

BENSON CITY HALL/POLICE DEPARTMENT

FACILITY ASSESSMENT AND FEASIBILITY STUDY

**Prepared for the City of Benson, Minnesota
by Widseth Smith Nolting**



May 2016



**City of Benson, Minnesota
CITY HALL/POLICE STATION – FACILITY ASSESSMENT AND FEASIBILITY STUDY
1410 Kansas Avenue, Benson, MN**

Executive Summary

WSN’s team assessed the observable conditions of the existing facility and developed cost opinions for specific areas of renovation. We compared the cost opinions between specific renovations of the existing building and a new City Hall/Police Department facility of comparable size on a different site.

Renovation - \$1,721,000
New Facility - \$1,633,000

Based on the increased cost for renovation and the advantages of new construction designed specifically for City Hall and Police Department space and environmental requirements, we recommend constructing a new facility.

General Facility Description

The existing building was constructed in the 1940s and includes a partial basement level and split-level main floor. The grade level main floor area is 2530 SF and is the location of the City council chambers and administrative office. Total main floor area is 6890 SF. The upper level main floor is 3360 SF and is where the City staff offices are located. The Police Department is located in the basement; the area is 3360 SF. Total building area is 10,250 SF. The existing building is unsprinklered.



Study Assessment Process

WSN architects visited the site to assess the condition of the existing building. We interviewed City staff members to verify their experience with the existing facility related to space needs, physical relationships among staff and departments, access by the public, thermal comfort, air quality, adequate lighting, and security. We observed the condition of the facility related to this criteria and developed a list of recommended upgrades.

In addition, we analyzed the building based on current codes for new buildings and summarized required code compliance.

WSN’s team developed budget costs for the recommended improvements to the existing facility to be compared with the cost of a new facility to determine the feasibility of remodeling or new construction.

EXISTING FACILITY DESCRIPTION AND ASSESSMENT

Site

Accessibility

The existing main entrance is accessible via a sidewalk from the adjacent parking lot to the east. The main entrance provides access to the administrative offices and City Council Chambers. Other levels above and below the main level do not have accessible means of access or egress. Access to the north entrance door and both basement entrances are via stairs.

Code comments: Both ADA and Minnesota Accessibility Codes require access to remodeled public spaces containing areas of primary function for which the building is used. The cost of providing that access can be capped at a maximum of 20% of the remodeling construction budget. However, from a practical aspect, providing access to the basement and upper main level is most easily accomplished by a three-stop elevator addition to the west side of the building. The cost will likely exceed the code cost cap, but this is the least expensive design strategy to achieve handicapped access to all levels.

Recommendation: Elevator addition with connecting links to the existing building

Cost Opinion: \$226,000

Site Structures

An unused exterior stair is located on the west side of the building. The stair is concrete and is deteriorating.



Recommendation: Demolish this stair and patch the adjacent building area

Cost Opinion: \$18,000

Building

Exterior Envelope Construction

- Roof

The existing roof is a rubber membrane roof and is in good condition. Roofing, insulation, and flashing were replaced in 2012.



good condition. The face brick is generally in good condition except for specific locations.



Walls

The existing walls above grade are a combination of face brick and EIFS (exterior insulation finishing system which has a finish coating similar in appearance to stucco) on hollow tile block with interior furred drywall. The EIFS application is recent and is in



The interior surfaces of many exterior walls are covered with vinyl wall covering. In recent years, vinyl wall covering has been identified as a material responsible for trapping moisture in walls. The material has a high perm rating and functions as a vapor barrier on the interior surface of the wall. If a vapor barrier occurs elsewhere in the wall construction, moisture becomes trapped between the two barriers and deteriorates wall materials and causes mold development. In addition, the wall covering is becoming detached from the wall in

some locations. We recommend removing the vinyl wall covering.

Code comments: Although the EIFS system includes rigid insulation applied to the exterior surface of the existing wall, it is not possible to approximate wall construction compliance with the Minnesota Energy Code. The west side of the building is primarily face brick and is therefore assumed to be minimally insulated.

The basement walls are poured concrete and show evidence of water infiltration. The basement air quality is poor. Although mold is not visible in the basement areas, we suspect mold is present in this area and that it has developed as a result of water infiltration through the basement wall construction. If a waterproofing membrane was ever applied to the basement walls, it has likely deteriorated over the years and no longer protects the wall from water penetration. In order to maintain the use of the basement, cracks in the wall construction must be patched and a waterproofing membrane applied to the exterior surface of the basement walls.

Recommendations:

- Tuckpoint face brick at specific areas.
Cost Opinion: \$3,000

- Remove vinyl wall covering on the interior surface of exterior walls and bleach surfaces (by specialty mold remediation company.) Sack, and paint.
Cost Opinion: \$43,000

- Obtain a mold test evaluation from a certified testing company to confirm the extent of mold in the basement and other building areas
Cost Opinion: \$3,000

- Excavate around the perimeter of the building to the depth of the basement wall footing. Clean the exterior surface, patch concrete cracks, apply a water-resistant membrane to the wall and add rigid insulation board. Add drain tile at the base of the wall footings and slope the drain tile lines to a sump pump for water removal.
Cost Opinion: \$ 165,000



▪ Doors and Windows

Windows were replaced in 1999 and many are operable. Storm windows were added in 2014. The operable windows are wood. Inoperable windows are aluminum. The interior window sills and frames of the wood windows are showing initial evidence of deterioration from interior humidity. The mechanical system requires adjustment to reduce the humidity level in the building.

The north entrance doors are wood and are new. Main entrance doors are glass/aluminum doors, are in good condition, and are equipped with power door operators for handicapped access. West and east exterior doors to the basement are residential doors that should be replaced. East access door from the main floor corridor is aluminum/glass and is good condition.

Recommendations:

- Repair damaged wood window sills with solid surface cast plastic after reducing the HVAC system humidity levels. (See costs for HVAC unit replacement below.)
Cost Opinion: \$10,000
- Replace 2 basement doors with solid panel aluminum doors, frames, and hardware.
Cost Opinion: \$10,000

Building Interior

- Exiting

Code comments: Building exiting meets most of the requirements in Minnesota Building Code such as number of exits from spaces and the building, maximum distance to exits, maximum distance to the point where two exits are available, exit width, and minimum distance between exits. One door not meeting code existing requirements is the vault door. There is no way to exit from the vault storage room if the door is closed.

Stairs: Riser and tread dimensions and handrails do not meet current codes.

Most interior doors and frames are in good condition.



Recommendations:

- Replace existing interior stairs and handrails.
- Cost Opinion: \$43,000



-Alter or remove the vault door lock so that the door cannot be locked and exiting from inside the room is possible without special knowledge or effort per code.

Cost Opinion: \$3,000

- Accessibility

Code Comments: As discussed above, the main level is a split-level configuration and access to the upper level is via stairs. Main level spaces are public and require accessibility for disabled. Access to employee work areas is also required, although the workspace is not required to be accessible. Doors have accessibility clearance

requirements and several of the interior doors do not provide adequate clearance.



Two toilet rooms on the main level near the Council Chambers were designed as accessible toilet rooms. The codes have changed and these rooms no longer meet Minnesota Accessibility Code and ADA requirements for space clearance, grab bars, fixture height, or mounting location for accessories (paper towel dispenser, toilet paper dispenser.)

Other toilet rooms in the building do not meet accessibility requirements. However, if elevator access is provided and toilet rooms near the Council Chambers are upgraded for accessibility, other existing toilet rooms can remain.



The public counter at the administrative offices does not meet accessibility height requirements.



Most doors do not have lever hardware.

Recommendations:

- Remodel main corridors to accommodate required door clearances/remove doors.

Cost Opinion: \$6,000

- Remodel main level toilet rooms into one accessible unisex toilet room. Remodel an area of the mail room into an additional non-accessible toilet room to meet the total number of code-required toilet rooms serving the Council Chambers and administrative offices.

Cost Opinion: \$85,000

- No upgrade to other building toilet rooms for accessibility assuming that elevator access will be provided to all building levels.

- Remodel the public counter to include a new coiling door, desk, and section of counter at wheelchair height.

Cost Opinion: \$22,000

- Change interior door hardware to lever hardware and remove any non-code-complying hardware (deadbolts.)

Cost Opinion: \$8,000

- Sanitation

Code Comments: Based on approximate occupant loads of the main and lower levels, the 6 toilet rooms provided in the building meet the fixture count requirements of Minnesota Building Code Chapter 29.



- Finishes

Ceilings, flooring, wall coverings, and painted walls in most areas are worn or outdated.



Recommendation:

See recommendation and cost opinion above for removing vinyl wall covering on exterior walls. Remove wall coverings on interior walls, sack, and paint. Repaint existing painted walls. Replace carpet and tile flooring and base in all spaces. Prep floors and other surfaces. Replace existing ceilings, grid, and tile. Refinish existing wood doors and frames where they are discolored or worn.

Cost Opinion for Finishes Upgrades: \$152,000

- **Casework**
Most built-in cabinets and counters are in good condition, well-utilized, and distributed throughout the building.
- **Space Functionality**
The office functions on the main level are split by the differences in finish floor heights. The administrative office on the main level uses storage areas on the upper main level, which is less convenient than storing files on the same office level.



The main level lobby is also the entrance lobby for the downstairs police department. The administrative office directs visitors to the police department or to the City staff offices. Because of this functional arrangement, visitors have access to most areas of the building without an escort during business hours. The main entrance does not have a secure lobby where visitors are required to wait for an escort.

The upper main level does not provide good public access to the City staff members.

During council meetings, visitors have access to the Council Chambers but because there is no secure lobby, they also have access to other building areas during the meetings.

Record storage requires a safe storage room.

The mayor does not have an office in the building, however, City Hall is often the place where the mayor meets with constituents. The Council Chambers are currently used for these meetings.

The police department dispatcher does not have visibility of approaching visitors from the main level entrance stairs.



Police department space is too small. Evidence storage and processing areas are too small. No office locker/shower rooms are available. The police department has approximately 5 vehicles that require garage storage. Expanding the basement is not recommended because the cost for constructing a sizeable basement addition to the existing building is not feasible.



Recommendations:

- Elevator addition. See above.

- Reorganize, duplicate, or digitize internal files to allow for administration files to be stored on the main level and City staff files to be stored on the upper main level.

- Remodel the vestibule and area at the administration office counter into a secure waiting lobby. Police department and City staff members will have to escort visitors to their offices or meet in the Council Chambers.
Cost Opinion: \$35,000

- Remodel the administrative offices/mailroom to include a small conference room for 5 or 6 occupants to meet with the mayor or other City staff members.
Cost Opinion: \$8,000

- Rearrange the police dispatch office so visitors approaching the office from upstairs are visible in the downstairs corridor.
Cost Opinion: \$4,000

- Space Utilization



In general, the space available in the building is not used as efficiently as it might be if the space layout and organization were different. In the City staff offices, many rooms are partially used for storage. It is possible for storage to occupy less space in the building if it is organized in one or two rooms with file cabinets, shelves, and other appropriate storage units.

Office occupants on the main levels appear to have adequate space for accomplishing their work.

The police department space layout compromises police processing requirements and interviewing of offenders in the space.

Recommendation: Combine the City staff storage areas to improve storage efficiency. Remodel the police department layout to a plan that works with police processing of evidence and offenders.

Cost Opinion for Improving Space Utilization: \$250,000

Security



- Main entrance access by police department visitors is the primary security concern in the building.
- Within the police department space, offenders cannot be processed in areas separate from the dispatch and office areas. This situation compromises the safety of occupants and visitors to the police department. Minor adjustments to improve these conditions are possible and included in the Space Utilization costs above.

Recommendations:

- We suggest that the City develop a security plan which outlines access areas for the public and for staff. Limiting public access in the building will provide better security control of the building. Some simple tools used to control building access and increase employee comfort levels are keypad door locks, surveillance cameras, and local alarms. Cost Opinion Allowance for Security Plan Upgrades: \$10,000

- Construct a separate lobby entrance for the police department (combined with the elevator addition recommendation above.)
Cost Opinion for Security Upgrades: \$47,000

Asbestos Containing Materials

No investigation has been performed for the facility at this time. Because the building has been remodeled over time, it is likely that some flooring adhesive and plumbing piping above the ceilings contains asbestos.

Recommendation:

Contract with a certified testing company for an asbestos survey and report of the facility.

Mechanical and Plumbing Systems

- Sprinklers
Code comments: the basement has adequate openings above grade in the west exterior wall and no interior area of the basement is more than 75 feet from the openings. No basement sprinkler is required.
- HVAC
The building is heated and cooled by 6 rooftop units, including one which has been replaced recently. A baseboard heating system is also used. The systems are controlled by separate thermostats.

The building ventilation seems inadequate, especially in the basement areas where mold is likely. Possible reasons for this condition are: insufficient ventilation air from the exterior or oversized rooftop units. It is also possible that on some days, the baseboard heating system satisfies the building heating requirement so the rooftop unit providing ventilation air also turns off. Insufficient ventilation is likely also the reason for increased humidity in the building.

Recommendations:

- Replace 5 rooftop units and adjust controls to provide code-required outside air for ventilation. Clean out existing HVAC ductwork and replace old ductwork. See exterior envelope discussion above related to basement mold abatement and poor basement air quality.
Cost Opinion for HVAC Upgrades: \$300,000
- Code Comment: Provide required ships ladder roof access to mechanical equipment on the building roof.
Cost Opinion for Ships Ladder and Roof Hatch: \$20,000
- Plumbing
Recommendation: Plumbing piping was not observed during the site visit, however, we have included an allowance to cover the cost of replacing deteriorating building piping and repairing service piping from the street, which are typical conditions in restoring buildings.
Cost Opinion Allowance for Upgrading Plumbing: \$63,000

Electrical Systems



▪ Power

The existing electrical service, panels, and breakers are outdated. Some fuse boxes are present in the building with fuses rated beyond the wiring capacity.

Recommendation: Replace building wiring, fuse boxes, old breaker panels, and verify that the building service is updated to current codes.

Cost Opinion to Upgrade Existing Electrical Power Distribution: \$58,000

▪ Lighting

Existing lighting is primarily incandescent and older fluorescent fixtures, which use energy inefficiently. Many exit signs are missing throughout the building and emergency lighting does not appear to be present.

Code Comments: Emergency lighting and illuminated exit signs are required in corridors.

Recommendation: Replace light fixtures with LED fixtures and provide emergency lighting. Replace paper exit signage with illuminated exit signs.

Cost Opinion for Lighting Upgrades: \$47,000



Renovation Project Contingency

Because existing construction includes unknown conditions, we have included a contingency cost factor of 5% of the cost option: \$82,000

RENOVATION COST SUMMARY

Site Accessibility Upgrades	226,000
Site Structures Stair Demolition	18,000
Exterior Building Envelope Upgrades	234,000
Building Interior Upgrades	616,000
Security Improvements	57,000
Mechanical and Plumbing System Upgrades	383,000
Electrical System Upgrades	105,000
Renovation Contingency	<u>82,000</u>
TOTAL REMODELING COST OPINION	\$1,721,000

NEW CONSTRUCTION COST SUMMARY

Construction of a new facility is a more cost feasible option than remodeling. For our new construction cost opinion, we assume a new building on a different site with typical grades, access to utilities, and adequate soil bearing capacity.

Area for the City staff offices, administration and Council Chambers can be reduced approximately 10% from the existing space occupied. A new facility will be more efficiently designed. We recommend increasing the police department area approximately 10% to provide for their space requirements that are not currently accommodated in the existing basement space. Cost information for storage garage for 5 police vehicles is listed below as an option but is not included in the City Hall/Police Department new facility cost.

City Staff/Administration/Council Chambers	6200 SF @ \$165/SF = \$1,023,000
Police Department	3700 SF @ \$165/SF = <u>610,500</u>
TOTAL NEW FACILITY COST OPINION	\$1,633,000

New Police Department Vehicle Storage Building Cost Opinion	\$175,000
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FEASIBILITY COMPARISON AND STUDY RECOMMENDATION

The cost of remodeling the existing building is projected to be \$88,000 more than building a new facility. In addition to the increased cost of renovating the existing building, new construction can provide a design that is specific to the functional requirements of the City Hall and Police Department while also providing an improved environment for working and for the public. At best, renovating the existing building can increase the efficiency of some spaces, but there will always be under-utilized space.

The operating costs, energy expenditure, and other operational expenses of a new building can be calculated when the building is designed. In an existing facility, many conditions are unknown and achieving good building performance in a renovation is not predictable.

WSN recommends constructing a new facility based on the cost feasibility analysis and on the anticipated increased operational and space use efficiency of a new building.

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed architect under the laws of the State of Minnesota.



B. Reed Becker

Date: 4.28.14

License No. 11794

Appendix A – List of Applicable Codes

Codes

2015 Minnesota Accessibility Code
2015 Minnesota Building Code
2012 International Fire Code
2015 Minnesota State Mechanical and Fuel Gas Code
2015 Minnesota Energy Code
2015 Minnesota Conservation Code
2014 National Electric Code
ADA Accessibility Guidelines
CABO/ANSI

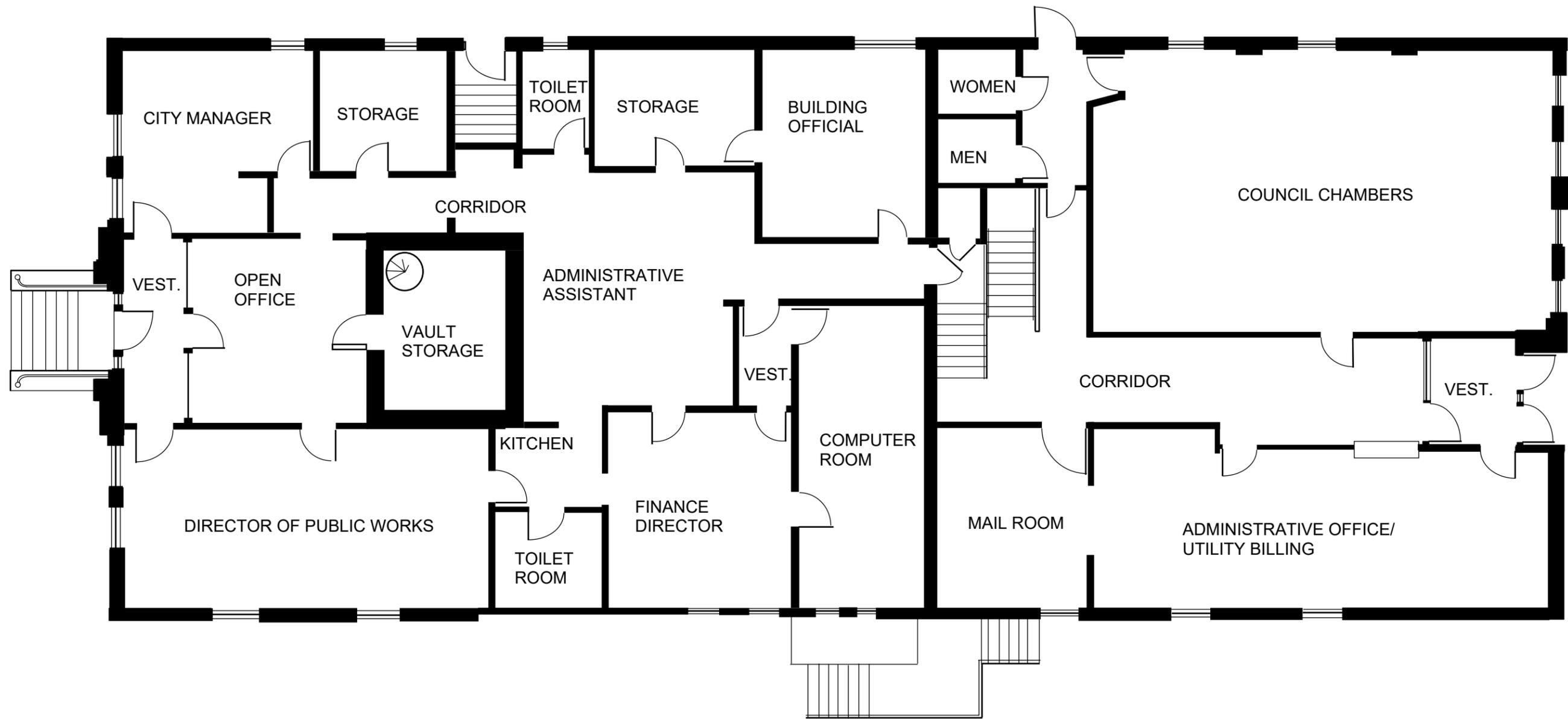
Appendix B – List of Reference Documents

Copies of the original building drawings dated 26 February, 1941.

Basement Floor Plan
First Floor Plan
Elevations

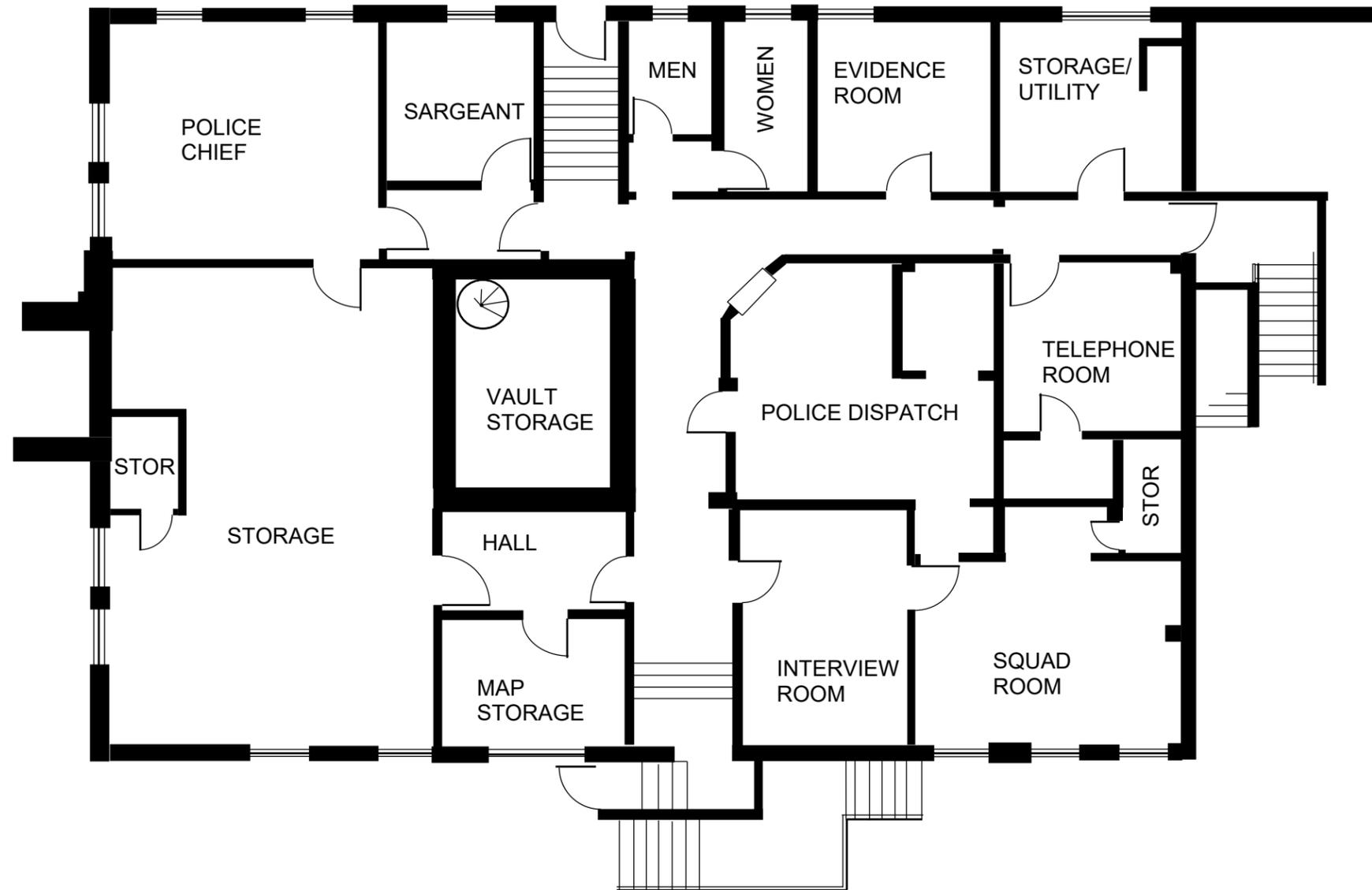
Appendix C – Existing Building Plan Diagrams Attached

First Floor Plan
Basement Floor Plan



**MAIN LEVEL FLOOR PLAN DIAGRAM
BENSON CITY HALL/POLICE DEPARTMENT**





**BASEMENT LEVEL FLOOR PLAN DIAGRAM
BENSON CITY HALL/POLICE DEPARTMENT**

