small for the report work they do daily. Also, as the primary receptionists for the building, they cannot see the entire public lobby which is a security risk.

- **Community Relations**

Community relations works with outreach, education, social media, and public information. This is one of the fastest growing initiatives in policing and will likely continue in the future. The police department is reacting by relocating community relations into the records supervisor's office, but additional growth in the future needs to be anticipated.

- **Social Services**

Police departments are now responsible for more services to the community including social services/counseling. Social services office is located in a very public location just off the main lobby, which is not ideal for privacy when working with victims or persons in need of counseling

- **Training**

The amount of mandatory training required of police officers is increasing. For example, the Illinois Police and Community Relations Act, Public Act 099-0352, has recently been amended to require specific training on an annual, bi-annual and tri-annual basis and includes annual use of force and scenario-based training. Training spaces need to provide greater flexibility for different types of training programs, including classroom, defensive tactics, and scenario-based training.

- **Administration**

The administration division is isolated from Patrol and dedicated space should be provided for storage of sensitive information.



Main corridor of police station

- **Safety and Security**

The importance of building safety and security has greatly increased since the building was constructed, especially with recent active shooter incidents occurring within public buildings. Modern police stations are designed with multiple levels of security depending on the security requirements. The overall security of the police station needs to be improved.

- **Employee Expectations**

With new generations of employees comes increased expectations of job amenities. Spaces such as wellness, breakrooms, and quiet rooms have put the police department behind when recruiting new employees.

- **Accessibility Requirements**

Since the existing building was remodeled, laws governing **accessibility requirements have since been updated, including the Illinois Accessibility Code and the Americans with Disabilities Act (ADA). The changes to the laws have required** more space for persons with disabilities.



Lower level access – note that it is difficult to see people in this area

The issues identified above provide an overview of some of the operational and space issues the existing building suffers from. Correcting these deficiencies will require additional space and a reorganization of the police station.

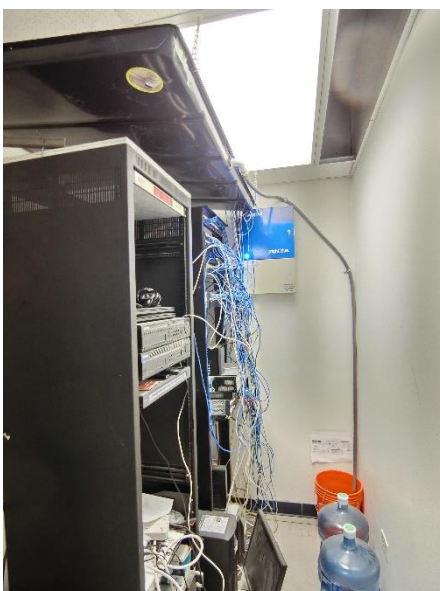
Parking Analysis

As part of the needs analysis, it is necessary to determine the parking requirements for the entire building. To perform this analysis, we reviewed projected parking requirements and then compared the requirements with the actual parking counts.

Total Police Department Staff Parking Required	53
(At Peak Demand)	
Visitor and Meeting / Training Parking Required	40
Total Parking Required	93

Project Goals

The primary goal of this study is to provide the village with options on how to solve the space needs requirements for the police department, which will meet the village's needs long term (30 years +).



Computer equipment – note drip pan to prevent leaks from damaging equipment

See Section 3 beginning on page 14 for additional information regarding goals and questions the village wanted addressed in the study.



Patrol office radio charging and refrigerator area

**Methodology of the Study Process
Needs Analysis**

FGM obtained information for this study through information provided and through a series of interviews and discussions with staff that took place over four days. The interviews consisted of meetings with individuals and groups representing all divisions and shifts of the police department and village staff to obtain direct feedback from the users and staff responsible for maintaining the facility. FGM toured the existing building and observed how staff members operate within it to gain further insight into operational issues and space needs requirements. See Section 2 beginning on page 11 for additional information.

All information was gathered and then analyzed to determine the police department's space needs requirements. The analysis was then summarized into a projection of space requirements called a Program Statement. The Program Statements located in Section 4 of this report on page 29, are the final product of the space needs analysis portion of the study.

While this study was performed in a very collaborative manner with staff members, FGM consistently reviewed space requests and operating assumptions to ensure that the recommendations reflect the true needs of the Department.



Interview room used for storage

History

The Lake in the Hills Police Department currently occupies 17,642 square feet of space in four different structures as identified below.

Existing Police Station	12,162 sq.ft.
Safety Education Center (SEC)	2,400 sq.ft.
2 Oak Annex	2,552 sq.ft.
2 Oak Annex Garage	<u>528 sq.ft.</u>
Total Area Occupied by Police Department	17,642 sq.ft.



Men's locker room

The existing police station is located at 1115 Crystal Lake Road. The main operations of the police department take place within this facility. The building was originally designed as a combined village hall and police station in 1992. The building originally had the village hall on the upper level and the police station on the lower level without any means of internal access between levels.

After the village hall was relocated to a new facility in 2002, the building was renovated for police department use and an addition was added to allow access between floors.



Evidence property custodian work area

Only minor improvements have been made to the police station since 2002 to accommodate the police department's operational changes. At this time, the existing facility is less than ideal in terms of space, workflow and parking.

See Section 5 beginning on page 40 for additional information.

Conceptual Solutions

Prior to developing actual solutions to solve the space needs issues of the police department, it helps to identify what the potential options are.

Potential Concepts

1. Renovate and add an addition to the existing police station.
2. Build a new police station on the existing police station site.
3. Renovate and add an addition to the existing Village Hall for the police station.

For detailed information about each concept, see Section 6 on beginning on page 46.

Project Budgets

As part of this study, FGM has provided conceptual budgets to implement a project.

Costs are based on a quality municipal structure that will be serviceable for 30+ years assuming an appearance and use of materials that are complimentary to other municipal facilities in Lake in the Hills.

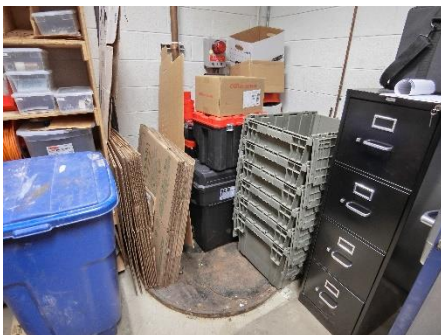
Costs are based on a spring/summer 2021 construction start. Budgets will need to be escalated for inflation as required annually after that time frame. Cost ranges have been provided as design work is no actual design work has been performed.

Project Budgets are located in Section 7 on page 79.

Recommendations

Only one of the concepts discussed in Section 7 will meet all of the long-term needs of the police department including parking requirements: Concept 3 - Renovate and Add an Addition to the Existing Village Hall for the Police station.

There are many benefits to this option that were highlighted in Section 7. Some of the most compelling reasons are as follows:



Sump pump in evidence property custodian work area



Evidence storage



Long term evidence storage at 2
Oak Annex

- This option brings together village hall and police department services under one room, which enhances staff efficiency, safety, and service to the community.
- The location of the police station is better suited for access to all parts of the village than in its current location.
- By having the police department and village hall share space, less new construction is necessary to meet the long-term needs, thus reducing costs.

For these reasons and many others, FGM recommends the village pursue Concept 3 to meet the long-term needs of the police department and the goals established by the Village.

Once the space needs are approved and the Village is ready to move forward, FGM Architects is prepared to assist the Village of Lake in the Hills with the next steps.

SECTION 2 PROJECT UNDERSTANDING AND METHODOLOGY

Overview of Study Process

For over 25 years, FGM Architects has provided consulting and architectural design services to municipalities for public safety projects and has worked on more than 170 police station projects. FGM brings a vast amount of knowledge and understanding to this project through previous experience but understands that each village has its own unique challenges and goals. Therefore, there is no cookie-cutter project or client and we must work with police department staff members to understand their operational issues.

The goal of this study is to provide the village with information on how to best solve the police department's facility needs long term (30 years+). The existing police station is located at 1115 Crystal Lake Road. The main operations of the police department take place within this facility. The department also utilizes space within three other structures. Currently, the lack of space and inefficient building layout is negatively affecting the police department's operations.

The village is pursuing this study because it recognizes that there are many operational issues caused by the police station and supporting facilities. In addition, there have been maintenance issues due to the building's age. For example, the basement was flooded due to a broken watermain. Therefore, instead of just continuing operations in a status quo manner, it makes sense to review the police department's overall facility needs so a holistic long-term solution can be determined.

Analysis of Space Needs

FGM obtained information for this study through data and documents provided and through a series of interviews and discussions with staff. The information provided included:

General Information

- Existing Building Drawings

Police Department Information

- Staff Organization Chart
- Functional Organization Chart
- Standard Operating Procedures
- Police Department Vehicle List
- Inventory of Existing Equipment

Village Information

- Lake in the Hills 2002 Comprehensive Plan, Amended April 25, 2013

Staff Interviews

The interviews consisted of 27 meetings with individuals and groups representing the police department that took place over four days and included the following:

Police Department

- Police Chief
- Administrative Specialist
- Deputy Chief, Patrol Services
- Patrol Sergeants (all shifts)
- Patrol Officers (all shifts)
- Community Service Officers
- Deputy Chief, Support Services
- Investigators
- Community Relations / Communications Coordinator
- Records Supervisor
- Records Clerks
- Social Services Coordinator
- Training
- Evidence Custodian
- Evidence Technicians

Village Departments

- Information Technology

FGM toured the existing facilities and observed how staff members operate within it to gain further insight into operational issues and space needs requirements.

All information was gathered and then analyzed to determine the police department's space needs requirements. The analysis was then summarized into a projection of space requirements called a Program Statement. The Program Statements, located in Section 4 of this report, are the final product of the needs analysis portion of the study.

While this study was performed in a very collaborative manner with staff members, FGM consistently reviewed space requests and operating assumptions to ensure that the recommended space size allotments reflect accurate needs.

Conceptual Solution Development

The village identified three potential solutions to be reviewed as part of this study.

1. Use the existing police station as part of a solution. This will require adding an addition to the building.

2. Replace the existing police station on the existing site. This will require the police department to move out during construction.
3. Add a police station addition onto the village hall. The rationale for exploring this potential solution are as follows:
 - a. The location would be better for the police department to serve the entire village
 - b. There may be some spaces that can be shared, thus reducing the amount of new construction
 - c. No additional land acquisition would be required

To determine if potential solutions are viable, FGM's design utilized the space needs programs developed in Section 4 to generate initial concepts. The concepts were then reviewed with the village. Viable solutions were further refined. If the solutions were not viable, they were also illustrated to explain the reasons why they did not meet the needs of the police department. Potential solutions are discussed in Section 6.

Budgeting Methodology

When the conceptual site and floor plan layouts were completed, budgets were developed for the project. The initial budgets developed provide for a good quality municipal structure subject to 365/24/7 use with an appearance that will meet the village's design guidelines as stated in the Comprehensive Plan. Budgets for this project are in Section 7.

FGM has an extensive database of cost information and used cost per square foot estimates as the budgeting methodology for the conceptual budgets. To verify budgets, FGM also consulted with local area builders. Because no actual design work has been performed, a budget range is provided for construction costs as well as a Total Project Budget.

SECTION 3 PROJECT GOALS AND QUESTIONS TO BE ANSWERED

Project Goals

For every project, it is important to establish clear goals which will be utilized to guide the direction of the solutions and decisions throughout the project. The following goals were identified by village and police department staff.

The primary goal of this study is to provide the village with options on how to solve the space needs requirements for the police department, which will meet the village's needs long term (30 years +). Other goals established by the village include:

1. Any solution must address security and safety concerns.
 - a. Currently, police and personal staff vehicles are parked in the open with no security and they have experienced damage in the past
 - b. The visitor parking lot is on a hill which is dangerous
2. Address immediate needs:
 - a. Locker rooms are severely undersized
 - i. There are no toilet facilities within the locker rooms
 - ii. Lockers are too small to hold all the gear required
 - iii. There is no privacy to the showers
 - b. Prisoner processing is too small and dangerous if a detainee becomes struggles or becomes violent
 - c. Evidence Issues
 - i. Evidence storage is out of space
 - ii. Evidence processing / Identification requires secure, proper space to perform required tasks
3. Address space issues:
 - a. Investigations workspace is too small
 - b. Interview room is within Investigations and is too close to staff workstations. Staff need to move out during an Interview
 - c. A soft interview room is required
 - d. Space is needed for on-line training and digital outreach programs
 - e. Workstations in Records are too small for effective workspace
4. Make the police station user friendly. Currently, the building has two lobbies which is confusing to visitors when not staffed.
5. Solutions must be cost effective

Questions to be Answered

To allow for an informed decision-making process, it is important to identify the questions the village requires answers to as part of this study. The following questions were identified from meetings with the village. A brief answer to each question has been provided in *red italic* type.

1. How much would a solution cost to address the immediate needs of the police department using the existing building as part of the solution?

See Sections 6 and 7 for discussions and costs regarding Concept 1 - Renovate and Add an Addition to the Existing Police Station. The immediate needs of the department include addressing the lockup and holding, evidence, and locker room areas. If only these areas are addressed, it becomes another stop gap solution and does not fulfill the long-term needs of the police department.

2. Can the existing police station be part of a long-term solution? If so, what is the cost of the addition and renovation work versus a new building?

See Section 6 for discussions regarding Concept 1 - Renovate and Add an Addition to the Existing Police Station. Using the existing police station as part of a long-term solution will not work as the site will not support the space needs requirements and parking required.

3. Is the current location the best place in the village for a police station?

This is discussed in Section 6 as part of Concept 2 - Build a New Police Station on the Existing Police Station Site. The existing police station is in a residential neighborhood which is not ideal due to potential for high speed emergency response and release of detainees from the station.

During major storm events, flood maps show how the police station becomes isolated from many parts of the Village making policing services more difficult.

4. Are there other space opportunities within the village for a police station?

The village space assessment team discussed this issue and identified the existing village hall site as a potential for the police station. In Section 6, Concept 3 - Renovate and Add an Addition to the Existing Village Hall for the Police Station, the discussion highlights several compelling reasons why the village should consider utilizing the village hall site.

**SECTION 4
ANALYSIS OF SPACE NEEDS**

Summary of Analysis

As of the date of this report, the Lake in the Hills Police Department has an authorized strength of 38 sworn police officers and 9 civilian employees, for a total of 47 staff. Patrol Officers work 12-hour shift and all other staff work 8-hour shifts. The potential for long term growth in the Department is modest and includes the addition of 7 sworn officers, and 2 civilian positions. The potential for growth has been factored into the space needs analysis.

The existing police station was envisioned by the village as a short-term solution as evidenced by the space needs analysis performed in 2005. When the police department moved into the entire building, it was evident that the space was insufficient to meet the needs of the Department in 2002. At this time, not only is the building too small, but the design of the building is negatively affecting the police department's operations.

The space needs analysis finds that 33,704 sq. ft. – 35,704 sq.ft. of space is necessary for the police department to operate effectively planning for the long term, which is defined as 30 years+. The existing areas used by the police department is only 17,642 sq.ft. Therefore, the Department is currently operating with a 16,062 sq.ft. deficit. Approximately doubling the square footage of the building will provide the optimum amount of space for the Department and includes provisions for long-term growth.

Police Department Growth Potential

The police department has identified potential future staff growth of 7 sworn officers, and 2 civilian positions. Staff growth can occur for a number of reasons, such as an increase in programs or responsibilities undertaken by the Department, an increase in demand for services, changing types of crimes, or an increase in population which increases the calls for service. It is extremely difficult to project increases in future programs and responsibilities and crime. However, it is possible to review potential population growth.

From a historical perspective, the population of the Village of Lake in the Hills in 2002 was 26,445 and 28,835 in 2018 from United States Census Bureau estimates.

The village's population is expected to grow at a modest pace. The village has some areas of potential development and the growth potential is supported by the following data:

United States Census Bureau Data

- 2010 Census Bureau Population Census: 28,965



View of police station from southeast

Chicago Metropolitan Agency for Planning (CMAP)

- 2050 Forecast of Population, Households and Employment 33,689

If the CMAP forecast is accurate, the village's population will increase by 16.3% over the next 30 years. This would support the modest potential growth anticipated by the police department that has been factored into the space needs projections.

Why More Space is Necessary

During the study, FGM observed how staff members operate within in the building to witness first-hand how dysfunctional the building is for the Department. It is unfortunate how the police department has had to adapt many of their procedures to work around building deficiencies. Many of the issues identified have a direct correlation with the amount of space required.

As previously stated, the existing police station was envisioned as a short-term solution in 2002. When the police department moved into the entire building, it was evident at that time, that the space was insufficient to meet the needs of the Department in 2002. Currently, not only is the building too small, but the design of the building is negatively affecting the police department's operations.

Examples of space and operational issues will be discussed in the following section.

Space and Operational Issues

• **Site and Parking Issues**

The existing site of the police station has several operational issues that affect operations and the neighborhood.

- Parking for police vehicles, staff, and public are all comingled. It is now common to have secure parking for police and staff personal vehicles.

Patrol vehicles are parked in an open parking lot with staff and public parking. This leaves the vehicles exposed to the elements as well as to vandalism. Today's patrol vehicles contain equipment that is very costly and sensitive to extreme temperatures. Having at least a portion of the vehicles in secure parking is a best practice.

We have been told by police department staff that their personal vehicles have been vandalized in the past as there is no secure staff parking.



Police station parking lot to south



View of police station from west



Main police station entry and daytime reception



Lower level police station entry and nighttime reception



Aerial photo of site showing how parking lot drives can be used as "cut-throughs" to neighborhood

- There is not enough parking when there are training and community events. During these events, cars are parked throughout the neighborhood.
- The configuration of the parking lot drives creates "cut-throughs" into the neighborhood, which can be a safety issue due to more people driving through the parking lot. Children and teenagers also often cut through to access the neighborhood or police station to use the toilet rooms.
- The site slopes significantly from the north to south. The main visitor parking is on a hill which can make parking difficult for visitors.
- Originally, the police station entrance was located on the lower level. When the building was remodeled, the main entrance was relocated to the main level. However, due to the department operations, nighttime reception, after 7:00pm, takes place on the lower level, which is confusing to patrons.

• **Holding Facility**

The sally port, booking room, male cells, and interview rooms are as designed when the building was first constructed in 1992 with the exceptions of changes in furnishings made during the 2002 renovation. As part of the 2002 renovation, a female holding cell and juvenile holding rooms were constructed in existing spaces.

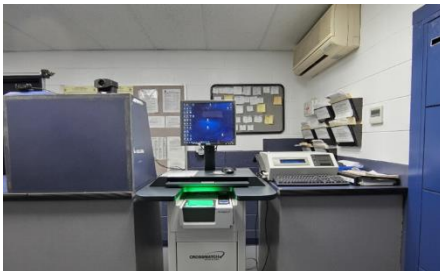
- A sally port is a secure garage used for safe transfer of detainees from a vehicle to the lockup area. Currently, the Sally Port is also used for evidence processing (identification work) and maintenance storage. Not only is the potential for the chain of evidence custody jeopardized, there are tools used by evidence technicians present that can be used as weapons, which poses a danger to officers.

In addition to the evidence processing areas, there are many items stored in the Sally Port which reduces the space available for defensive tactics if a detainee struggles. This poses a liability risk to the village as it is the police department's responsibility for the well-being and safety of detainees.

- When the police station Lockup area was originally constructed in 1992, arrest procedures were much simpler



Booking room with evidence pass through lockers



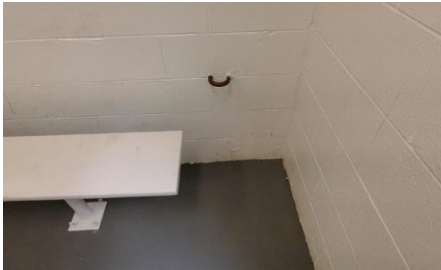
Booking station with electronic fingerprint station and breathalyzer testing machine



Holding cell

and procedures such as Live scan fingerprinting, which is used to capture fingerprints electronically, was considered new technology and not widely used. As booking procedures changed with technology, more space became necessary.

- The booking room is very small and there is not enough space for an officer to maneuver if a detainee becomes violent. The police Department has experienced officers getting injured in the booking room during a struggle. In a modern police station, booking rooms have enough space to allow an officer to utilize defensive tactics training to safely restrain a detainee.
- The booking room only has enough space for one detainee to be processed at a time. It is not unusual to have multiple arrests at an incident and the inability to process multiple prisoners is inefficient and keeps officers in the Station longer and away from their patrol assignments.
- The breathalyzer for testing blood alcohol levels is also located in the booking room. Best practices dictate that Breathalyzer testing be separated from other work areas to avoid potential air contamination.
- The evidence transfer lockers are in the booking room. This is an awkward situation as officers package evidence in other parts of the building and then must access a secure area to drop off the evidence for storage or further processing.
- Staff must travel through the secure holding area to move between floors of the police station. This layout has staff moving through three secure doors before they can access staff areas on either the upper or lower level. Furthermore, if there is a detainee being interviewed or a juvenile being held, officers must also store their firearms prior to moving between floor.
- Corridors leading to the holding cells are very narrow. Like the booking room, officers need to have enough space to allow use of defensive tactics to safely restrain a detainee.
- Prisoners are generally released through the Sally Port and are often escorted to the east parking lot. This procedure requires officers to travel outside of the police station, unarmed, past several blind spots. Modern police stations



Holding cell – note cuff ring which can be used as a hanging point

have separate prisoner release and bond out areas, which release away from public spaces.

- While adequate in size, the holding cells need to be modified to have anti-ligature (hanging) fixtures.

• **Evidence Processing and Storage**

The processing and storage of evidence has undergone significant changes since the building was remodeled in 2002. The changes include statutory (legal) and technological changes which require additional space.

- More space is needed for evidence storage. Statutory changes have greatly increased the length of time that evidence must be kept; in some cases, evidence is now required to be kept forever. The increased retention requirements mean that police departments take in much more evidence on an annual basis than they can dispose of. The Lake in the Hills Police Department is running out of evidence storage space.
- Evidence intake processing is very small, which makes working conditions very difficult. The evidence intake room also shares space with an ejector pump, which is not ideal as it is best practice not to comingle water and wastewater lines with evidence storage areas.
- There is not a dedicated evidence packaging space where officers can package evidence prior to placing in the evidence transfer lockers for storage. Currently, officers package evidence either in the evidence processing area in the sally port or in the patrol room where they hold briefings and eat lunch or dinner.
- Evidence Processing (Identification): When the police station was designed, there was no dedicated space for analysis of evidence. The current evidence processing area is in the Sally Port. The work performed by the police department includes collection of latent fingerprints, presumptive drug testing, collection and preservation of evidence, and forensic photography, which ideally is conducted in a secure, clean space to prevent tampering and contamination of evidence. The sally port is not ideal for this type of work.



Evidence processing (identification) area in sally port



Evidence property custodian workspace

• **Locker Rooms**

- Since the building was constructed, the amount of gear issued to police officers has increased. Lockers now must store a multitude of items, including training manuals,



Evidence storage room



Men's locker room – note small lockers



Women's locker room shower used for storage

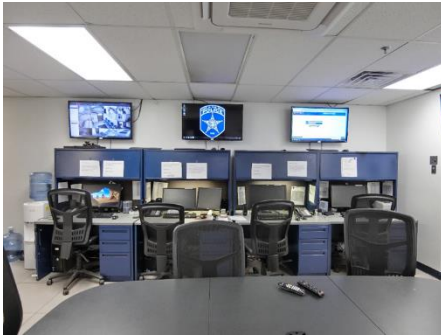
bulletproof vests, specialized protective equipment, and weapons. This has necessitated a need for larger lockers. Today, the smallest locker typically provided for police officers is 24" wide x 24" deep. The existing lockers are 12" wide x 18" deep.

The locker rooms are located off of a semi-public hallway. The locker room doors are fitted with locks for security, but this is still not a good situation as an officer coming out of the locker room may not be aware of a visitor in the police station.

- There are no toilet facilities within the locker rooms. The toilets are located outside the locker rooms in the semi-public hallway and are shared with the public. Ideally, there would be separate staff and public toilet facilities.
- The toilet rooms do not meet current accessibility codes. Accessibility codes have dictated the size of toilet rooms be increased to accommodate persons with disabilities.

• **Patrol**

- The patrol division is located on the lower level and is isolated from administration, investigations and records divisions. To access other areas from patrol requires moving through secure holding facility areas.
- Report writing rooms are required. It was observed that when a citizen is making report at the police station, there is very little privacy. Reports are taken in the lobby. If they are brought into a conference or other meeting space, they must pass through the secure staff work areas of the police station and can possibly overhear sensitive discussions. From a citizen's perspective, it is not a comforting environment for making a report.
- Patrol officer workspace is very small given the number of staff in Patrol.
- After the 911 operations were moved to CenCom E911 Public Safety Communications Center, the patrol division took over the former dispatch center space for report writing, roll call, break room, and evidence packaging functions. In modern police stations, as a minimum, the break room and evidence packaging functions would be in separate dedicated spaces.



Patrol office

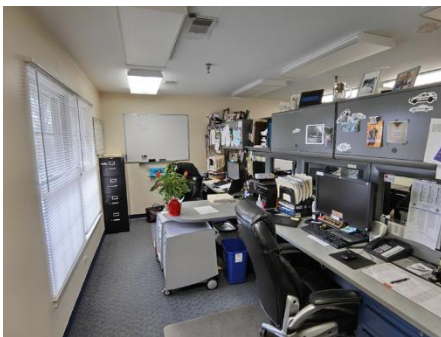
- Equipment issue and armory are combined into one space. Typically, they are separated for functional and security issues.
- The equipment issue and armory room is very narrow, which makes equipment issue difficult. At the beginning and end of each patrol shift, multiple officers check out and return equipment in this room.
- Due to the lack of storage, functional areas, such as interview rooms and locker room showers have been converted into storage rooms.

• **Investigations**



Patrol equipment issue and armory storage

- The investigations division is isolated from the patrol division. These two divisions often have to work closely together, therefore, the physical distance separating them and the need to move through secure holding areas, is a hinderance.
- Workstations within Investigations are very small. With the increase of financial crimes, such as online scams and credit card fraud, investigators now work less in the field and spend more time working on multiple cases in the station. To help investigators be more effective, larger workstations are required.
- The investigations sergeant's office is very small, which problematic when the sergeant wants to have a private conversation with another staff member.
- Workstations are very close together which is problematic when the investigators are on the phone at the same time. Increasing the spacing between investigators will help with noise issues.
- There is one interview room within the police station that is capable of video and audio recording. It is located off of the main corridor in Investigations which can pose a security risk. The interview room opens up adjacent to the investigations and community relations workspace, allowing an interviewee an opportunity to see and hear what staff is working on.
- Investigators bring detainees from lockup to the interview room so they can be interrogated in a different environment, which can be very effective when seeking information. The problem is that the interview rooms are located upstairs and moving detainees from one floor to another poses a security risk. Another issue is the interview room is located off the main corridor, which is semi-public.



Investigations workstations



Investigations sergeant's office

- The interview room is not sound isolated, so an interview can be heard from outside the room.
- The interview room is very small, which is not conducive to interviews with more than two people in the room.
- A soft interview room should be provided. There are many studies that show interrogations within a soft interview room can be more effective than interviews in "hard" or traditional interview rooms. This type of interview room can also be used as a "victim room," where the Department can work with a victim without making him/her feel like a criminal.
- There is no provision for computer forensics workspace. Federal agencies and regional crime labs assisting municipal law enforcement have been inundated by requests to obtain data from mobile devices, including cell phones, leading to long turnaround times, which is detrimental to solving a crime.



Interview room in investigations

The growth of cybercrime has been described by security experts as "relentless" and "ruthless", with damages expected to exceed \$6 trillion globally by 2021.

Policing is adapting with increasing use of specialized computers and equipment for data recovery, crime analysis, and on-line crime issues, which requires additional secure space.

There is no major case meeting / work room. Investigations requires access to a large, secure working space which can be dedicated for up to a month for a regional task force of investigators.

Investigations requires additional storage space to provide proper secure equipment storage.



Records reception workstation

• **Records**

- The records supervisor's office is being converted to a community relations office. The record's supervisor will be moving to a small workstation within records.
- Workstations are very small. Records clerks process many documents on a daily basis and require large workstations to be efficient.
- Records also functions as the primary daytime reception for the police department. It is difficult to see the entry vestibule from the reception window which poses a security risk.



Records file storage

• **Community Relations**

- Community relations works with outreach, education, social media, and public information. This is one of the fastest growing initiatives in policing and will likely continue in the future. The police department is reacting by relocating community relations into the records supervisor's office, but additional growth in the future needs to be anticipated.
- Community relations requires more storage to hold items used for events and education.

• **Social Services**

- Police departments are now responsible for more services to the community including social services/counseling.
- Social services office is located in very public location just off the main lobby, which is not ideal for privacy when working with victims or persons in need of counseling



Community relations storage at the Safety Education Center

• **Training**

- The police department uses the training room within the police station and the Safety and Education Center. When classes are being hosted, there is not enough parking.
- Training functions do not have enough support spaces with includes toilets, break area, lobby space and storage.
- The amount of mandatory training required of police officers is increasing. For example, the Illinois Police and Community Relations Act, Public Act 099-0352, has recently been amended to require specific training on an annual, bi-annual and tri-annual basis and includes annual use of force and scenario-based training. Training spaces need to provide greater flexibility for different types of training programs, including classroom, defensive tactics, and scenario-based training.
- A dedicated defensive tactics space (mat room) is required. The police department conducts this type of training regularly. Currently, the Department uses the Safety and Education Center for this type of training which is not ideal as floor padding needs to be set up for each use and the walls are not padded.



Meeting and training room

• **Administration**

- The administration division is isolated from Patrol.



Training room at Safety Education Center

- Dedicated space should be provided for storage of sensitive information. Many files are in offices or in the stairwell instead of a central location

• **Safety and Security**

- The importance of building safety and security has greatly increased since the building was constructed, especially with recent active shooter incidents occurring within public buildings. Modern police stations are designed with multiple levels of security depending on the security requirements. For example, the lobby areas are very public, and the evidence storage is very secure.

There are several safety and security issues with the existing police station that warrant additional space.

Once inside the police station, one has access to much of the building. There are no separate “semi-public” areas, such as conference rooms, where a person can meet with police Department staff for a conversation without having access to the rest of the building.

From the front desk, it is very difficult to monitor the entire lobby. There are blind spots, which cannot be seen, creating a security issue.

When a person needs to speak to records staff, the conversations are held in the public lobby as there is not a secure transaction counter where this interaction can occur.



Administrative file storage in stairwell

• **Employee Expectations**

- With new generations of employees comes increased expectations of job amenities. Spaces such as wellness, breakrooms, and quiet rooms have put the police department behind when recruiting new employees.

• **Accessibility Requirements**

- Since the existing building was remodeled, laws governing accessibility requirements have since been updated, including the Illinois Accessibility Code and the Americans with Disabilities Act (ADA). The changes to the laws have required more space for persons with disabilities.

The laws apply to municipalities and are intended to provide equal access to services and functions for the public which include visitors, vendors, and other users, employees, and even detainees and persons under arrest.



Main and lower level public entries to police station



Locker room access off semi-public corridor on lower level

The laws are applicable to police departments as there may be civilian employees with a disability or sworn staff on light duty with a temporary disability.

These laws require more space for accessible routes (entries, corridors and stairways), workspaces, and support spaces (toilet and locker rooms).

Many rules govern when compliance with accessibility standards is required. Generally, if a space is renovated, including any change in flooring, such as a carpet replacement, it is required to be brought into compliance with the Illinois Accessibility Code. Non-compliance with the requirements can subject the village to a lawsuit by the U.S. Department of Justice or the Illinois Attorney General, who has been aggressively enforcing compliance on municipalities.



Women's locker room – note how small and inaccessible the space is

The issues identified above provide an overview of some of the operational and space issues the existing building suffers from. Correcting these deficiencies will require additional space and a reorganization of the police station.

**SECTION 4
ANALYSIS OF SPACE NEEDS –
PARKING**

Parking Analysis

As part of the needs analysis, it is necessary to determine the parking requirements for the entire building. To perform this analysis, we reviewed projected parking requirements and then compared the requirements with the actual parking counts.

Summary of Findings

Peak demand for the police department is during the afternoon shift change, between 2:00 pm and 3:00 pm. At this time, administrative and daytime personnel are working and patrol shifts coming on and leaving need to be accounted for. If the police department hosts a training class or community function during this time, parking is an issue as there is not enough parking.

Parking at the existing building is located in several areas. Total off-street parking available for the police station is 78 spaces. There are an additional 10 spaces at the Safety Education Center directly south of the police station.

Police Department Parking

Police Department Vehicles	Spaces
Patrol Vehicles	14
Administrative Vehicles	3
Support Services Vehicles	3
Total Police Vehicles	20

Staff Parking	Spaces
Peak Staffing	30
Take Home Vehicles	(3)
Total Police Vehicles	27

Total Police Department Staff Parking Required **53**
(At Peak Demand)

Visitor and Meeting / Training Parking Required **40**

Total Parking Required **93**

Other Parking Needs

Command Vehicle	1
Speed Trailer	1
Speed Trailer / Message Board	1

Utility Vehicle	1
16' Patrol Boat	1
Total Other Parking Required	5

This parking is accommodated for in warm, secure storage areas. Currently, the parking is in the 2 Oak Annex, 2 Oak Annex Garage, and at Public Works.

T
SECTION 4
ANALYSIS OF SPACE NEEDS
PROGRAM

Following this page is the police department space needs program referenced in Section 4.

Police Department Space Needs Program

Pages 1-10

Note that Space Needs Programs attempt to compare the size of existing space to space required. In many cases, it is difficult to provide an "apples to apples" comparison because many spaces accommodate more than one function in the existing building. Therefore, we suggest using the space comparison as a general comparison only.

Village of Lake in the Hills
Police Department
Space Needs Program

FGM ARCHITECTS

June 12, 2019
FGM #: 19-2668.01

Room/Area/Space	Sq. Ft. Existing	Sq. Ft. Current	Notes
A. PUBLIC ENTRY / PUBLIC ACCESS AREAS			
1.0 Entry Vestibule	119	80	Existing Sq. Ft. includes both upper and lower levels
2.0 Lobby	264	300	Provide seating for (4-6)
3.0 Information Kiosk		40	Area for information / service kiosk
4.0 Report Writing Rooms		100	Incorporate into one of the Citizen Report Rooms above
5.0 Small Report Room		250	Seating for (4)
6.0 Large Report Room		12	Seating for (6-8)
7.0 Displays		12	Display cases
8.0 Public Toilets (2) required	78	128	Single user toilets off the lobby
Public Entry / Public Access Areas Sub-Total	461	910	
10.0 Circulation, Wall, and Mechanical Shaft Space	204	319	
11.0 PUBLIC ENTRY / PUBLIC ACCESS AREAS TOTAL	665	1,229	
B. COMMUNITY/TRAINING ROOM			
1.0 Training Room Lobby	-	400	Allow for Training Room to be isolated from Public Lobby
2.0 Training Room / Community Room	1,016	1,200	Seating for (40) people in classroom format, dividable
3.0 Audio/Visual Equipment	-	25	Closest for Audio/Visual Equipment
4.0 Storage	37	80	General storage
5.0 Table and Chair Storage	-	150	
6.0 Credenza Storage Counter		100	Long counter w/storage cabinets for Community/Training Room
7.0 Kitchennette	-	150	To support Community/Training room functions
8.0 Community/Training Room Toilets	-	450	Mens: 2 toilets, 2 urinals and 2 lavs. Women's: 3 Toilets and 2 lavs.
Community/Training Room Sub-Total	1,053	2,555	
10.0 Circulation, Wall, and Mechanical Shaft Space	467	894	
11.0 COMMUNITY/TRAINING ROOM TOTAL	1,520	3,449	
C. POLICE ADMINISTRATION			
1.0 Chief of Police Office	257	225	Desk, credenza, soft seating area, small conf. table, bookcases
2.0 Closet	17	12	
3.0 Deputy Chief - Patrol Services	221	185	"U" shaped workstation, (2) guest seats, lateral file
4.0 Closet	-	-	
5.0 Deputy Chief - Support Services	221	185	"U" shaped workstation with "P" top or conf. table for (4), lateral file
6.0 Closet	-	10	
9.0 Administrative Assistant's Office	120	120	"U" shaped workstation
12.0 Secure Files/Administrative Storage	100	100	Allow for (3) 4-drawer 42" wide lateral files and (7) 4-drawer letter files
13.0 Administrative Storage Closet	47	50	Secure supply storage
14.0 Copy/Workroom	-	120	Area with copier, shredder, work counters, storage

Village of Lake in the Hills
Police Department
Space Needs Program

FGM ARCHITECTS

June 12, 2019
FGM #: 19-2668.01

Room/Area/Space	Sq. Ft.		Notes
	Existing	Current	
15.0 Administrative Waiting	-	80	Guest seating for (4)
16.0 Coat Closet	-	15	
17.0 Administrative Conference Room	265	420	Conference Seating for (14-16) with credenza
18.0 Coffee Area	-	80	
19.0 Toilet	-	60	Single User Toilet
20.0 Police Administration Sub-Total	1,148	1,662	
21.0 Circulation, Wall, and Mechanical Shaft Space	509	582	
22.0 POLICE ADMINISTRATION TOTAL	1,657	2,244	
D. PATROL SERVICES			
1.0 Sergeants Open Office	410	480	(6) 'L' shaped workstations, each with 2-drawer lateral files
2.0 Storage	14	64	Storage room for sergeants
3.0 Training Files	-	18	Three drawer lateral file
4.0 Patrol Conference / Briefing Room	206	250	Table with seating for (8)
5.0 Patrol Room	-	-	
6.0 Patrol Equipment / References	-	50	Area for timeclock, manuals, vehicle keys, radios
7.0 Mail Boxes	-	12	Mail slots
8.0 Report Writing	372	168	(4) report writing workstations
9.0 Copier / Work Area	-	80	Copier and supply storage
10.0 Open Meeting / Break Area	-	250	Table with seating for (6-8)
11.0 Kitchenette	35	80	
12.0 Report Writing Carrels (quiet)	-	80	(2) report writing workstations in quiet setting close to Patrol Room
13.0 Interview/Juvenile Status Offence Holding (2)	-	200	(2) Temporary holding rooms near Report Writing
14.0 Holding Toilet	-	64	
15.0 Soft Interview Room	188	-	Share with Investigations
16.0 Interview Rooms	-	-	Share with Investigations
17.0 Equipment Issue	-	-	
18.0 Tasers	-	120	21"wx10" dx18"h storage and 38"wx18" dx55"h storage cabinet
19.0 Narcan	-	120	21"wx10" dx18"h storage
20.0 Rifle Storage	-	-	Storage for (20) rifles in racks
21.0 Tactical Bike	-	-	Located in Warm Storage below
22.0 Bike Storage	-	-	
23.0 Armory Storage	-	-	Storage for (6-8) rifles in racks and (3) rifle cases
24.0 Rifle Storage	-	-	Storage for (20) handguns in cases
25.0 Handguns	-	-	Storage for (15) in soft cases
26.0 Less Lethal Weapons (FN 303)	114	120	Large storage cabinet
27.0 Ammunition	-	-	2'x6' storage cabinet
28.0 Simulation Storage	-	-	

Village of Lake in the Hills
Police Department
Space Needs Program

FGM ARCHITECTS

June 12, 2019
FGM #: 19-2668.01

Room/Area/Space	Sq. Ft.		Notes
	Existing	Current	
29.0 Armors Work Area		80	3'x6' bench with area for tools and parts
30.0 Gun Cleaning Station		80	Cleaning bench, cleaning tank, storage cabinet
31.0 Patrol Storage		80	
32.0 Patrol Sub-Total	1,339	2,276	
33.0 Circulation, Wall, and Mechanical Shaft Space	594	797	
34.0 PATROL SECTION TOTAL	1,933	3,073	
E. INVESTIGATIONS			
1.0 Investigations Sergeant's Office	70	120	Desk, credenza, guest seating for 2 people
2.0 Investigations Workstations (open office)		320	(4) 'U' shaped workstations
3.0 Files	309	35	Allow for (2) lateral files
4.0 Storage/Equipment		20	Secure storage closet
5.0 In-Process Evidence Temporary Storage	-	15	Lockers for temporary evidence storage
6.0 Copier / Work Area	-	-	Share with another Division?
7.0 Coffee Area	-	50	
8.0 Major Case Conference Room	-	530	Conference space for (10-20)
9.0 Interview Rooms		200	Hard interview room, can share with Patrol
10.0 Standard Interview Rooms (2 required)		160	Soft seating, can share with Patrol
11.0 Soft Interview Room	61	50	A/V recording equipment
12.0 A/V Recording Equipment	-	140	Provide secure office with workcounters for (2) computers
13.0 Computer Forensics	-	20	For storage of electronics and media within office
14.0 Secure Storage	-	20	
15.0 General Storage Closet	-	20	
16.0 Investigations Sub-Total	440	1,680	
17.0 Circulation, Wall, and Mechanical Shaft Space	195	588	
18.0 INVESTIGATIONS TOTAL	635	2,268	
F. COMMUNITY RELATIONS			
1.0 Community Relations Coordinator	145	120	
2.0 Flexible Workspace		120	(2) 6' desks for interns and part time use
3.0 Storage Closet		20	
4.0 Warm Storage	-	-	Located in Warm Storage below
5.0 Community Relations Sub-Total	145	260	
6.0 Circulation, Wall, and Mechanical Shaft Space	64	91	
7.0 COMMUNITY RELATIONS TOTAL	209	351	

Village of Lake in the Hills
Police Department

Space Needs Program

FGM ARCHITECTS

June 12, 2019
FGM #: 19-2668.01

Room/Area/Space	Sq. Ft.		Notes
	Existing	Current	
G. RECORDS DIVISION			
1.0 Public Counter Positions		80	Provide for (1) secure reception positions with package pass-through
2.0 Form Storage		6	(1) 2 drawer letter file
3.0 Peer Jury Files		6	(1) 2 drawer letter file
4.0 Officer Service Window		50	Service counter/window for Officers
5.0 Records Supervisor Office	387	120	"U" shaped workstation, (2) guest chairs, lateral files
6.0 Records Clerks Open Office		210	Open office work area with (3) 7'x7" "L" shaped workstations
7.0 Active Files		123	Require 696 l.f. of 12" deep high-density shelving (currently have 432 l.f.)
8.0 Juvenile Files		45	(3) 4-high, 36" lateral files
9.0 Copy/Workroom		120	Area with copier, shredder, work counters, storage
10.0 Long Term Records Storage	90	90	Archived records storage (bankers boxes). (Currently at 2 Oak Annex)
11.0 Closet	9	10	
12.0 Records Section Sub-Total	486	860	
13.0 Circulation, Wall, and Mechanical Shaft Space	215	301	
14.0 RECORDS DIVISION TOTAL	701	1,161	
H. SOCIAL SERVICES			
1.0 Social Services Coordinator's Office	213	210	"L" shaped workstation, conf. table for (4), soft seating for (4), files
2.0 Storage Closet	21	12	
3.0 Social Services Sub-Total	234	222	
4.0 Circulation, Wall, and Mechanical Shaft Space	104	78	
5.0 SOCIAL SERVICES TOTAL	338	300	
I. TRAINING			
1.0 Training Room	1,226	-	see Community / Training Room above. Existing training room is in SEC
2.0 Training Files	-	-	Located in Patrol Services above
3.0 DT Training Room	-	900	Padded room. Currently use SEC Training Room (above)
4.0 DT Storage	-	180	Storage for training aids. Located in SEC
5.0 Training Sub-Total	1,226	1,050	
6.0 Circulation, Wall, and Mechanical Shaft Space	543	315	
7.0 TRAINING TOTAL	1,769	1,365	
J. EVIDENCE PROCESSING			
1.0 Evidence Garage			
2.0 Evidence Vehicle Garage		570	For storage of evidentiary vehicles

Village of Lake in the Hills
Police Department

Space Needs Program

FGM ARCHITECTS

June 12, 2019
FGM #: 19-2668.01

Room/Area/Space	Sq. Ft. Existing	Sq. Ft. Current	Notes
3.0 Vehicle Processing Bay	-	630	18x35' space, includes tool area
4.0 Evidence Vehicle Storage	-	525	15x35' space, also can be used for vehicle processing
5.0 Drying Cabinets	-	150	Provide space for (2) double drying cabinets and 8' layout area
6.0 Emergency Eyewash/Shower	-	25	
7.0 Temporary Large Evidence Storage	-	80	
8.0 Forensic Processing Lab	-		Existing is located in Sally Port
9.0 Dust/Superglue Work Area	-	70	Work areas with dusting chambers, sinks, and storage
10.0 Fuming Chamber	-	30	
11.0 Fume Hood	-	30	
12.0 Refrigerators	-	14	Provide space for (1) refrigerator
13.0 Worktables and Counters	-	200	
14.0 Digital Photo Area	-	80	(1) 'L' shaped workstation, printer, and workbench
15.0 Equipment Storage Room	-	80	
16.0 Evidence Processing Sub-Total	482	2,484	
17.0 Circulation, Wall, and Mechanical Shaft Space	214	745	
EVIDENCE PROCESSING TOTAL	696	3,229	
K. EVIDENCE COLLECTION AND STORAGE			
1.0 Evidence Packaging	-		Work area with computer workstation (currently located in Sally Port)
2.0 In-Process Evidence Temporary Storage	-	180	Evidence return lockers
3.0 Worktable and Barcoding	-		(3) sets pass-thru lockers, large counter, storage for supplies, sink
4.0 Evidence Drop Lockers	-		Located above (currently located in Booking)
5.0 Intake Area/Work Area	-	120	Work Area with sink
6.0 Property Custodian Office	150	120	Office with "L" shaped workstation and (3) 4-drawer letter files
7.0 Evidence Storage		392	Require 100 l.f. of High Density Storage (currently have 49)
8.0 General Evidence		100	
9.0 Open Floor Area		10	Allow for (1) refrigeration units
10.0 Refrigerated Storage		60	Area with shelving
11.0 Destruction Holding Area	150	20	
12.0 Valuables/Money Vault		50	
13.0 Narcotics Storage		50	
14.0 Firearms Storage		280	
15.0 Long Term Evidence Storage	226	245	Currently located in garage
16.0 Found Bike Storage	243	245	Currently located in garage
17.0 Large Item Storage			see Evidence Processing Above
18.0 Evidentiary Vehicles			
Evidence Collection and Storage Sub-Total	769	1,872	
Circulation, Wall, and Mechanical Shaft Space	341	562	

Village of Lake in the Hills
Police Department

Space Needs Program

FGM ARCHITECTS

June 12, 2019
FGM #: 19-2668.01

Room/Area/Space	Sq. Ft.		Notes
	Existing	Current	
EVIDENCE COLLECTION AND STORAGE TOTAL	1,109	2,434	
L EXPLORERS			
1.0 Explorers Room	141	200	Uniforms, equipment, radios/chargers
2.0 Equipment Storage	-	40	6' desk for computer
3.0 Workstation	-	8	(1) four drawer letter files cabinet
4.0 Files	-	80	(3) bicycles and 2'x3' storage cabinet
5.0 Bicycles	-	80	
6.0 Explorers Sub-Total	141	328	
7.0 Circulation, Wall, and Mechanical Shaft Space	63	98	
8.0 EXPLORERS TOTAL	204	426	
M. HOLDING FACILITY			
1.0 Sally Port	630	950	(2) car sally port in drive through configuration (28x34')
2.0 Prisoner Search and Personal Effects Lockers	-	25	include sorting counters and double tiered lockers
3.0 Vestibule Area	-	50	Secure entry to lockup areas
4.0 Processing Area			Keep detainees separated - locate away from Book Station
5.0 Cuff Benches			
6.0 Holding Rooms (3 required)			For ink fingerprinting, with sink and eyewash
7.0 Fingerprint Area	165	650	include photo area
8.0 Live Scan/Suspect Photography			Work area for Breathalyzers
9.0 Sobriety Testing			Size to allow processing of (3) detainees
10.0 Booking Station	138	100	Provide (1) hard interview room
12.0 Interview Rooms		65	Single user detention grade toilet
13.0 Toilet		40	Secure storage of cleaning supplies
14.0 Janitor's Closet		40	
15.0 Jail Storage		40	
16.0 Detention Rooms	447	675	(6) Cells total, incl. (1) Accessible Cell. Arrange in groups of (2) cells, (1) shower
18.0 Juvenile Detention Rooms	114	-	included in Detention Rooms above
19.0 Attorney/Client Room		-	Not required, will need to request waiver from IDOC
20.0 Bond Out Vestibule		80	Bond out vestibule for release of detainees
21.0 Holding Facility Sub-Total	1,494	2,675	
22.0 Circulation, Wall, and Mechanical Shaft Space	662	936	
23.0 HOLDING FACILITY TOTAL	2,156	3,611	
N. INFORMATION SYSTEMS			
1.0 Server Room	46	120	space for up to (2) server racks, clean agent fire suppression

Village of Lake in the Hills
Police Department
Space Needs Program

FGM ARCHITECTS

June 12, 2019
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Room/Area/Space	Sq. Ft.		Notes
	Existing	Current	
2.0 Storage Area	-	20	For storage of equipment
3.0 IDF Closet	-	60	Allowance for network closet
4.0 Information Systems Sub-Total	46	200	
5.0 Circulation, Wall, and Mechanical Shaft Space	20	70	
6.0 INFORMATION SYSTEMS TOTAL	66	270	
O. STAFF SUPPORT AREAS			
1.0 Lunchroom with Kitchette	145	300	Break area with (3) tables of four
2.0 Mud Room	-	40	With area for wet gear
3.0 Duty Bag Storage	-	168	Provide (36) 24" wide x 24" high lockers for duty bags near patrol entry
4.0 Library	-	120	
5.0 Pension Files	-	-	Located at Village Hall
6.0 Staff Toilets Allowance	54	450	Allowance for toilet rooms throughout the building
7.0 Closet Allowance	-	100	Allowance for closets throughout the building
8.0 Staff Support Areas Sub-Total	199	1,178	
9.0 Circulation, Wall, and Mechanical Shaft Space	88	412	
10.0 STAFF SUPPORT AREAS TOTAL	287	1,590	
P. LOCKER/FITNESS AREAS			
1.0 Male Locker Area	232	756	Provide (42) 24" wide lockers
2.0 Toilet/Sinks/Shower Areas	106	285	(2) toilets, (2) urinals, (2) lavs, (2) showers
3.0 Female Locker Area	57	288	Provide (16) 24" wide lockers
4.0 Toilet/Sinks/Shower Areas	45	212	(2) toilets, (2) lavs, (1) shower
5.0 Defensive Tactics Training Room	-	-	See Training above
6.0 Fitness Room	-	-	Alternate Space - see below
7.0 Locker/Fitness Areas Sub-Total	440	1,541	
8.0 Circulation, Wall, and Mechanical Shaft Space	195	539	
9.0 LOCKER/FITNESS AREAS TOTAL	635	2,080	
Q. WARM STORAGE			
1.0 Mobile Command Center	912	600	28' long vehicle
2.0 Patrol Boat	243	198	16' patrol boat and trailer, currently located in garage
3.0 Speed Trailer / Message Board	-	176	Storage for (2) 6'x10' speed trailers, currently located at Public Works
4.0 Utility Vehicle	-	88	currently located in garage
5.0 Tactical Bike Storage	170	180	Storage for (3-4) bicycles, bike racks, 2x3 storage cabinet
6.0 Community Relations Storage	141	250	Storage for camp needs, outreach programs

**Village of Lake in the Hills
Police Department
Space Needs Program**

FGM ARCHITECTS

June 12, 2019
FGM #: 19-2668.01

Room/Area/Space	Sq. Ft.		Notes
	Existing	Current	
7.0 Kennel Cages	-	40	For found pets
8.0 Warm Storage Sub-Total	1,466	1,502	
9.0 Circulation, Wall, and Mechanical Shaft Space	650	300	
10.0 WARM STORAGE TOTAL	2,116	1,802	
R. LOADING/FACILITY MAINTENANCE			
1.0 Central Custodial Storage Space	-	100	Storage of supplies
2.0 Janitor's Closet Allowance	-	80	For janitorial storage
3.0 Mail and Delivery Storage Room	-	100	
4.0 Dock Leveler	-	-	located outside of Utility Garage
5.0 General Building Storage	-	400	
6.0 Loading/Facility Maintenance Sub-Total	-	680	
7.0 Circulation, Wall, and Mechanical Shaft Space	-	204	
8.0 LOADING FACILITY MAINTENANCE TOTAL	-	884	
S. MECHANICAL AND ELECTRICAL SPACES			
1.0 Emergency Generator	-	-	Locate outside
2.0 Mechanical Room(s)	497	1,100	HVAC, Plumbing and Fire Protection Equipment
3.0 Electrical Room	118	350	
4.0 Gas Service Room	-	-	In mechanical room
5.0 Elevator	-	-	In circulation space allowance
6.0 Elevator Machine Room	-	-	In circulation space allowance
7.0 Telephone Service Room	40	40	D-mark room
8.0 Mechanical and Electrical Spaces Sub-Total	655	1,490	
9.0 Circulation, Wall, and Mechanical Shaft Space	290	447	
10.0 MECHANICAL AND ELECTRICAL SPACES TOTAL	945	1,937	
T. TOTAL BUILDING AREA REQUIRED - 1 Story	-	33,704	Area required for one story building
Multi-Floor Factor		2,000	Assume two floors at 1,000 sq.ft. per floor
U. TOTAL BUILDING AREA REQUIRED - 2 Story	-	35,704	Area required for two story building
V. TOTAL EXISTING AREA USED BY POLICE DEPARTMENT			
1.0 Existing Police Station	12,162		
2.0 Safety Education Center	2,400		

**Village of Lake in the Hills
Police Department
Space Needs Program**

FGM ARCHITECTS

June 12, 2019
FGM #: 19-2668.01

Room/Area/Space	Sq. Ft. Existing	Sq. Ft. Current	Notes
3.0 2 Oak Annex (former fire station)	2,552		Portion utilized by Police Department
4.0 2 Oak Annex Garage	528		
5.0 TOTAL AREA USED BY POLICE DEPARTMENT	17,442		
W. PARKING REQUIREMENTS			
1.0 Police Department Vehicles		14	
2.0 Patrol Vehicles		3	
3.0 Administrative Vehicles		3	
4.0 Support Services Vehicles		3	
5.0 Total Police Vehicles		20	
1.0 Staff Parking			
2.0 Peak Staffing		30	Peak demand is (30) at 2:30 pm shift change
3.0 Take Home Vehicles		(3)	(3) Administrative Vehicles
4.0 Total Staff Parking Required		27	
1.0 Future Parking Needs		6	Allowance for potential future hires and additional Department Vehicles
Total Police Vehicle and Staff Parking Required		53	
Visitor and Meeting / Training Parking		40	Spaces required for Visitors and Meeting / Training Functions
Other Parking Needs			
2.0 Command Vehicle		-	Located in Warm Storage above
3.0 Speed Trailer		-	Located in Warm Storage above
4.0 Speed Trailer / Message Board		-	Located in Warm Storage above
5.0 Utility Vehicle		-	Located in Warm Storage above
6.0 16' Patrol Boat		-	Located in Warm Storage above
X. MISCELLANEOUS OUTDOOR SPACES			
1.0 Plaza Entrance	800		For flagpoles, seating
2.0 Trash Enclosure	200		
3.0 Generator Enclosure	800		Allow area 20'x40'
4.0 Transformer Enclosure	300		
5.0 Outdoor Staff Area	400		
6.0 Secure Evidence Remote Storage Shed	100		For secure storage of large and hazardous items

**SECTION 5
PROJECT HISTORY AND
EXISTING BUILDING PLANS**

HISTORY

The Lake in the Hills Police Department currently occupies 17,642 square feet of space in four different structures as identified below.

Existing Police Station	12,162 sq.ft.
Safety Education Center (SEC)	2,400 sq.ft.
2 Oak Annex	2,552 sq.ft.
2 Oak Annex Garage	<u>528 sq.ft.</u>
TOTAL AREA OCCUPIED BY POLICE DEPARTMENT	17,642 sq.ft.



Police station

Police Station History

The existing police station is located at 1115 Crystal Lake Road. The main operations of the police department take place within this facility. The building was originally designed as a combined village hall and police station in 1992. The building originally had the village hall on the upper level and the police station on the lower level without any means of internal access between levels.



Safety Education Center

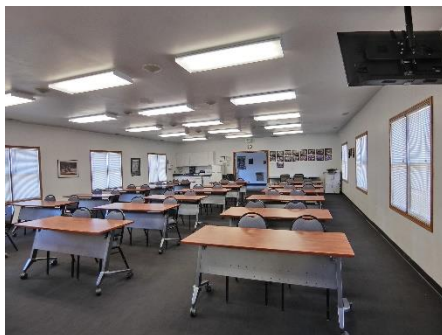
After the village hall was relocated to a new facility in 2002, the building was renovated for police department use and an addition was added to allow access between floors.

In 2017, the Lake in the Hills 911 dispatch center closed, and operations were transferred to Southeast Emergency Communications (SEECOM) in Crystal Lake. The space originally occupied by the 911 dispatch center was taken over by the Department's Patrol Division.

Other than the 911 dispatch center closing in 2017, only minor improvements have been made to the police station since 2002 to accommodate the police department's operational changes. At this time, the existing facility is less than ideal in terms of space, workflow and parking.

Safety Education Center (SEC)

The Safety Education Center (SEC) is located at 11109 Crystal Lake Road approximately 200' south of the police station. Constructed in 2001 along with a safety town, which is a miniature community used to provide children a safety education, the facility provides classroom and support space for police department community outreach programs. The classroom space is also used by the police department for regional training programs, including use of force and defensive tactics training, and by the Lake in the Hills Police Department Law Enforcement Explorers Post.



Training room in Safety Education Center



2 Oak Annex

2 Oak Annex

Constructed in 1965 as a fire station, this building has been converted for use as a support facility for the police department and a pre-school. It is located directly east of the police station, across Crystal Lake Road. The police department uses the building to process vehicles involved in a crime and storage for evidence, evidence vehicles, mobile command vehicle, and other equipment.

2 Oak Annex Garage

Located adjacent to 2 Oak Annex is a two-car garage that is used for storage of found bicycles and a police boat.



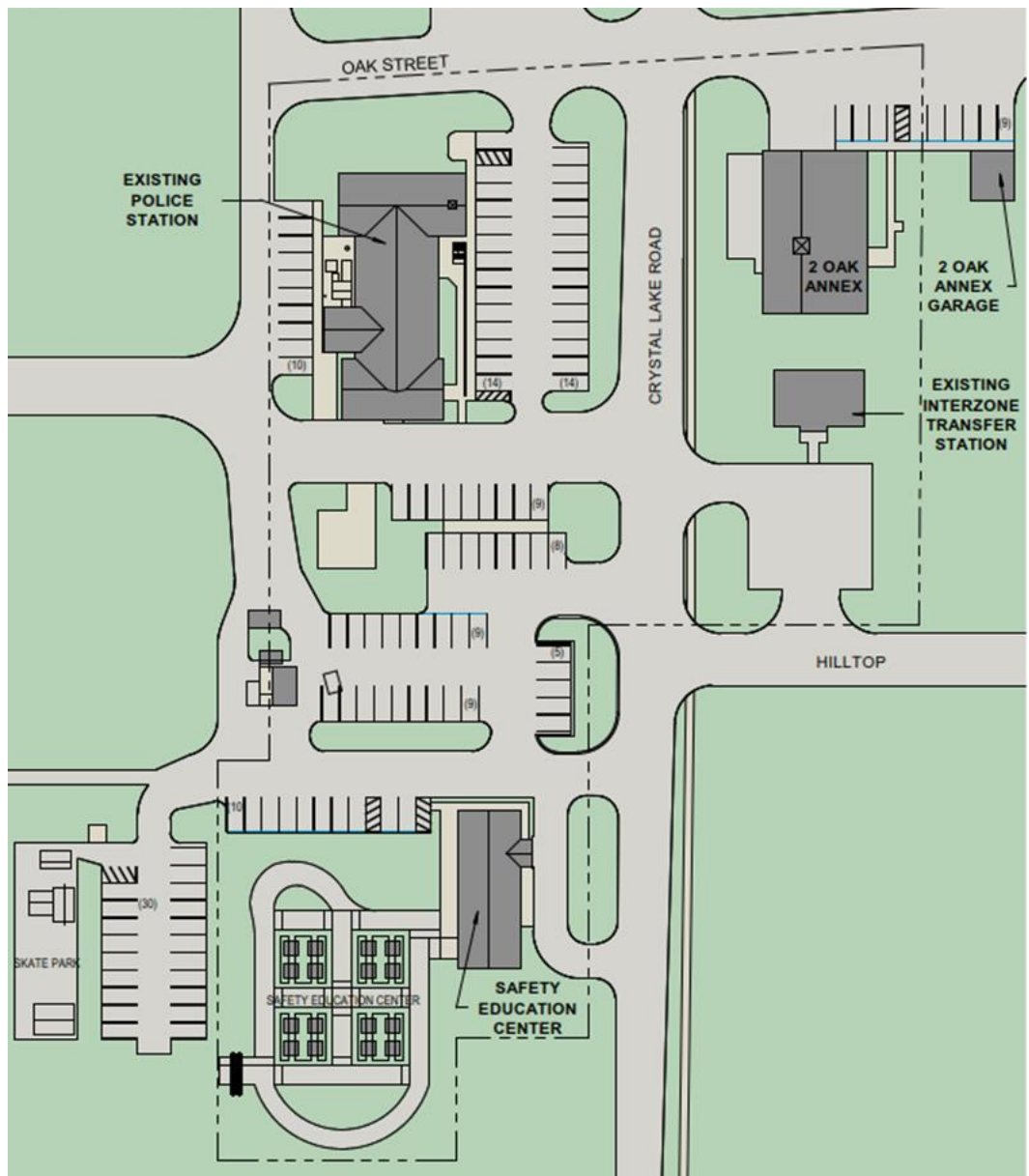
2 Oak Annex garage storage

The police department needs to utilize all of the above facilities to support its operations. The Department started using three other facilities (the SEC, 2 Oak Annex, and 2 Oak Annex Garage) over time as the existing police station did not have the space available. The findings of this report show that even by using the three facilities, the space required for the long-term operations far exceeds what is available.

SECTION 5
EXISTING BUILDING PLANS

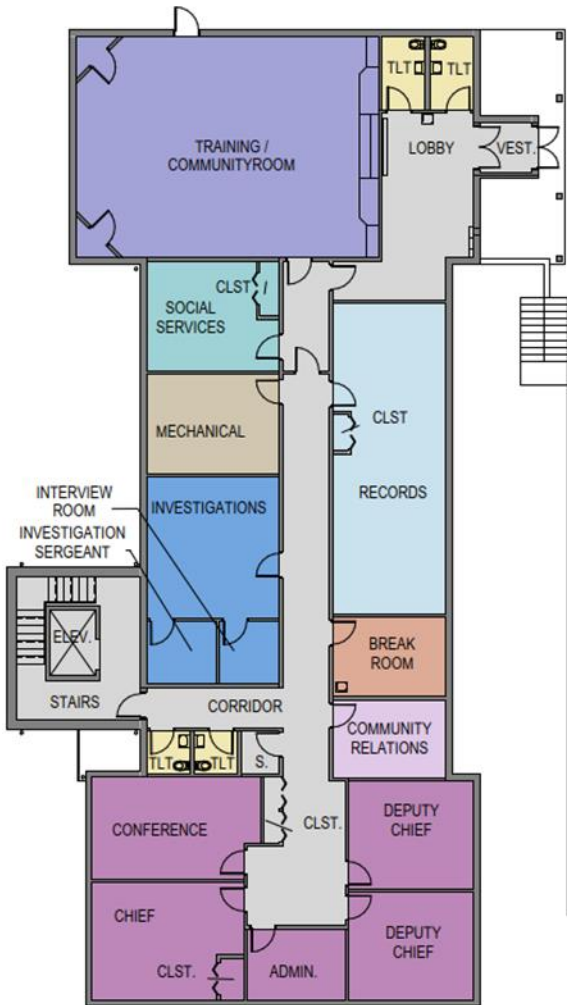
The following diagrams illustrate the building as it currently is being utilized and will provide a frame of reference for the space needs requirements identified in Section 4 of this report.

EXISTING SITE PLAN

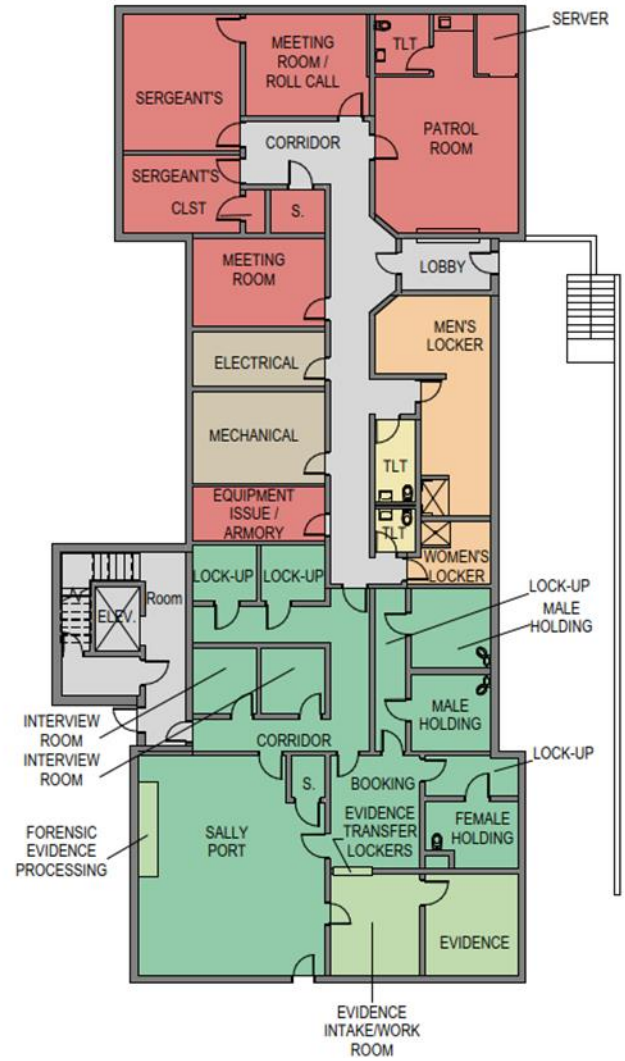


Site Plan of the Police Station, SEC, 2 East Oak Annex, and 2 East Oak Annex Garage

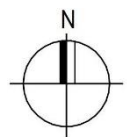
EXISTING POLICE STATION PLANS



First Floor

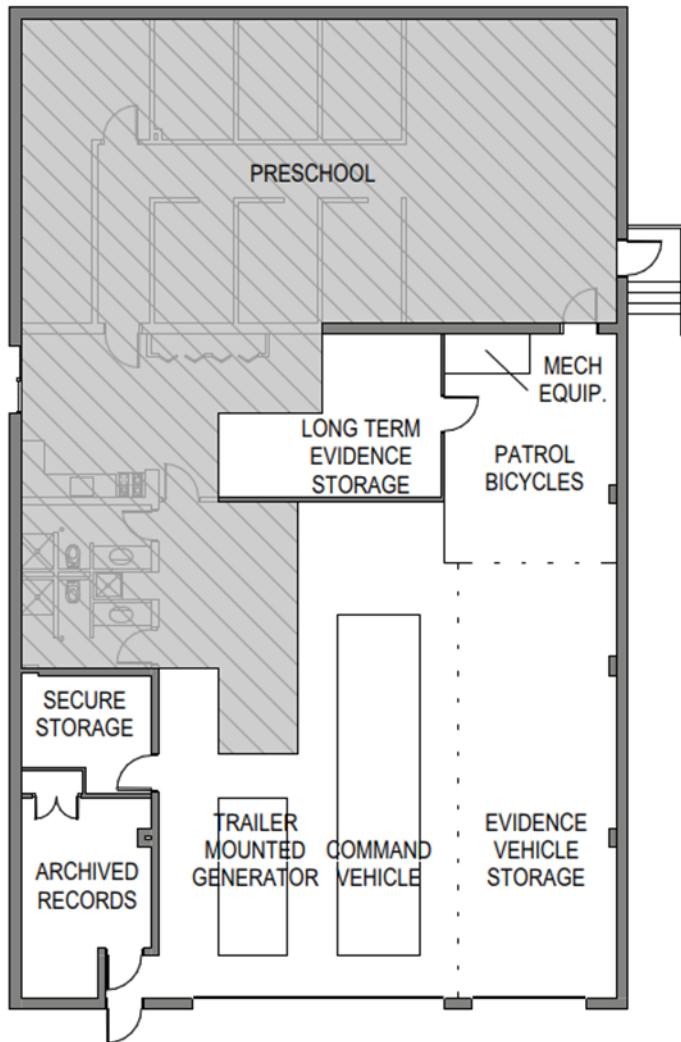


Lower Level

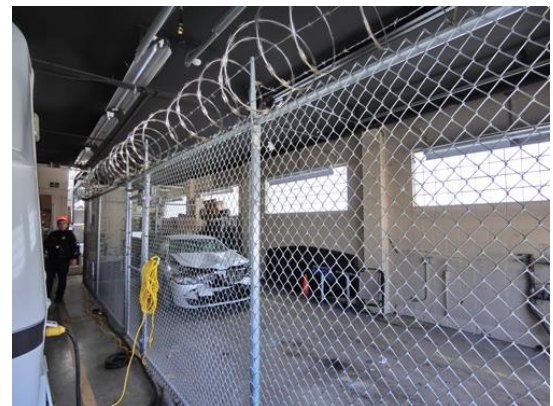


Police Station Area: 12,162 sq.ft.

EXISTING 2 OAK ANNEX AND GARAGE



2 Oak Annex Garage



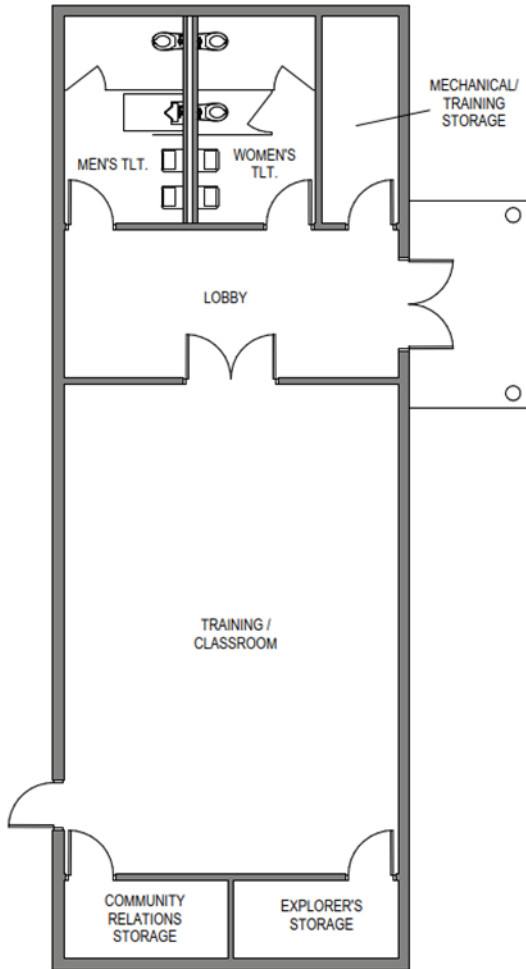
2 Oak Annex

2 Oak Annex Floor Plan

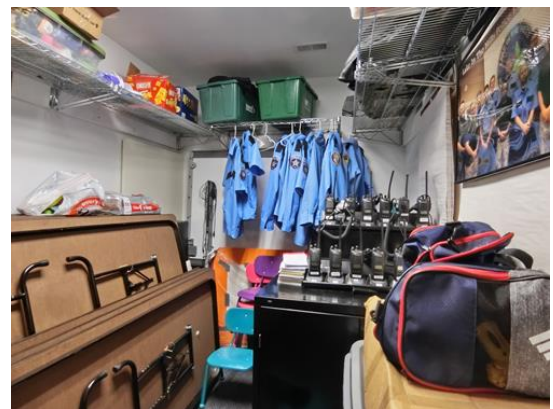
Area Used by Police Department

2 Oak Annex Area: 2,552 sq.ft.
2 Oak Annex Garage: 528 sq.ft.

SAFETY EDUCATION CENTER



Training Classroom



Explorer's Storage Room

Safety Education Center Floor Plan

Safety Education Center Area: 2,400 sq.ft.

SECTION 6 CONCEPTUAL SOLUTIONS

Identification of Potential Options

Prior to developing actual solutions to the space needs issues of the police department, it helps to identify what the potential options are and the associated magnitude of costs in a conceptual manner.

Three potential solutions were identified by the village to be explored.

Potential Concepts

1. Renovate and add an addition to the existing police station.
2. Build a new police station on the existing police station site.
3. Renovate and add an addition to the existing village hall for the police station.

Each option will be discussed in this section.

It should be noted that the option of building a new police station on a new site was considered, but ultimately discarded as the village did not want to have to purchase any new property, which would increase the cost of the project.

Site and Building Concepts

Concept 1. Renovate and Add an Addition to the Existing Police Station

The goal of this concept is to address the three largest deficiencies in the police station, which includes the lockup and holding, evidence, and locker room areas. The addition and renovation work would need to be constructed in such a manner that the police department can still function without the use and expense of temporary facilities.

Building Reuse Considerations

This concept reuses the existing building, so it is appropriate to discuss any potential issues with reusing the building.

- The building was built in 1992 with a stair and elevator addition added in 2002.
- Since 2002, no major work, other than routine maintenance, has been performed on the building with exception of fixing a watermain break under the building.
- If any significant work is done to the building, current building codes will require the building to be updated to critical facility

standards for structural loads (wind and seismic). These requirements were not required under the building codes in effect when the building was originally constructed in 1992 or for the 2002 addition

- If any significant work is done to the building, the building must be updated to meet critical operations power systems per the building code. This code requirement was first enacted in 2008 versions of the building code.
- If the building is remodeled, it will need to meet the International Energy Conservation Code (IECC) as adopted by the State of Illinois [20 ILCS 3125] in 2007 and has become stricter over time.
- If the building is remodeled, it will be required to comply with current accessibility codes including the Illinois Accessibility Code and the Americans with Disabilities Act (ADA).
- The building will require extensive remodeling / renovation to correct building infrastructure issues, including plumbing and HVAC.
- The building will require major work and an addition to allow it to function as a modern police station.
- Adding an addition will be difficult due to the configuration of the building.

Site Information

Site concept development consisted of analyzing the current police station site, located on Crystal Lake Road to determine if this site can effectively accommodate an addition capable of addressing the three largest deficiencies of the police station as discussed above.

The site is bounded by West Oak Street to the north, Crystal Lake Road to the east, the Safety Education Center and skate park to the south and Decatur Avenue to the west. The existing police station is set within a residential neighborhood. Parking is located on grade for the police department, and visitors. Additional parking is available at the Safety Education Center and skate park.

Utilizing information from the space needs analysis, FGM began developing potential site diagrams and program stacking arrangements depicting how the space needs of the police department could be accommodated on the existing site. These

diagrams consider the size of the facility, the parking requirements, and the traffic flow through the site.

Concept Development

Based on space needs requirements to solve the deficiencies of the lockup and holding, evidence, and locker room areas, an addition of approximately 13,839 square feet was determined to be required. Plan diagrams were developed, exploring which critical program elements could be accommodated with the existing remaining space. For implementation, the addition would be constructed first, allowing police functions to temporarily function out of the addition while the existing building is renovated.

The resulting concept renovates the existing 12,128 square feet police station and with the addition, is a total of 25,967 square feet in size.

- The police station is approximately 9,700 square feet smaller than required to accommodate all the program areas required to meet the long-term needs of the police department because the space available for an addition is limited by the site area.
- Police department staff parking is short by 14 spaces.
- Visitor parking is short 11 spaces.
- The police department will need to continue relying on use of existing space at the 2 Oak Annex and Safety Education Center for storage and training needs.

Concept 1 Pros and Cons

Pros

- The village owns the property.
- This concept improves key functional areas including lockup and holding, evidence, and locker room areas.
- The police department can stay functional on this site during construction.

Cons

- This concept does not meet the long-term space requirements of the police department.

- This concept does not meet the parking requirements.
- This concept does not meet the security requirements for providing separate staff and visitor parking.
- This concept does not eliminate the need for remote training and storage use of the Safety Education Center and 2 Oak Annex.
- Training space does not meet capacity needs or security requirements.
- The public lobby is inadequate to meet the need for report rooms and toilet facilities.
- This concept is not expandable in the future as all available site area is utilized.

Conclusion

We do not believe the village will gain much value by attempting to reuse the existing building for the following reasons:

- The existing building has many deficiencies, as stated in the building reuse considerations above, so renovation work will be extensive.
- The existing building will need to be reinforced to meet current code required structural requirements. This will require further investigation to establish if it can be accomplished.
- Parking requirements cannot be met in terms of quantity and security.
- There is no room to expand to meet the police department's long-term needs.

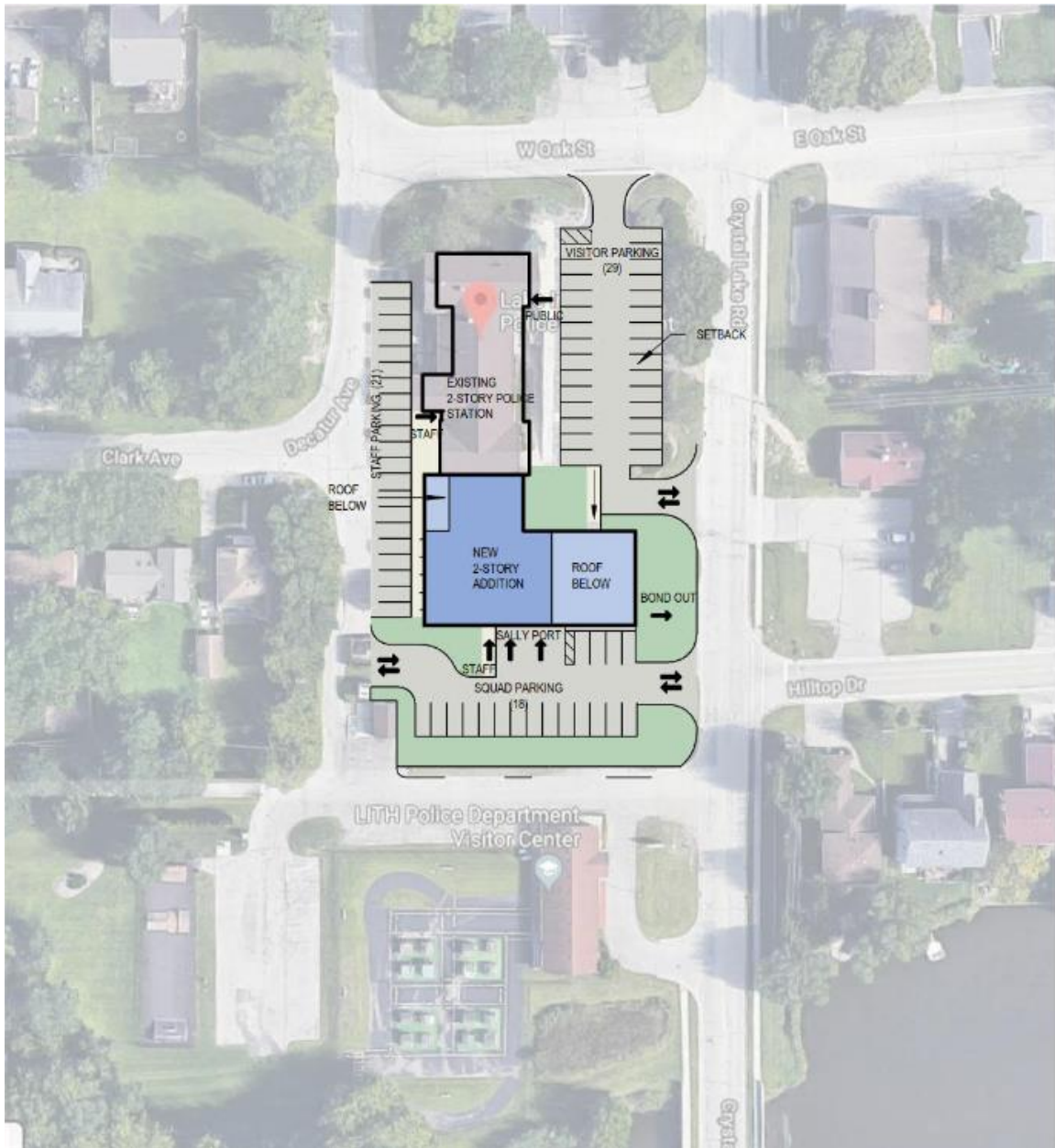
Because this concept does not have enough space to meet the long-term needs of the police department, this concept merely becomes a stop gap solution

Concept Diagrams

On the following pages are Concept 1 diagrams

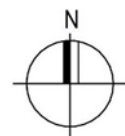
- Conceptual Site Plan
- Conceptual Floor Plans

CONCEPT 1 – Renovate and Add Addition to Existing Police Station

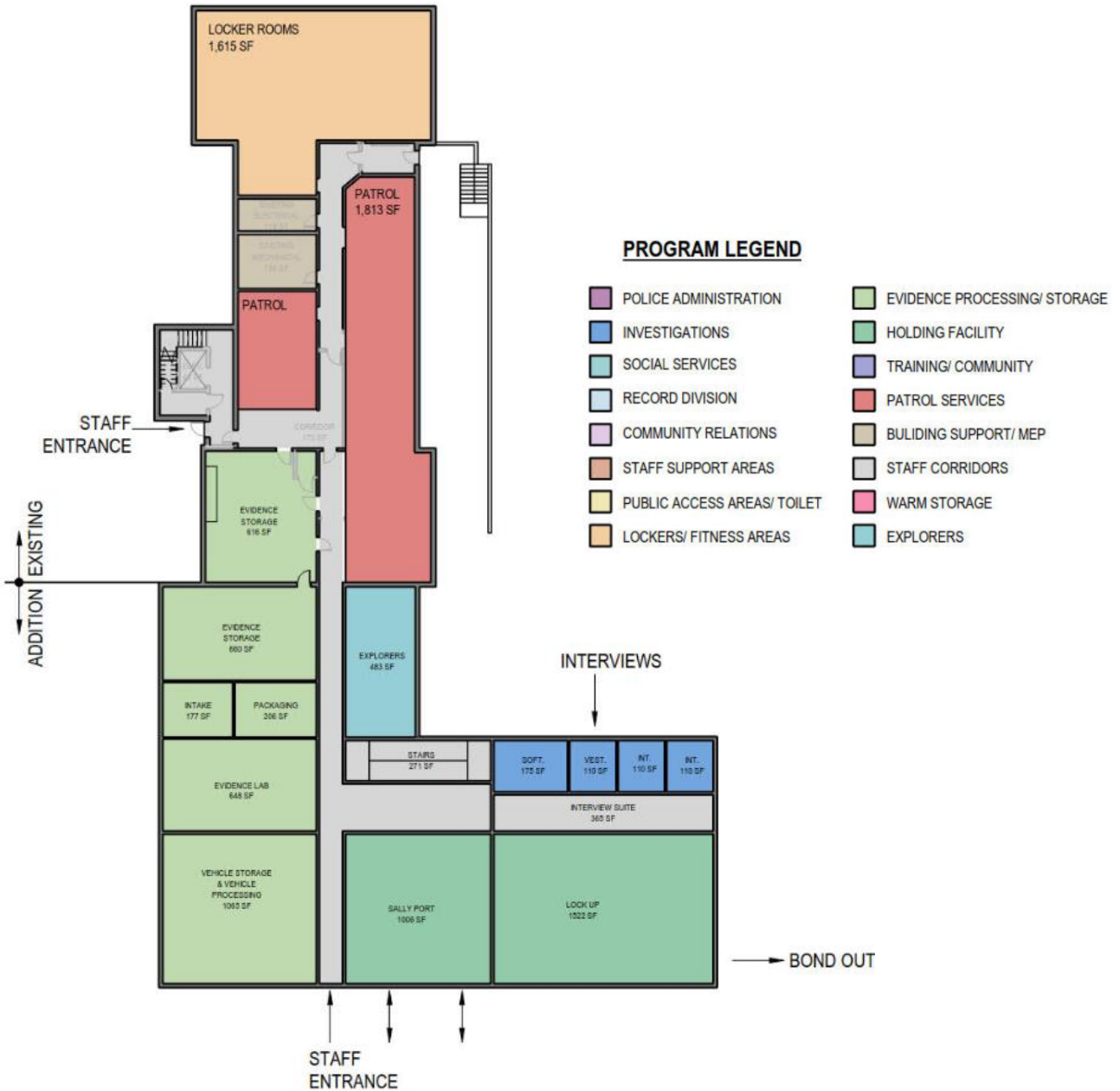


Conceptual Site Diagram

Existing Building	12,129 sq.ft.
Building Addition	13,839 sq.ft.
Parking	68 spaces (39 staff and 29 public)

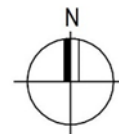


CONCEPT 1 – Renovate and Add Addition to Existing Police Station



Conceptual Lower Level Plan

Existing Building	12,129 sq.ft.
Addition	8,332 sq.ft.
Total	14,360 sq.ft.

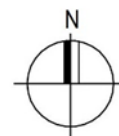


CONCEPT 1 – Renovate and Add Addition to Existing Police Station



Conceptual Upper Level Floor Plan

Existing Building	6,101 sq.ft.
Addition	5,507 sq.ft.
Total	11,608 sq.ft.



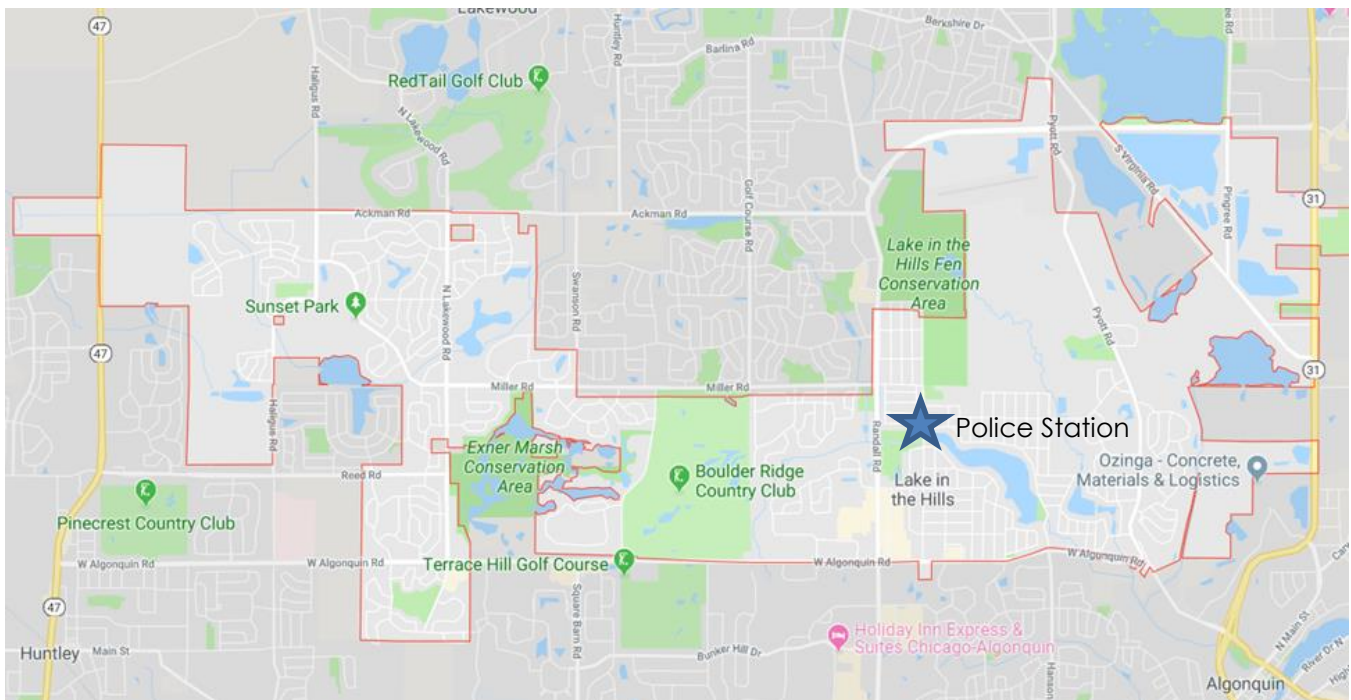
Concept 2 Build a New Police Station on the Existing Police Station Site.

The goal of this concept is to identify if the existing site is large enough to accommodate a new police station meeting the long-term needs. The new police station would need to be constructed in such a manner that the police department can still function without the use and expense of temporary facilities.

Police Location Considerations

To answer the question if the existing site can be used for a new police station, the following question needs to be considered:

Is this the best location for a police station in Lake in the Hills?

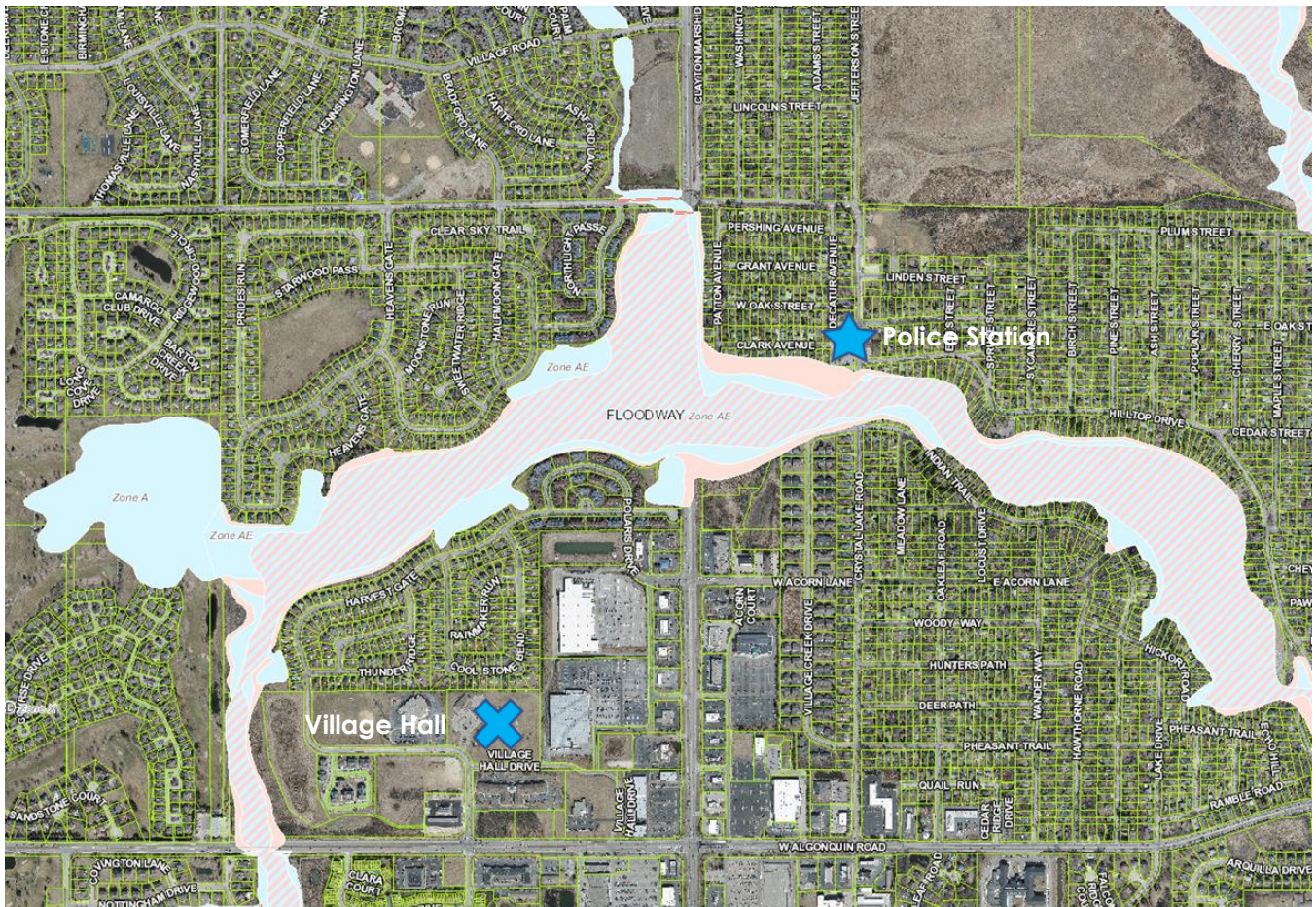


Map of Lake in the Hills

The following are some of the location issues that need to be considered when selecting where to build a new police station.

- How visible is the site to the public? Police stations are public facilities that should be easy to find.
- Does the location of the police station allow for easy access to and from all parts of the village? How difficult is it to move east-west and north-south from the station?

- The existing police station is in a residential neighborhood. Are there situations that require rapid response from the station? Is releasing of detainees into the neighborhood acceptable?
- It has been noted during major rain events, flooding in Lake in the Hills can restrict access to the police station. Are there better places for the police station to be located that are more resilient to weather related events?



McHenry County Flood Map

Concept Development

This concept is largely governed by the goal of keeping the existing police station in operation during construction. To do so, a phased approach is required. The first phase would build a new building over the existing parking lot to the east side of the site. After the police department moves into the new first phase, the existing police station would be torn down and the second phase of the new building would be constructed.

Concept 2 - Build a New Police Station on the Existing Police Station Site.

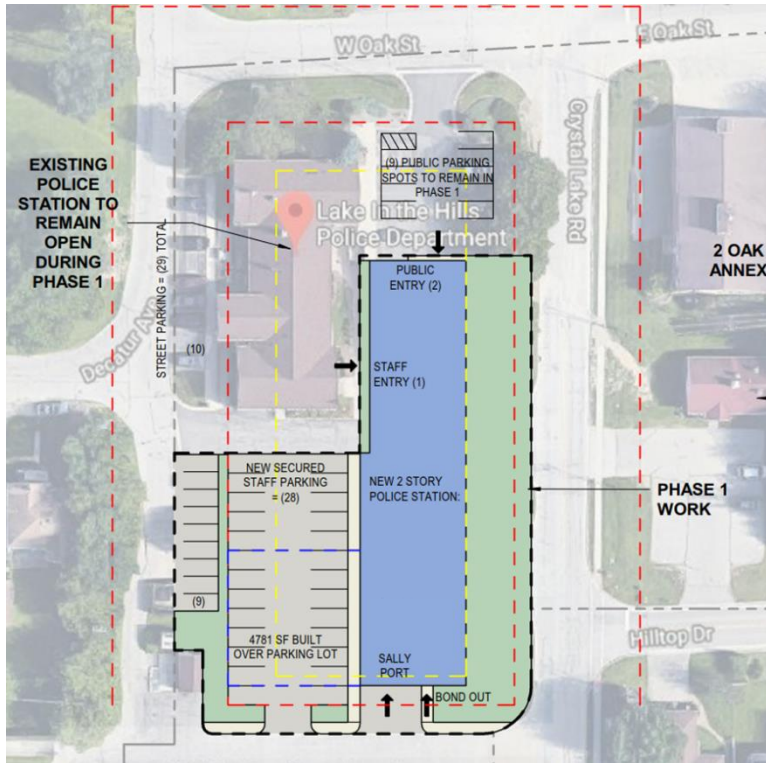


Existing Site

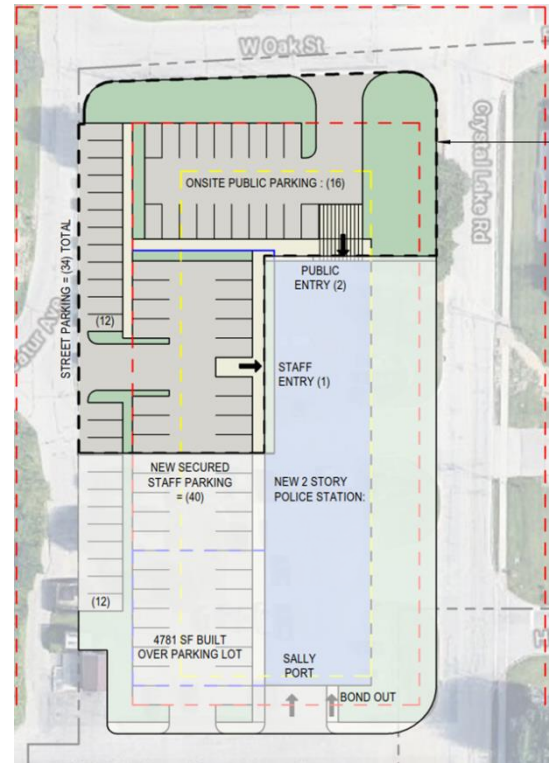
Assumptions for Concept 2

- The existing site boundaries are shown in the red dotted line.
- The existing police station is to stay operational during construction.
- Variations to zoning setbacks will be granted by the village.

Concept 2 - Build a New Police Station on the Existing Police Station Site.



Phase 1 – Build New Police Station

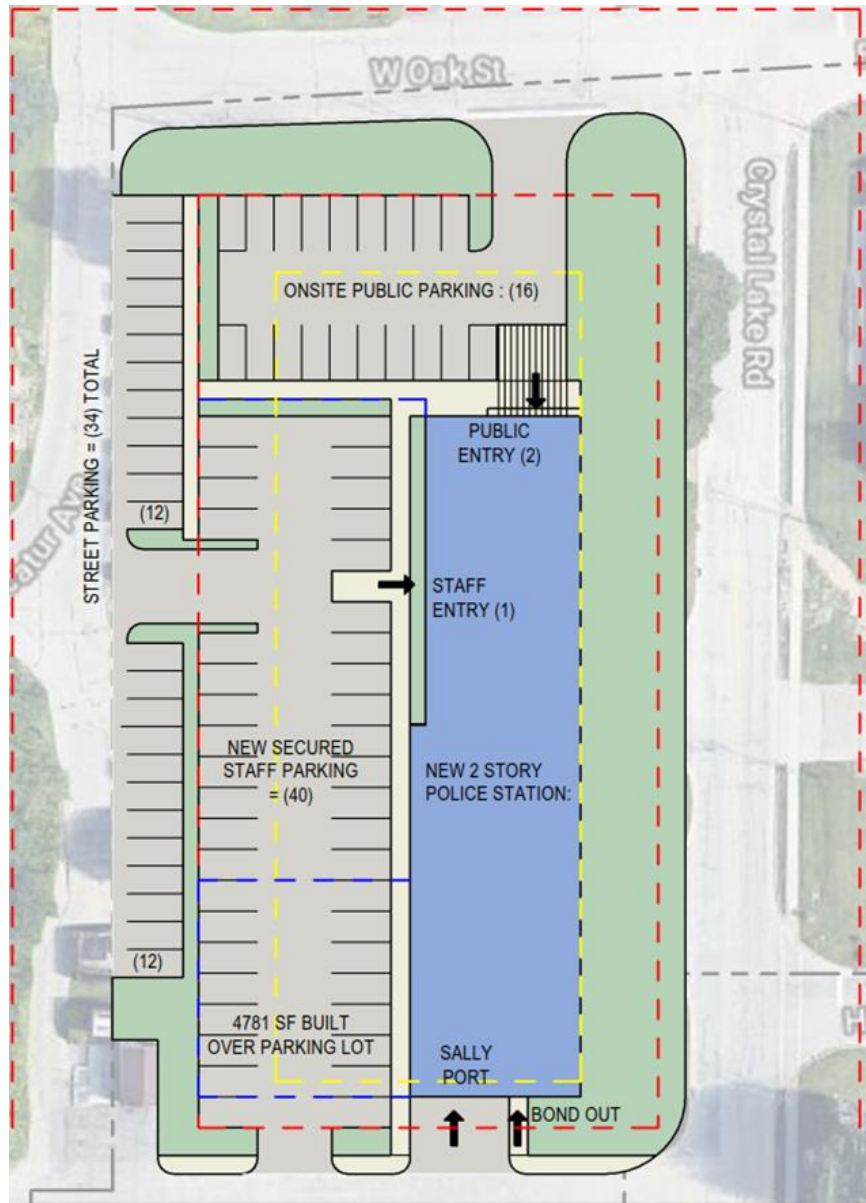


Phase 2 – Demolish Existing Police Station

The conceptual site planning shows how a new building can be planned to allow the existing police station to remain in operation during construction.

- The new building would be required to be relatively narrow so the existing building can remain. This layout may be less efficient and require additional space for functionality.
- Zoning variations will be required for building setbacks.
- The plan indicates the building to be a reverse “L” shape with one portion built over the parking lot. It was shown this way to allow for as many parking spaces as possible.
- The conceptual plan is short on parking 34 spaces. On street parking would be required.
- The plan would still require the use of the 2 Oak Annex for storage to meet the long-term space needs requirements.
- Stormwater detention will need to be located underground or offsite, which may increase costs.

Concept 2 - Build a New Police Station on the Existing Police Station Site.



Final Conceptual Plan

Concept 2 Pros and Cons

Pros

- The village owns the property.
- The police department can stay in operation during construction.

- The overall programmatic requirements for the long-term needs of the police department can be met.
- This concept improves key functional areas including lockup and holding, evidence, and locker room areas.

Cons

- The site can be isolated during major rainstorm events making travel to and from the police station difficult.
- This concept does not meet the parking requirements. Secure staff and visitor parking are short.
- Some of the staff and public parking is located on the street.
- This concept does not meet the security requirements for providing separate staff and visitor parking.
- This concept does not eliminate the need for storage use at the 2 Oak Annex.
- This concept is not expandable in the future as all available site area is utilized.

Conclusion

While this concept can meet the long-term building needs of the police department, there are many significant cons that make this option undesirable.

- The site is susceptible to being isolated during a major rainstorm.
- Parking requirements cannot be met in terms of quantity and security.

We question if the location of the police station is the best place for it being located in a residential neighborhood and not the easiest to access from all parts of the village.

Building a new police station on the current site will require zoning setback variations to fully utilize available site area and require street parking which may not be acceptable to the village.

We recommend the village explore alternative locations for a new police station

Concept 3 Renovate and Add an Addition to the Existing Village Hall for the Police Station.

The goal of this concept is to review how a police station addition can be added onto the village hall which would bring both functions under one roof. The thought behind this concept is as follows:

- Having both village hall and police department functions at the same site offers improved service to the community.
- There is land available at the village hall site for a potential addition.
- Underutilized spaces at the village hall can be used for police functions which potentially reduces the amount of new construction necessary to meet the long-term needs of the police department.

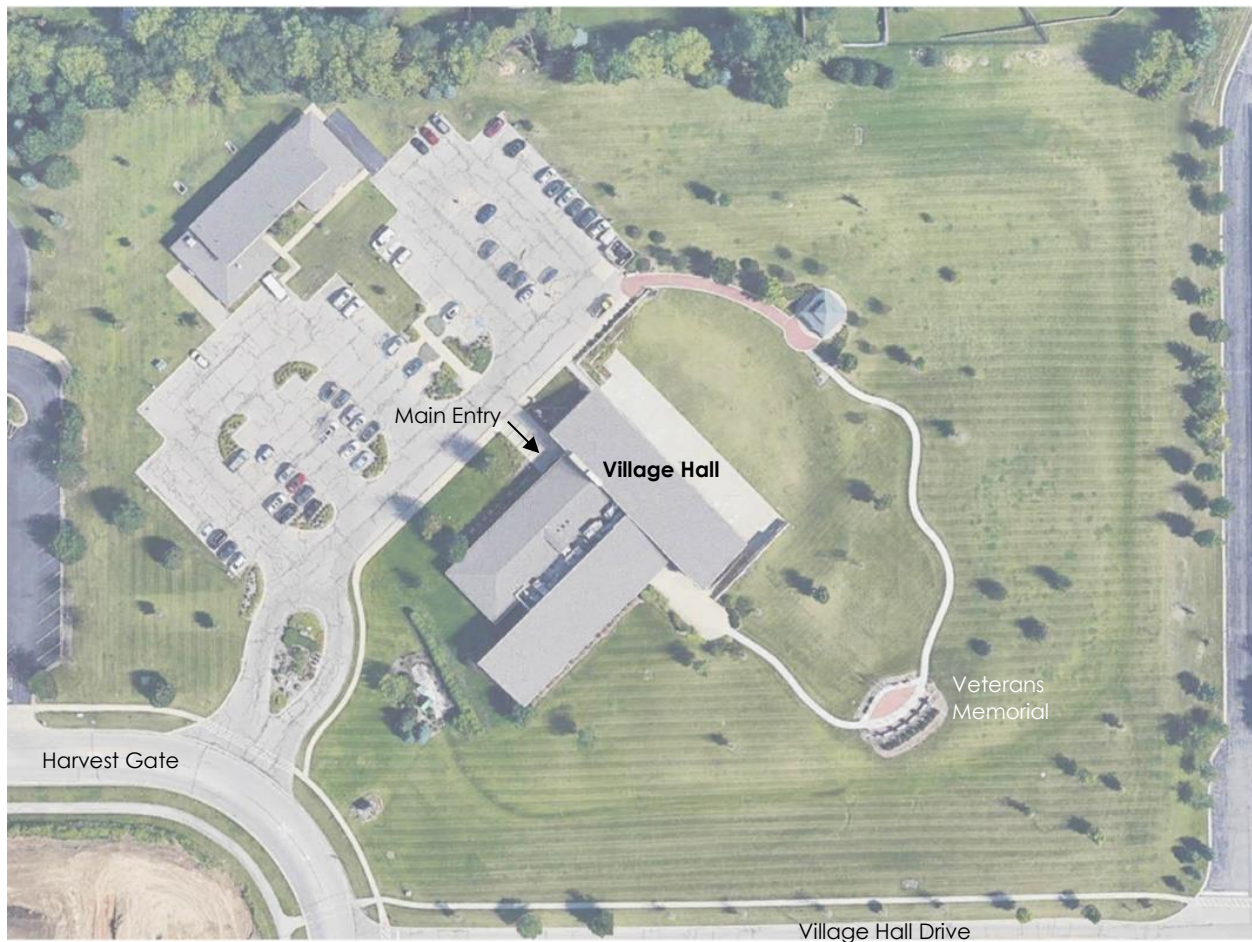
Village Hall Addition Considerations

When considering adding a police station addition onto the village hall, it is prudent to look at the entire project from a holistic standpoint. This includes reviewing how the existing village hall site and building functions. Are there any issues that should be addressed as part of the planning process? In discussions with village staff, the following were identified as items that should be considered.

- The orientation of the village hall “turns its back” to the community. While the village hall is seen from Village Hall Drive and Harvest Gate to the south and west, the entry is not visible until the building is seen from the north after entering the parking lot.
- Access to the parking lot is off a curved portion of Harvest Gate, which is more difficult than accessing off a straight section of road such as Village Hall Drive.
- The Veterans Memorial is visible from Village Hall Drive, but access to the memorial is via pedestrian paths from the parking lot behind the building. For persons who have difficulty walking, visiting the memorial can be difficult.
- In the village hall, the customer service areas have been consolidated into one location which making access to village hall services easy for the community. However, this has made supervision and assistance from administrative staff more difficult as they are located across the building from the

customer service area. The planning should review how this can be corrected.

- Even though there is underutilized space within the village hall, there are instances where staff from the same department have been split up and located in different parts of the building. For example, the village administrator and the assistant village administrator are located at opposite ends of the building.
- Currently, the village's recreation department utilizes the village hall for some recreation programming and hosts summer day camps. Where the programs are located would need to be reviewed by the village.



Existing Village Hall Site



Concept Development

To begin the development of this concept, FGM met with staff to identify the space needs requirement of the village hall. The space needs assessment identified space requirements for each department located in the village hall. The resulting space needs program identified 23,398 sq.ft. of space is required for the long-term needs of the village hall. The long-term needs allow for some modest potential staff growth over time. For comparison, the existing village hall is 23,450 sq.ft. See the village hall space needs program located at the end of this section for additional information.

The village staff had identified existing spaces which are underutilized. Spaces identified includes the southeast portion of the first floor which was originally recreation program space and was converted into additional preschool space and community/meeting room space.

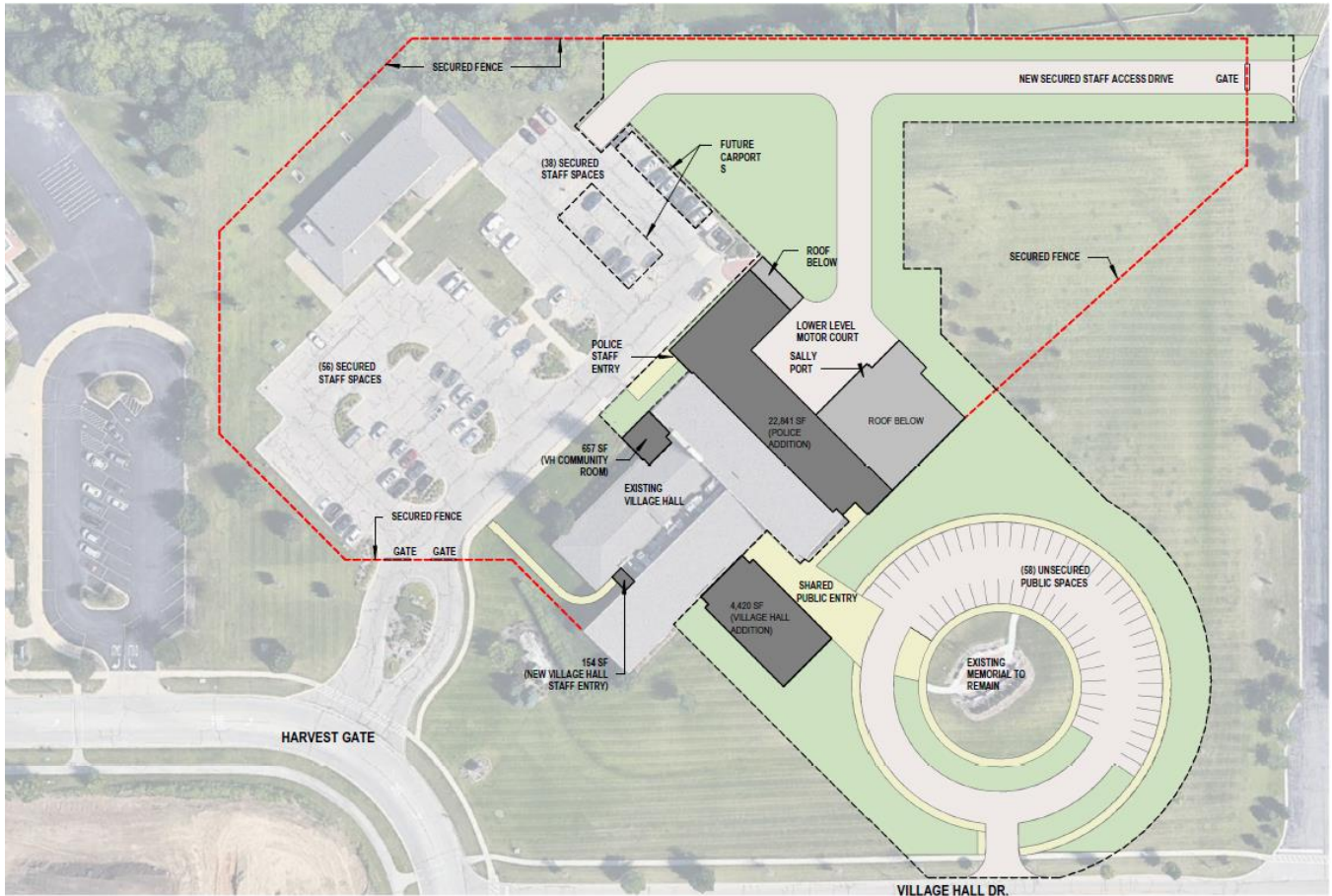
When developing the concepts, both the users of the village hall and police department recognize that community/meeting room space is necessary but is not needed on a daily basis. This is a potential area where spaces can be shared, thus reducing the overall space needs when considering a joint facility. Other areas where spaces can be shared include:

- Building Entrances
- Lobby space
- Public toilets
- Mechanical and electrical rooms

Another consideration that needed to be addressed in the concept development is the topography of the site. The village hall site is sloped on the east side to allow for a walk-out lower level. As the north and east sides of the building are areas where additions may be located, the topography becomes an important consideration.

The diagrams on the following pages illustrate the conceptual site and floor plans that were developed for this study.

Concept 3 - Renovate and Add an Addition to the Existing Village Hall for the Police Station.

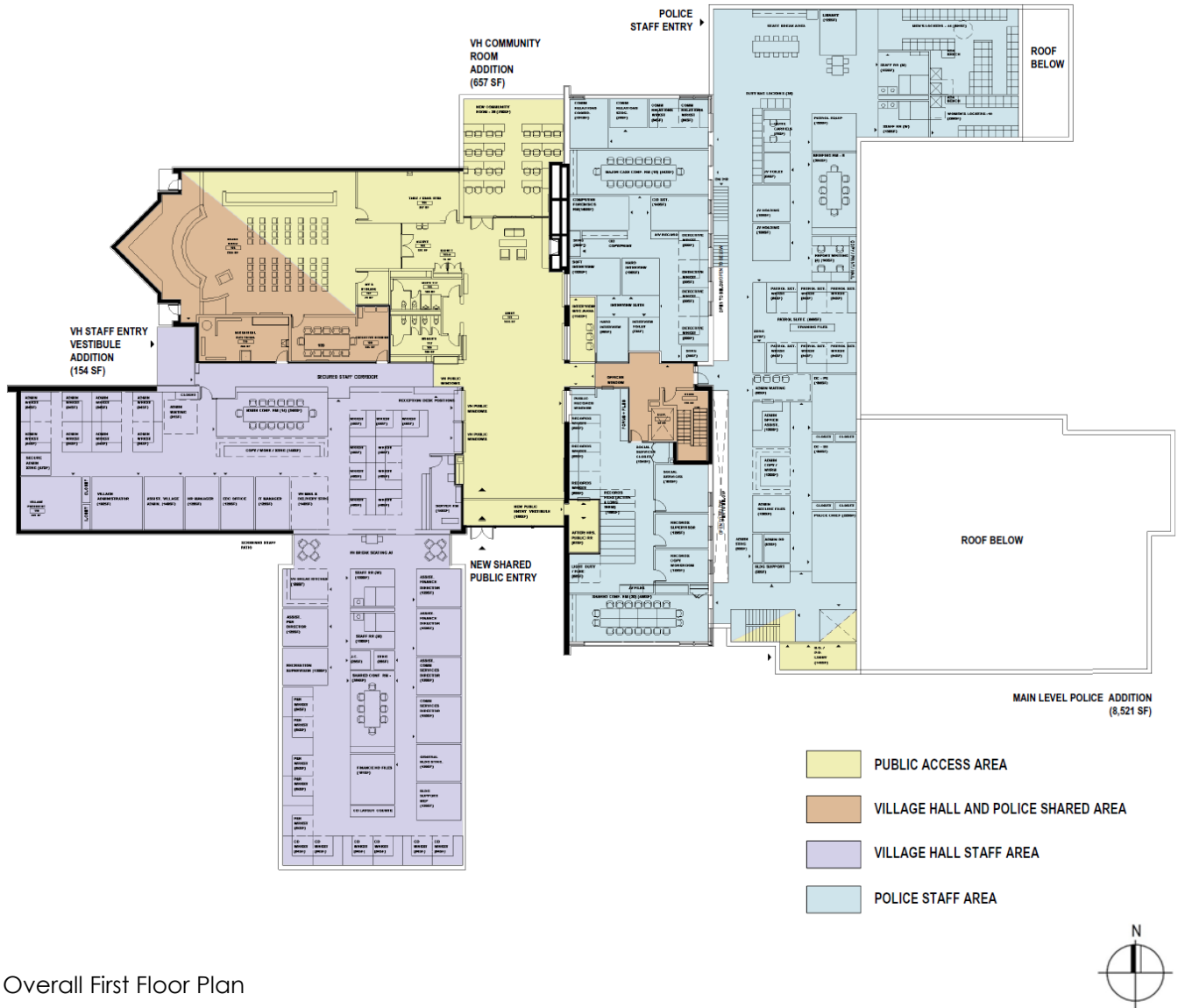


Conceptual Site Plan

The conceptual site planning reorients the building entrance towards Village Hall Drive, so the building entrance is visible to the community.

- The new entrance provides greater prominence to the Veterans Memorial
- New public parking is located directly off Village Hall Drive which also provides easy access to the Veterans Memorial.
- The existing parking lot to the north is reused for secure staff parking.
- An addition to relocate village hall functions is located on the south, adjacent to the proposed new main public entrance.
- An addition for the police station is located to the east.
- A small community room addition is located to the north.

Concept 3 - Renovate and Add an Addition to the Existing Village Hall for the Police Station.



Overall First Floor Plan

The first-floor planning has building additions for the village hall and police department.

- The addition for the village hall, located to the south of the existing building allows for all village hall functions to be contiguous.
- The first floor accommodates all areas requiring public access and customer service areas for both the village hall and police department.

-
- Village hall department staff can be arranged to be able to provide supervision and support to customer service areas without having to cross the lobby.
 - Village hall departments have enough workspace for the department's employees so they can be co-located, which allows for better communication and operational efficiency.
 - Village hall conference rooms can be arranged so they are easily accessed by both staff and public.
 - The lobby, public toilets, and meeting rooms are utilized for village hall and police department functions which provides greater utilization and reduces the amount of space required than if they were in separate buildings.
 - Police department reception is located directly across the lobby from the village hall reception offering better customer service than if they were in separate locations.
 - The east portion of the existing village hall is remodeled for police department use and a new two-story police station addition is located directly east.

Lower level planning accommodates primarily police department functions, but there are proposed shared meeting, facility maintenance, and storage areas too.

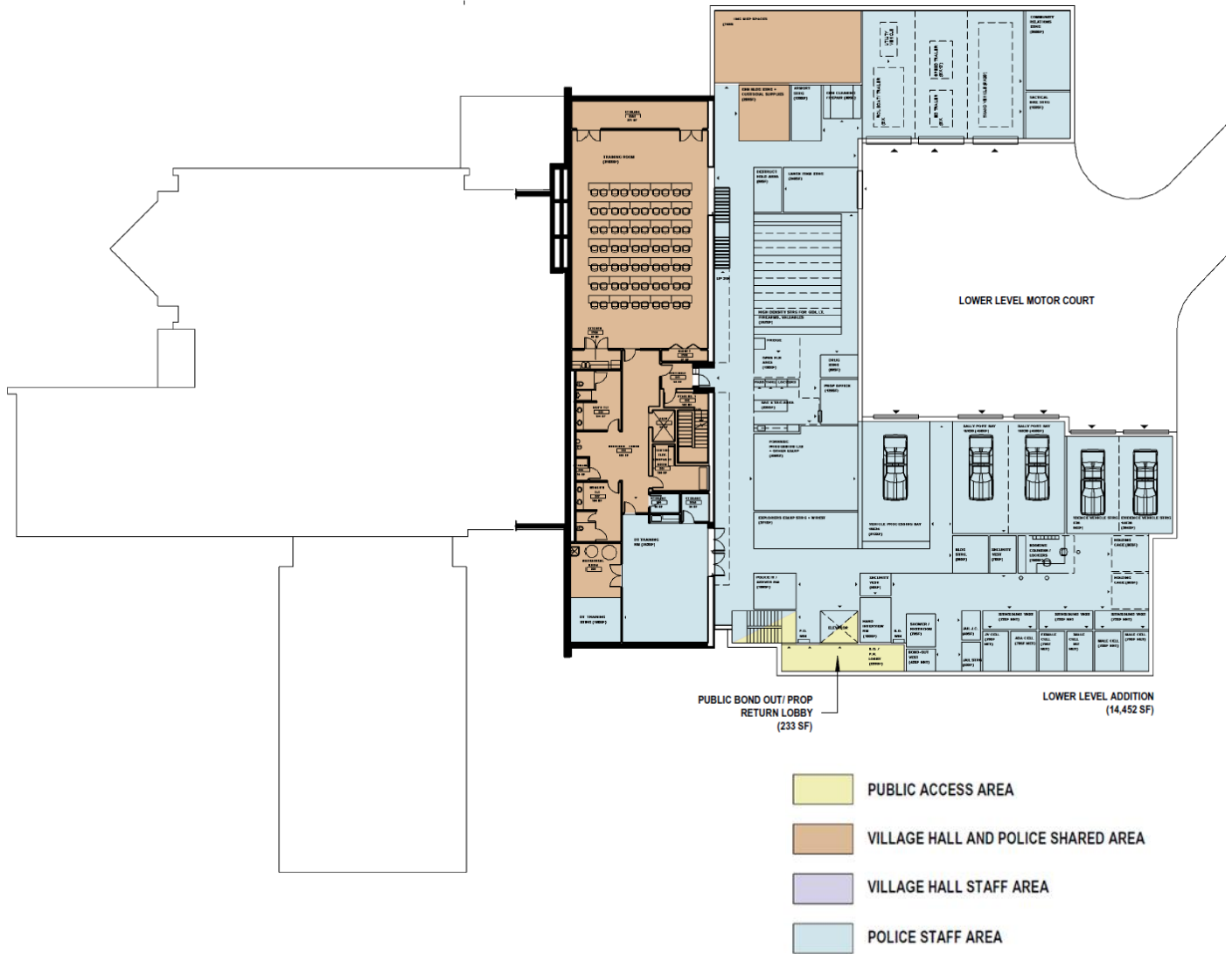
- The lower level of the existing village hall is largely unchanged, and the meeting room is proposed to be another shared space for village and police department use.
- The lower level addition is relatively isolated from view to the community and accommodates all areas requiring vehicular access and security. This includes lock up, evidence, and storage garage areas.

By placing an addition for the police department onto the village hall and sharing lobby, meeting, mechanical, maintenance and storage spaces, less space is needed than if they were separate buildings.

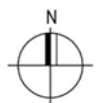
- The total programmed area for separate buildings is 60,902 sq.ft.
- The conceptual plan for a combined facility is 51,965 sq.ft.
- The proposed combined building is 8,937 sq.ft. less than if they were separate.

Enlarged conceptual floor plans are shown on the following pages.

Concept 3 - Renovate and Add an Addition to the Existing Village Hall for the Police Station.



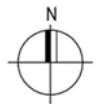
Overall Lower Level Plan



Concept 3 - Renovate and Add an Addition to the Existing Village Hall for the Police Station.



Enlarged Lower Level Plan



Concept 3 Pros and Cons**Pros**

- The village owns the property.
- More prominence is given to the Veterans Memorial.
- The entry to the village hall is more easily identified as the entry now faces Village Hall Drive.
- The police department can stay in operation during construction.
- All parking requirements are met including providing secure staff parking.
- The overall programmatic requirements for the long-term needs of the police department can be met.
- This concept improves key functional areas including lockup and holding, evidence, and locker room areas.
- This concept eliminates the need for using 2 Oak Annex and the Safety and Education Center.
- This option is scalable and can be expanded in the future if needs change.
- There is good synergy between village hall and police functions which also improves service to the community as the building will be a one stop shop for all functions.
- The overall security of the village hall is improved.
- Staff functionality of the village hall is improved.
- Sharing public access and facility maintenance space reduces the amount of new construction required to meet the long-term needs of both the police department and village hall, which reduces the cost of construction.

Cons

- The recreation programming that currently takes place at the village hall will need to be relocated.
- Village hall operations will be disrupted during construction.
- The amount of green space around the village hall will be reduced.

Concept 3 Renovate and Add an Addition to the Existing Village Hall for the Police Station.**Conclusion**

Concept 3 meets all of the long-term needs of the police department and at the same time, improves operational issues at the village hall and gives greater prominence to the Veterans Memorial. The number of pros vs cons leads us to recommend this option as the best solution for solving the space needs issues of the police department.

Village Hall Space Needs Program

Following this page is the village hall space needs program referenced in Concept 3.

Village Hall Space Needs Program

Pages 1-5

Note that Space Needs Programs attempt to compare the size of existing space to space required. In many cases, it is difficult to provide an "apples to apples" comparison because many spaces accommodate more than one function in the existing building. Therefore, we suggest using the space comparison as a general comparison only.

Village of Lake in the Hills

Village Hall

Space Needs Program

FGM ARCHITECTS

July 28, 2019
FGM #: 19-2668.01

Room/Area/Space	Sq. Ft. Existing	Sq. Ft. Proposed	Notes
A. PUBLIC ENTRY / PUBLIC ACCESS AREAS			
1.0 Entry Vestibule	169	169	Existing Sq. Ft. includes both upper and lower levels
2.0 Lobby	1,632	1,632	Provide seating for (4-6)
3.0 Closet	13	13	
4.0 Public Toilets	349	349	Men's: 2 toilets, 2 urinals and 2 lavs. Women's: 3 Toilets and 2 lavs.
5.0 Public Entry / Public Access Areas Sub-Total	2,163	2,163	
6.0 Circulation, Wall, and Mechanical Shaft Space	-	-	included in spaces
7.0 PUBLIC ENTRY / PUBLIC ACCESS AREAS TOTAL	2,163	2,163	
B. BOARD AND MEETING ROOMS			
1.0 Board Room Entry Alcove	202	202	
2.0 Board Room / Community Room	2,155	2,155	Seating for (80) people with dais and staff tables
3.0 Audio/Visual Equipment	76	76	Closet for Audio/Visual Equipment
4.0 Storage	-	150	General storage
5.0 Table and Chair Storage	-	-	Long counter w/storage cabinets for Community/Training Room
6.0 Credenza Storage Counter	-	-	To support Community/Training room functions
7.0 Kitchenette/Breakroom	357	350	
8.0 Executive Session Conference Room	335	375	Conference seating for (12)
9.0 Community / Multi-Purpose Room (main level)	694	-	
10.0 Storage	108	-	
11.0 Large Multi-Purpose Room (lower level)	2,117	2,000	
12.0 Kitchenette	66	80	
13.0 Closet	37	200	
14.0 Storage	271	-	
19.0 Public Toilets (lower level)	368	368	Men's: 1 toilet, 1 urinal and 2 lavs. Women's: 2 Toilets and 2 lavs.
20.0 Board and Meeting Rooms Sub-Total	6,786	5,956	
21.0 Circulation, Wall, and Mechanical Shaft Space	-	1,787	
22.0 BOARD AND MEETING ROOMS TOTAL	6,786	7,743	
C. ADMINISTRATION			
1.0 Village President's Office	229	225	Desk, credenza, soft seating area, small conf. table, bookcases
2.0 Closet	-	10	
3.0 Village Administrator's Office	227	185	"U" shaped workstation, (2) guest seats
4.0 Closet	-	10	
5.0 Assistant Village Administrator's Office	-	150	
6.0 Human Resources Manager's Office	170	120	"U" shaped workstation, (2) guest seats
7.0 Economic Development Coordinator's Office	-	120	"U" shaped workstation, (2) guest seats

Village of Lake in the Hills
Village Hall

FGM ARCHITECTS

July 28, 2019
FGM #: 19-2668.01

Space Needs Program

Room/Area/Space	Sq. Ft.		Notes
	Existing	Proposed	
8.0 IT Managers Office	129	120	"U" shaped workstation, (2) guest seats
9.0 Open Office Workstations	845	576	(6) 8x8 "U" shaped workstations
10.0 Administrative Waiting		80	Guest seating for (4)
11.0 Coat Closet	10	15	
12.0 Administrative Conference Room	283	420	Conference Seating for (14) with credenza
13.0 Secure Files/Administrative Storage	105	100	Allow for (3) 4-drawer 42" wide lateral files and (7) 4-drawer letter files
14.0 Administrative Storage Closet	-	50	Secure supply storage
15.0 Copy/Workroom	207	120	Area with copier, shredder, work counters, storage
16.0 Server Room	145	145	
17.0 Coffee Area	11	80	
18.0 Toilet	-	60	Single User Toilet
19.0 Administration Sub-Total	2,361	2,586	
20.0 Circulation, Wall, and Mechanical Shaft Space	292	905	
21.0 ADMINISTRATION TOTAL	2,453	3,491	
D. FINANCE AND CUSTOMER SERVICE			
1.0 Finance Director	187	150	"U" shaped workstation, (2) guest seats, lateral file
2.0 Assistant Finance Director's Office	129	120	"U" shaped workstation, (2) guest seats, lateral file
3.0 Open Office Workstations	1,271	662	(9) 7x7 "L" shaped workstations
4.0 Reception Desk	-	90	(3) reception positions required
5.0 Copy/Workroom	219	120	Area with copier, shredder, work counters, storage
6.0 Conference Room	112	225	Seating for (6)
7.0 Storage	311	80	
8.0 Files	311	311	High density files. Existing includes temporary staff desks
9.0 Finance and Customer Service Sub-Total	2,229	1,758	
10.0 Circulation, Wall, and Mechanical Shaft Space	127	615	
11.0 FINANCE AND CUSTOMER SERVICE TOTAL	2,356	2,373	
E. COMMUNITY SERVICES			
1.0 Community Services Director's Office	184	150	
2.0 Community Development			
3.0 Assistant Director's Office	128	120	"U" shaped workstation, (2) guest seats
4.0 Open Office Workstations	389	509	(3) 7x7 "L" shaped workstations and (3) 8x8 "U" shaped workstations
5.0 Storage	16	40	
6.0 Closet	14		
7.0 Conference Room	-	280	Table with seating for (8)

Village of Lake in the Hills

Village Hall

Space Needs Program

FGM ARCHITECTS

July 28, 2019

FGM #: 19-2668.01

Room/Area/Space	Sq. Ft.		Notes
	Existing	Proposed	
8.0 Parks and Recreation			
9.0 Assistant Director's Office	128	120	"U" shaped workstation, (2) guest seats
10.0 Recreation Supervisor's Office	160	120	
11.0 Open Office Workstations	350	480	(4-5) 8'x8' "U" shaped workstations
12.0 Storage		150	
13.0 Preschool		-	
14.0 Preschool Classroom (upper level)	1,039	-	
15.0 Closet	24	-	
16.0 Preschool Classroom (lower level)	776	-	
17.0 Storage	56	-	
18.0 Room 129	162	-	
19.0 Room 130	76	-	
20.0 Room 131	202	-	
21.0 Closet	10	-	
22.0 Room 132	129	-	
23.0 Room 133	129	-	
24.0 Room 134	183	-	
25.0 Preschool Classroom (lower level)	776	-	
26.0 Storage	56	-	
Community Services Sub-Total	4,987	1,969	
Circulation, Wall, and Mechanical Shaft Space	-	689	
COMMUNITY SERVICES TOTAL	4,987	2,657	
F. STAFF SUPPORT AREAS			
1.0 Staff Entry	58	60	
2.0 Lunchroom with Kitchennette		300	Break area with (3) tables of four
3.0 Mud Room		40	With area for wet gear
4.0 Staff Toilets Allowance		450	Allowance for toilet rooms throughout the building
5.0 Storage	18	-	Located in closet allowance below
6.0 Storage	40	-	Located in closet allowance below
7.0 Closet Allowance		100	Allowance for closets throughout the building
8.0 Staff Support Areas Sub-Total	58	890	
9.0 Circulation, Wall, and Mechanical Shaft Space	-	312	
10.0 STAFF SUPPORT AREAS TOTAL	58	1,202	
G. LOADING/FACILITY MAINTENANCE			

Village of Lake in the Hills

Village Hall

Space Needs Program

FGM ARCHITECTS

July 28, 2019
FGM #: 19-2668.01

Room/Area/Space	Sq. Ft.		Notes
	Existing	Proposed	
1.0 Central Custodial Storage Space	-	100	Storage of supplies
2.0 Janitor's Closet Allowance	-	80	For janitorial storage
3.0 Mail and Delivery Storage Room	-	100	
4.0 General Building Storage	-	400	
5.0 Loading / Facility Maintenance Sub-Total	-	680	
6.0 Circulation, Wall, and Mechanical Shaft Space	-	204	
7.0 LOADING FACILITY MAINTENANCE TOTAL	-	884	
H. MECHANICAL AND ELECTRICAL SPACES			
1.0 Emergency Generator	-	-	Locate outside
2.0 Mechanical Room(s)	641	641	HVAC, Plumbing and Fire Protection Equipment
3.0 Electrical Room			
4.0 Gas Service Room	100	-	In mechanical room
5.0 Elevator	138	-	In circulation space allowance
6.0 Elevator Machine Room		40	In circulation space allowance
7.0 Telephone Service Room		40	D-mark room
8.0 Mechanical and Electrical Spaces Sub-Total	879	681	
9.0 Circulation, Wall, and Mechanical Shaft Space		204	
10.0 MECHANICAL AND ELECTRICAL SPACES TOTAL	879	885	
	19,882		
TOTAL BUILDING AREA	23,450		
I. TOTAL BUILDING AREA REQUIRED - 1 Story	-	21,398	Area required for one story building
Multi-Floor Factor		2,000	Assume two floors at 1,000 sq.ft. per floor
J. TOTAL BUILDING AREA REQUIRED - 2 Story	-	23,398	Area required for two story building
K. PARKING REQUIREMENTS			
1.0 Village Vehicles			
2.0 Administrative Vehicles		5	
3.0 Bus		1	1.5 person bus
4.0 Total Village Vehicles		6	
1.0 Staff Parking			

SECTION 7 CONCEPTUAL PROJECT BUDGETS

Project Budgets

As part of this study, FGM has provided conceptual budgets to implement a project. For the attached summaries, the Total Project Budget includes the cost of construction, fees and soft costs for each of the schemes.

Costs are based on a quality municipal structure that will be serviceable for 30+ years assuming an appearance and use of materials that are complimentary to other municipal facilities in Lake in the Hills.

Costs are based on a spring/summer 2021 construction start. Budgets will need to be escalated for inflation as required annually after that time frame. Cost ranges have been provided as design work is no actual design work has been performed.

Budgeting Methodology

FGM has an extensive database of cost information for police stations and used cost per square foot estimates as the budgeting methodology for the conceptual budgets. To verify budgets, FGM also consulted with local area builders. Because no actual design work has been performed, a budget range is provided for construction costs as well as a Total Project Budget.

Components of a Budget

When developing cost estimates for a construction project for a municipality, it is helpful to have a total project budget, so the village knows the overall costs for a project. Most often, when project costs are discussed, only construction costs are presented. The components of a total project budget include the following items.

- Construction Costs
 - Public projects in Illinois are also subject to prevailing wage laws for site and building construction.
 - Price Escalation accounts for inflation over time. Often, construction inflation out paces the consumer price index.
- Design and Construction Contingencies
 - Contingency funds provide funds to take care of unknown issues during design and construction.
- Soft Costs
 - Owner purchased items including, furniture, equipment, computers, telephones, telephone and radio boosters, etc.
 - Fees and Other Soft Costs including Architectural and Engineering fees, surveys, soil testing, commissioning,

moving costs, etc.

- Owner Contingencies
 - Owner contingencies provides funds for unexpected issues for owner purchased items

Why Police Stations Cost More Than Other Buildings

When discussing budgets for a police station construction project, it is important to understand that police stations are subject to more special requirements that most buildings making it more costly. Some of the requirements are as follows.

- Requirements – Police stations are subject to stricter building code requirements than many other building types.
 - The building code deems police stations a critical facility, therefore, there are increased structural requirements; i.e.: being able to withstand 120 mph vs 90 mph winds.
 - Critical operations power systems are required per the building code. This includes emergency backup power and protected power systems (surge and lighting protection).
 - Holding areas are subject to requirements of the Illinois Department of Corrections. Lockup and holding cell construction is costly
- Police stations must be designed for 365/24/7 use.
- Evidence specialty equipment is costly. Specialized equipment is used for processing and handling of evidence.
- A high level of security is required which is costly. This includes physical security, such as bullet resistant windows and electronic security, including CCTV cameras and door access controls.
- Police stations by law require a significant amount of audio/visual/recording equipment.

Cost Summaries

A summary of costs for each concept presented is as follows.

Concept 1 Renovate and Add an Addition to the Existing Police Station

This concept is to address the three largest deficiencies in the police station, which includes the lockup and holding, evidence, and locker room areas, but does not meet the long-term space or parking requirements of the police department.

A summary of costs for Concept 1 is as follows.

Item	Low	High
Total Construction Costs	\$9,556,407	\$10,181,569
Design & Construction Contingency	\$955,641	\$1,018,157
Fees and Soft Costs	\$1,505,084	\$1,713,975
Owner Contingency	\$150,508	\$171,975
Total Project Budget	\$12,645,461	\$13,594,178

For additional information, see the Conceptual Budget for Stop Gap Solution - Renovation and Addition to Existing Police Station

Concept 2 Build a New Police Station on the Existing Police Station Site.

This concept constructs a new police station on the existing police station site. The long-term space needs of the police department can be met if the 2 Oak Annex building is kept, but the parking requirements cannot be met. Building a new police station at this site is also questionable due to its location in a residential neighborhood, access to the rest of the village, and access during a significant rain event due to flooding.

A summary of costs for Option 2 is as follows.

Item	Low	High
Total Construction Costs	\$16,178,07	\$17,005,324
Design & Construction Contingency	\$1,617,808	\$ 1,700,532
Fees and Soft Costs	\$2,315,671	\$2,555,547
Owner Contingency	\$231,567	\$255,547
Total Project Budget	\$ 21,152,029	\$22,367,138

For additional information, see the Conceptual Budget for Concept 2 - New Police Station on Existing Site

Concept 3 Renovate and Add an Addition to the Existing Village Hall for the Police Station.

This concept has the police station and village hall which would bring both functions under one roof to improve service to the community. This concept meets the long-term needs of the police department and village hall. The planning takes into account underutilized space at the village hall and through the sharing of space, reduces the amount of new construction necessary.

A summary of costs for Concept 3 is as follows.

Item	Low	High
Total Construction Costs	\$15,079,118	\$16,103,242
Design & Construction Contingency	\$1,507,912	\$1,610,324
Fees and Soft Costs	\$2,492,898	\$2,756,653
Owner Contingency	\$249,290	\$275,665
Total Project Budget	\$19,329,217	\$ 20,745,885

For additional information, see the Conceptual Budget for Concept 3 - Police Station Addition and Renovations to Village Hall.

Total Project Budget Comparisons

A summary of the total project budgets from each of the concepts is shown below.

Item	Low	High
Concept 1 Stop Gap Plan Renovation/Addition to Police Station	\$12,645,461	\$13,594,178
Concept 2 Long Term Solution New Police Station on Existing Site	\$21,152,029	\$22,367,138
Concept 3 Long Term Solution Renovation/Addition to Village Hall	\$19,329,217	\$ 20,745,885

Project Budget Attachments

Following this page are the conceptual project budgets for the three concepts presented in this report.

Budget Summary Page 1 of 1

Renovation and Addition to Existing Police Station
Conceptual Budget for Stop Gap Solution - Renovation and
Addition to Existing Police Station Pages 1-2

Build a New Police Station on Existing Site
Conceptual Budget for Concept 2 - New Police Station on Existing
Site Pages 1-2

Police Station Addition and Renovations to Village Hall
Conceptual Budget for Concept 3 - Police Station Addition and
Renovations to Village Hall Pages 1-2

Item		Quantity	Unit	Cost/Unit		Construction Cost		Remarks
				Low	High	Low	High	
POLICE STATION RENOVATION AND ADDITION								
Site Preparation								
	Environmental Remediation (asbestos)			allow	allow	\$ 40,000	\$ 50,000	Assumed some remediation is required
	Selective Demolition of Existing Building	12,128	s.f.	\$ 6	\$ 8	\$ 72,768	\$ 97,024	Prep. work for new construction
Construction								
	Major Renovation of Existing Police Station	12,128	s.f.	\$ 255	\$ 275	\$ 3,092,640	\$ 3,335,200	Includes replacement of HVAC system
	Two Story Police Station Addition	13,839	s.f.	\$ 400	\$ 420	\$ 5,535,600	\$ 5,812,380	Build to essential facility criteria
	Phasing Costs			allow	allow	\$ 180,000	\$ 210,000	Assume 6 months add. construction time
	Sub-Total	25,967				\$ 8,921,008	\$ 9,504,604	
	Escalation (3.5% per annum for two years)					\$ 635,399	\$ 676,965	Assume construction starts in Fall 2021
	Total Construction Costs					\$ 9,556,407	\$ 10,181,569	
	Design and Pricing Contingency (5%)					\$ 477,820	\$ 509,078	
	Construction Contingency (5%)					\$ 477,820	\$ 509,078	
	Total Construction Budget					\$ 10,512,047	\$ 11,199,726	
Allowances for Items to be Purchased by the Village								
	Furniture and Equipment					\$ 200,000	\$ 250,000	Assumes some reuse of existing furniture.
	Computer Systems					\$ 50,000	\$ 60,000	
	Wireless Network System					\$ 20,000	\$ 25,000	
	Maintenance/Janitorial Equipment					\$ 5,000	\$ 6,000	
	Telephone System					\$ 50,000	\$ 60,000	
	Wireless Telephone Boosters/Amplifiers					\$ 25,000	\$ 35,000	
	Miscellaneous Equipment and Furnishings					\$ 15,000	\$ 20,000	For items such as art, plants, bond safe, etc.
	Total Allowances for Items to be Purchased by the Village					\$ 365,000	\$ 456,000	
Allowances for Items Fees and Soft Costs								
	Architectural and Engineering Fees (9.0%)					\$ 946,084	\$ 1,007,975	Incl. civil, security and landscape design
	Furnishings Design Fee					\$ 25,000	\$ 35,000	Design, procurement and project mgmt

**Village of Lake in the Hills
Police Station Renovation and Addition**

Conceptual Budget for Stop Gap Solution - Renovation and Addition to Existing Police Station

Item		Quantity	Unit		Cost/Unit		Construction Cost		Remarks
			Low	High	Low	High	Low	High	
Environmental Studies							\$ 12,000	\$ 15,000	
Surveys & Soil Investigations							\$ 12,000	\$ 17,000	Asbestos and lead testing
Material Testing During Construction							\$ 25,000	\$ 30,000	
Building Commissioning							\$ 40,000	\$ 50,000	Code required commissioning
Printing Costs							\$ 5,000	\$ 8,000	
Utility Company Charges (Electric, Gas, Telephone)							\$ 25,000	\$ 30,000	
Moving Costs							\$ 40,000	\$ 50,000	Two moves
Utility costs during construction							\$ 10,000	\$ 15,000	
Total Allowances for Fees and Soft Costs							\$ 1,140,084	\$ 1,257,975	
Owner's Contingency							\$ 150,508	\$ 171,398	10% of Allowances
TOTAL PROJECT BUDGET							\$ 12,645,461	\$ 13,594,178	
Notes:									
Project Budgets are preliminary and are based on historical square foot cost information.									
Project Budgets are based on a Fall 2021 construction start date.									
Project Budgets do not include legal fees or financing costs.									
Construction Costs are based utilizing a Construction Management project delivery method.									
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FGM ARCHITECTS

November 8, 2019
FGM #: 19-2668.01

**Village of Lake in the Hills
Police Station Renovation and Addition**

Conceptual Budget for Stop Gap Solution - Renovation and Addition to Existing Police Station

Village of Lake in the Hills
New Police Station
Conceptual Budget for Concept 2 - New Police Station on Existing Site

FGM ARCHITECTS
November 8, 2019
FGM #: 19-2668.01

Item	Quantity	Unit	Cost/Unit		Construction Cost		Remarks
			Low	High	Low	High	
NEW POLICE STATION ON EXISTING SITE							
Site Preparation							
Environmental Remediation (Asbestos)			allow	allow	\$ 40,000	\$ 50,000	Assumed some remediation is required
Demolition of Existing Building	12,162	s.f.	\$ 5	\$ 6	\$ 60,810	\$ 72,972	
Construction							
New Two Story Police Station	37,504	s.f.	\$ 400	\$ 420	\$ 15,001,600	\$ 15,751,680	Assumed use of precast concrete
Sub-Total					\$ 15,102,410	\$ 15,874,652	Build to essential facility criteria
Escalation (3.5% per annum for two years)					\$ 1,075,669	\$ 1,130,672	Assume construction starts in Fall 2021
Total Construction Costs					\$ 16,178,079	\$ 17,005,324	
Design and Pricing Contingency (5%)					\$ 808,904	\$ 850,266	
Construction Contingency (5%)					\$ 808,904	\$ 850,266	
Total Construction Budget					\$ 17,795,887	\$ 18,705,856	
Allowances for Items to be Purchased by the Village							
Furniture and Equipment					\$ 480,000	\$ 530,000	Assumes new furniture and furnishings.
Computer Systems					\$ 80,000	\$ 100,000	
Wireless Network System					\$ 20,000	\$ 30,000	
Maintenance/Janitorial Equipment					\$ 6,000	\$ 8,000	
Telephone System					\$ 80,000	\$ 90,000	
Wireless Telephone Boosters/Amplifiers					\$ 25,000	\$ 35,000	
Miscellaneous Equipment and Furnishings					\$ 15,000	\$ 20,000	For items such as art, plants, bond safe, etc.
Total Allowances for Items to be Purchased by the Village					\$ 706,000	\$ 813,000	
Allowances for Items Fees and Soft Costs							
Architectural and Engineering Fees (8.0%)					\$ 1,423,671	\$ 1,496,469	Incl. civil, security and landscape design
Furnishings Design Fee					\$ 25,000	\$ 35,000	Design, procurement and project mgmt
Site Environmental Study (Phase I)					\$ 6,000	\$ 8,000	
Surveys & Soil Investigations					\$ 10,000	\$ 15,000	

Village of Lake in the Hills New Police Station		FGM ARCHITECTS							
Conceptual Budget for Concept 2 - New Police Station on Existing Site		November 8, 2019 FGM #: 19-2668.01							
Item	Quantity	Unit	Cost/Unit	Low	High	Construction Cost	Low	High	Remarks
Material Testing During Construction						\$ 25,000		\$ 30,000	
Building Commissioning						\$ 40,000		\$ 50,000	
Printing Costs						\$ 5,000		\$ 8,000	
Utility Company Charges (Electric, Gas, Telephone)						\$ 30,000		\$ 40,000	
Moving Costs						\$ 30,000		\$ 40,000	
Utility costs during construction						\$ 15,000		\$ 20,000	
Total Allowances for Fees and Soft Costs						\$ 1,609,671		\$ 1,742,469	
Owner's Contingency						\$ 231,567		\$ 255,547	10% of Allowances
TOTAL PROJECT BUDGET						\$ 21,152,029		\$ 22,367,138	
Notes:	Project Budgets are preliminary and are based on historical square foot cost information.								
	Project Budgets are based on a Fall 2021 construction start date.								
	Project Budgets do not include legal fees or financing costs.								
	Construction Costs are based utilizing a Construction Management project delivery method.								
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Village of Lake in the Hills
Police Station Addition to Village Hall
Conceptual Budget for Concept 3 - Police Station Addition and Renovations to Village Hall

FGM ARCHITECTS
November 8, 2019
FGM #: 19-2668.01

Item	Quantity	Unit	Cost/Unit	Low	High	Construction Cost	Low	High	Remarks
ADDITION AND RENOVATIONS TO VILLAGE HALL									
Site Preparation									
Selective Demolition of Existing Building	8,058	s.f.	\$ 6	\$	\$ 8	\$ 48,348	\$	\$ 64,464	
Police Station Construction									
New Construction	22,973	s.f.	\$ 400	\$	\$ 420	\$ 9,189,200	\$	\$ 9,648,660	
Heavy Renovation Work Areas	4,170	s.f.	\$ 250	\$	\$ 270	\$ 1,042,500	\$	\$ 1,125,900	Village Hall areas renovated for Police Dept.
Light Renovation Work Areas	3,445	s.f.	\$ 80	\$	\$ 100	\$ 275,600	\$	\$ 344,500	Village Hall areas converted for Police Dept.
Minor Renovation Work Areas	4,303	s.f.	\$ 25	\$	\$ 30	\$ 107,575	\$	\$ 129,090	Minimal work required (new paint, etc.)
Sub-Total	34,891					\$ 10,614,875		\$ 11,248,150	
Village Hall Construction									
New Construction	5,231	s.f.	\$ 385	\$	\$ 405	\$ 2,013,935	\$	\$ 2,118,555	
Heavy Renovation Work Areas	3,888	s.f.	\$ 250	\$	\$ 270	\$ 972,000	\$	\$ 1,049,760	Renovated existing building areas
Light Renovation Work Areas	1,471	s.f.	\$ 80	\$	\$ 100	\$ 117,680	\$	\$ 147,100	
Minor Renovation Work Areas	6,484	s.f.	\$ 20	\$	\$ 30	\$ 129,680	\$	\$ 194,520	Minimal work required (new paint, etc.)
Sub-Total	17,074					\$ 3,233,295		\$ 3,509,935	
Phasing Costs			allow	allow		\$ 180,000	\$	\$ 210,000	Assume 6 months add. construction time
Construction Costs Sub-Total						\$ 14,076,518	\$	\$ 15,032,549	
Escalation (3.5% per annum for two years)						\$ 1,002,600	\$	\$ 1,070,693	Assume construction starts in Fall 2021
Total Construction Costs						\$ 15,079,118		\$ 16,103,242	
Design and Pricing Contingency (5%)						\$ 753,956	\$	\$ 805,162	
Construction Contingency (5%)						\$ 753,956	\$	\$ 805,162	
Total Construction Budget						\$ 16,587,030		\$ 17,713,567	
Allowances for Items to be Purchased by the Village						\$ 630,000	\$	\$ 680,000	Assumes some reuse of existing furniture.
Furniture and Equipment						\$	\$	\$	

Village of Lake in the Hills
Police Station Addition to Village Hall
Conceptual Budget for Concept 3 - Police Station Addition and Renovations to Village Hall

FGM ARCHITECTS

November 8, 2019
FGM #: 19-2668.01

Item	Quantity	Unit		Cost/Unit		Construction Cost		Remarks
		Low	High	Low	High	Low	High	
Computer Systems				\$ 80,000	\$ 100,000			
Wireless Network System				\$ 20,000	\$ 30,000			
Maintenance/Janitorial Equipment				\$ 6,000	\$ 8,000			
Telephone System				\$ 80,000	\$ 90,000			
Wireless Telephone Boosters/Amplifiers				\$ 25,000	\$ 35,000			
Miscellaneous Equipment and Furnishings				\$ 15,000	\$ 20,000			For items such as art, plants, bond safe, etc.
Total Allowances for Items to be Purchased by the Village				\$ 856,000	\$ 963,000			
Allowances for Items Fees and Soft Costs								
Architectural and Engineering Fees (8.5%)				\$ 1,409,898	\$ 1,505,653			Incl. civil, security and landscape design
Furnishings Design Fee				\$ 25,000	\$ 35,000			Design, procurement and project mgmt
Environmental Studies				\$ 12,000	\$ 15,000			Asbestos and lead testing
Surveys & Soil Investigations				\$ 15,000	\$ 20,000			
Material Testing During Construction				\$ 25,000	\$ 30,000			
Building Commissioning				\$ 40,000	\$ 50,000			
Printing Costs				\$ 5,000	\$ 8,000			
Utility Company Charges (Electric, Gas, Telephone)				\$ 30,000	\$ 40,000			
Moving Costs				\$ 60,000	\$ 70,000			Two VH moves and one PD move
Utility costs during construction				\$ 15,000	\$ 20,000			
Total Allowances for Fees and Soft Costs				\$ 1,636,898	\$ 1,793,653			
Owner's Contingency				\$ 249,290	\$ 275,665			10% of Allowances
TOTAL PROJECT BUDGET				\$ 19,329,217	\$ 20,745,885			
Notes:								
Project Budgets are preliminary and are based on historical square foot cost information.								
Project Budgets are based on a Fall 2021 construction start date.								
Project Budgets do not include legal fees or financing costs.								
Construction Costs are based utilizing a Construction Management project delivery method.								
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SECTION 8 RECOMMENDATIONS

Recommendations

Only one of the concepts discussed in Section 7 will meet all of the long-term needs of the police department including parking requirements: Concept 3 - Renovate and Add an Addition to the Existing Village Hall for the Police Station.

There are many benefits to this option that were highlighted in Section 6. Some of the most compelling reasons are as follows:

- This option brings together village hall and police department services under one room, which enhances staff efficiency, safety, and service to the community.
- The location of the police station is better suited for access to all parts of the village than in its current location.
- By having the police department and village hall share space, less new construction is necessary to meet the long-term needs, thus reducing costs.

For these reasons and many others, FGM recommends the village pursue Concept 3 to meet the long-term needs of the Police Department and the goals established by the village.

This study is to be utilized as a starting point and is intended to provide the village with the necessary information to make an informed decision on which direction should be taken to address the space needs issues of the police department.

Once the space needs are approved and the village is ready to move forward, FGM Architects is prepared to assist the Village of Lake in the Hills with the next steps.