



AGENDA OF THE AD HOC FACILITIES COMMITTEE

**TUESDAY, NOVEMBER 15, 2022, 11:00 AM
Room 310**

A. Roll Call.

B. Approval of the Agenda.

C. Approval of Minutes.

- I. Approval of the Ad Hoc Facilities Committee minutes from the February 21, 2022 meeting.

D. Regular Business.

- I. Consideration with possible action the review of the Facilities Assessment Updates for City Hall, Municipal Court, Police Station, and Fire Station #1.

E. Adjournment.

- 1) THIS MEETING IS RECORDED: THE VIDEO OF THIS MEETING AND MINUTES ARE AVAILABLE ONLINE AT www.greenbaywi.gov
- 2) ACCESSIBILITY: Any person wishing to attend who requires special accommodation because of a disability, should contact the City Safety Manager at 920-448-3125 at least 48 hours before the scheduled meeting time so that arrangements can be made.
- 3) QUORUM: Please take notice that a majority or quorum of the Common Council will attend this Ad Hoc Facilities Committee meeting and will constitute a meeting of the Common Council for purposes of discussion and information gathering relative to this agenda.
- 4) QUORUM: Please take notice that a majority or quorum of the Finance Committee will attend this Ad Hoc Facilities Committee meeting and will constitute a meeting of the Finance Committee for purposes of discussion and information gathering relative to this agenda.
- 5) REPRESENTATION: The party requesting the communication, or their representative, should be present at this meeting.



MINUTES OF THE AD HOC FACILITIES COMMITTEE

MONDAY, FEBRUARY 21, 2022, 10:00 AM
Virtual Meeting. Public may join via Zoom.

A. ZOOM MEETING INFORMATION.

I. This item contains Zoom information, instructions, and a link to the Virtual Comment Form.

B. ROLL CALL.

Present: Eric Genrich, Barbara Dorff, Brian Johnson, Jesse Sharp, Garritt Bader, Chet Lamers, Ian Griffiths, Paul Martzke.

Also present: Finance Director Diana Ellenbecker, Public Works Director Steve Grenier, Parks Director Dan Ditscheit, Assistant City Attorney Lindsay Mather, Chief of Operations Joe Faulds, Police Chief Chris Davis and others.

C. APPROVAL OF THE AGENDA.

Moved by Ald. Brian Johnson, seconded by Ald. Barbara Dorff to approve the agenda.

Motion Passed.

Yes- Eric Genrich, Barbara Dorff, Brian Johnson, Jesse Sharp, Garritt Bader, Chet Lamers, Ian Griffiths, Paul Martzke

Moved by Ald. Brian Johnson, seconded by Ald. Barbara Dorff to reconsider the agenda.

Motion Passed.

Yes- Eric Genrich, Barbara Dorff, Brian Johnson, Jesse Sharp, Garritt Bader, Chet Lamers, Ian Griffiths, Paul Martzke

Moved by Ald. Brian Johnson, seconded by Chet Lamers to to move Item #1 & #2 of Regular Business to the bottom of the agenda..

Motion Passed.

Yes- Eric Genrich, Brian Johnson, Jesse Sharp, Garritt Bader, Chet Lamers, Ian Griffiths, Paul Martzke

Moved by Garritt Bader, seconded by Ald. Brian Johnson to approve the amended agenda.
Motion Passed.

Yes- Eric Genrich, Brian Johnson, Jesse Sharp, Garritt Bader, Chet Lamers, Ian Griffiths, Paul Martzke

D. REGULAR BUSINESS.

1. Consideration with possible action to appoint a Chair.

Moved by Ian Griffiths, seconded by Garritt Bader to approve Brian Johnson as Chair.
Motion Passed.

Yes- Eric Genrich, Brian Johnson, Jesse Sharp, Garritt Bader, Chet Lamers, Ian Griffiths, Paul Martzke

2. Consideration with possible action to appoint a Vice Chair.

Moved by Ald. Brian Johnson, seconded by Ian Griffiths to approve Paul Martzke as Vice Chair.
Motion Passed.

Yes- Eric Genrich, Brian Johnson, Jesse Sharp, Garritt Bader, Chet Lamers, Ian Griffiths, Paul Martzke

3. Communication by Ald. Johnson approved by Common Council on 6-1-2021 to approve the creation of an ad-hoc committee to assess the feasibility and necessity of a unified municipal building to include city hall, police, fire and municipal court and for the Committee to include appointees as selected by the Mayor with a least two city council members, a Mayors office representative, 4-5 community members and appropriate City department heads and to report out to Finance Committee.

Moved by Ald. Brian Johnson, seconded by Paul Martzke to receive and place on file.
Motion Passed.

Yes- Eric Genrich, Brian Johnson, Jesse Sharp, Garritt Bader, Chet Lamers, Ian Griffiths, Paul Martzke

4. Overview of the Berners Schober 2015 evaluation of City-owned facilities by Director of Public Works.

Moved by Ald. Brian Johnson, seconded by Paul Martzke to receive and place on file.
Motion Passed.

Yes- Eric Genrich, Brian Johnson, Jesse Sharp, Garritt Bader, Chet Lamers, Ian Griffiths, Paul Martzke

5. Overview of the current status of City Hall by Parks Director.

Moved by Ald. Brian Johnson, seconded by Garritt Bader to receive and place on file.
Motion Passed.

Yes- Eric Genrich, Brian Johnson, Jesse Sharp, Garritt Bader, Chet Lamers, Ian Griffiths, Paul Martzke

6. Overview of Bray Architects presentations.

Moved by Ald. Brian Johnson, seconded by Garritt Bader to receive and place on file.
Motion Passed.

Yes- Eric Genrich, Brian Johnson, Jesse Sharp, Garritt Bader, Chet Lamers, Ian Griffiths, Paul Martzke

7. Consideration with possible action the use of the remaining 2018 bonded money for Public Safety building analysis of \$34,361.60.

Moved by Paul Martzke, seconded by Garritt Bader to dedicate funds to update the studies related

to the City Hall, Police, Fire and Municipal Court buildings as well as review the operational costs of these buildings.

Motion Passed.

Yes- Eric Genrich, Brian Johnson, Jesse Sharp, Garritt Bader, Chet Lamers, Ian Griffiths, Paul Martzke

8. Determine next meeting date.

Moved by Ald. Brian Johnson, seconded by Garritt Bader to receive and place on file.

Motion Passed.

Yes- Eric Genrich, Brian Johnson, Jesse Sharp, Garritt Bader, Chet Lamers, Ian Griffiths, Paul Martzke

E. ADJOURNMENT.

Moved by Ald. Brian Johnson, seconded by Ian Griffiths to adjourn.

Motion Passed.

Yes- Eric Genrich, Brian Johnson, Jesse Sharp, Garritt Bader, Chet Lamers, Ian Griffiths, Paul Martzke

F. VERBATIM MINUTES.

- I will call to order the meeting of the Ad-Hoc Facilities Committee for Monday, February 21st, 2022. I believe we have six members present, but I'll do a roll call. Mayor Genrich is here, Ian Griffiths.

- Here.

- Paul Martzke.

- Here.

- Alder Barb Dorff.

- Here.

- Alder Brian Johnson.

- Here.

- Garritt Bader.

- Here.

- Jesse Sharp. And then Chet is also not here, but we'll keep the roll open, hoping that they join us shortly. I will entertain a motion to approve the agenda.

- So moved.

- So moved.

- Motion to approve-

- Seconded.

- Motion to approve the agenda made by Alder Johnson, seconded by Alder Dorff, all in favor, signify by saying aye.

- Aye.

- Aye.

- Aye.

- Aye.

- Opposed nay? The ayes have it, and the agenda has been approved. Now onto regular business, and before we get into the items, just wanna thank you all for joining us, especially our citizen members. We've got a tall order and promise a lot of weighty questions to attend to, so really appreciate our citizen attendance and the expertise that all of you bring to bear on some of these questions. So looking forward to a good discussion over the coming months, hopefully to bring forward some recommendations, both to our Finance Committee, as well as our common council. Also wanna- And looks like we have Chet joining us, so appreciate that. Thanks all also to our alders for their attendance and Alder Johnson for bringing this item, item number three forward, and then really that's the reason why we're here. We've kind of expanded the scope a bit to capture what Alder Johnson was trying to accomplish there, in item three, just understanding that we have a lot of facility needs across the city and felt like it made a lot of sense to expand the scope a bit, but also to capture the idea behind the alder's communication. I think there are a number of people in City Hall, including Director Grenier, for example, who have thought that it would make sense actually to have a facilities manager working for the City of Green Bay, I believe Alder Johnson has made similar point. I've had similar thoughts and so just don't want to overly narrow the scope of this discussion, we wanna capture the most important item in front of us, which is that item three, but wanna encourage folks on the committee to think broadly about what we think our needs are as a community, both as an organization and sort of the footprint that we occupy here in the City of Green Bay. So again, thanks to everyone for attending, we do have just about everyone on board here, but I think before we get to the first item there, maybe we can go around for some introductions. I don't know that we all know one another. So I'm mayor Eric Genrich, really glad to be part of this committee, and then I'll just kick things over to Ian Griffiths and maybe he can pass the baton from there.

- Ian Griffiths, Berners-Schober Associates, architects, engineers here in Green Bay been around since, not myself, but the company since 1898, been involved with the city for many of those years. And actually part of the packet that you see in front of you of the thousand pages came out of our office, so very familiar with the Green Bay city facilities. Over to you, Paul.

- Thank you, Ian, Paul Martzke, I'm President of Green Bay based Immel Construction, been working in Green Bay for about the last 25 years. In a past life I was actually the design architect for two facilities for the City of Green Bay, the Municipal Court and Fire Station number four and Immel consistently bids and hopes to construct facility projects for the city. So very much interested in what we're about to try and do here. I also am the Vice Chair of the city's Landmarks Commission, which deals with historic preservation efforts. So thank you, I'll turn it over to, how about Garritt Bader?

- Good morning, Garritt Bader, GB Real Estate Investments. My hope on being on this is to lend a little bit of real estate voice to some decision making that may be made where facilities should be located and how it makes sense, not only for that facility, but maybe even ones that would be moved or used differently as a result of this process, so look forward to being involved And I think things have shifted now, so let's go over to Brian, I guess. I dunno if you guys want to, but.

- Sure, Brian Johnson, Alderman for the near West Side in pending the outcome of the April 5th election, that district, District 9, would also include, what's an affectionately referred to as the Sliver on the River on the East Side. So roughly, a big chunk of the downtown area and then my full-time job, Executive Director of. So

wide variety of backgrounds and experience, including small business ownerships, some real estate stuff. So with that, I guess, actually Alder Dorff, if you don't mind, I'm gonna refer to Jesse Sharp who just joined the call.

- I apologize for joining late. So I work for Schneider National, I lead up the shared financial services, been in Green Bay for a little over 20 years, and I know a few of you personally, so I'm glad to be here.

- He doesn't know the rules, he has to pick the next person.

- That was unfair.

- I didn't hear that part, so I joined.

- And you don't even know who's left, so I'm left and I think Chet is left.

- Right, go ahead, Barb.

- Okay, I'm Alder Barbara Dorff and I was appointed by Mayor Schmitt to the original Ad-hoc Facilities Commission. And then recently by Mayor Genrich, to this Ad-Hoc Facilities Commission. I don't wanna throw a gears here, but Alder Johnson and I are both on finance. Do we constitute a negative quorum?

- That's a fair question. I don't know if Attorney Bungert is with us this morning.

- [Man] I can go find out Mayor, I'll be right back.

- Okay, I'll continue then. And so I represent District 1, far, far, far East side, a very large land wise, the largest district. Used to be the Executive Director of Pupil Services for Green Bay Area Public Schools, in charge of school security and all kinds of other things. And I work with the school security, I guess, throughout the State of Wisconsin, in addition to doing my alder work. Thanks.

- Thanks Alder, and then I think our only remaining member is Chet Lamers, go ahead Chet.

- Good morning, everyone, my name is Chet Lamers, I currently work at NWTC in the role of Director of Facilities. I've been doing that for about 12 years, so my back background is in both architecture and urban planning. I helped to lead the technical college about five years ago through a major expansion referendum that included all different sectors, transportation, college of business, acquisition of property that we had previously rented. So I'm very excited to have been asked to be on the committee and glad to help move this project forward if that's the end conclusion. Good morning, everyone.

- Thanks for joining us Chet and thanks again, to everybody who's participated. 'Cause I think we all understand given those introductions, we're really blessed with a bunch of expertise offered by our citizen membership as well as our alders, so really appreciate the participation. So given the introductions that we, I think we can move along to an item one under regular business consideration with possible action to appoint a Chair. So I would-

- Mayor would you wanna approve the agenda first?

- We did.

- Okay, I apologize, thank you.

- Yep, no problem. So if there's anyone who's interested in serving as Chair, you can nominate yourself, or if you've asked somebody to do that, I would entertain those nominations as well.

- And everybody jump at once, huh?

- Right, and we could certainly have a discussion about what that would entail. If people have questions about the responsibilities of a Chair for a body like this.

- Mayor, my question would be, would it be best for the city to have whomever is the Chair possibly also be a resident of the City of Green Bay, which I am not, but I just bring that to the table, is there an advantage to thinking about it that way?

- Yeah, that's a good question. Obviously, with your role at NWTC, on the kind of the professional side of things, you have a big presence in the City of Green Bay. I don't know that that you'd be excluded from serving as Chair because your residence is outside of it, but certainly a good question.

- Mayor could someone, whether it's you or someone else maybe speak to, I think the alders here probably have a strong understanding of what Chairs typically do, but maybe for the benefit of others, just kinda talk about scope of responsibility.

- Yeah, absolutely, it's a good question. You know, first and foremost, the Chair's responsibility is to run the meeting. So to have some familiarity with Robert's rules, would be helpful, but that's not a necessary prerequisite, it's a pretty simple process, especially at the committee level. But that's the primary responsibility, in addition to that, the Chair would work with Diana as our finance director to put together our agendas prior to our meetings. So those would be the big responsibilities, ultimately, if this committee moves forward with some recommendations for the city that the Chair's in favor of, it would be helpful to have them involved in some of the advocacy work as well. But would defer to both Alders Johnson and Alder Dorff, if you have other details.

- Yeah, and I think you kind of hit on the head, right? To me, I think the workload is not substantially more as the Chair, it's really more of that parliamentarian, type of responsibility as sort of the gut feel that I had and I just wanted to verify that.

- I think Garritt hit on great, but I'm not gonna nominate anyone.

- He just turned his camera on, so that's what I would.

- And I was gonna say Chet's asking about residents sounded like a not it called me, but anyway. Can I make a suggestion that maybe I know we approved the agenda, can we maybe move these two items to the end and let everyone have a feel for what we really need to talk about and then see if the on itself at the end?

- Yeah, I think that's-

- Can I have a motion to reconsider the agenda?

- Second.

- Okay, motion has been made by Alder Johnson, seconded by Alder Dorff to reconsider the agenda. All in favor will signify by saying aye.

- [Panelists] Aye.

- Opposed nay? The ayes have it, the agenda's before us.

- Then I would motion to amend the agenda.

- Oh, sorry.

- Yeah, I'm just trying to pull Mr. Bader there suggested two items and I'm pulling up the agenda, I don't know what those two were.

- We can put item one and two at the foot of the calendar?

- Okay, so yeah, we'll put those right at the end. That's the motion.

- Alder Johnson has made a motion to amend the agenda, to put items one and two of regular business at the bottom of the agenda, is there a second?

- I can second.

- Seconded by Mr. Lamers. All in favor will signify by saying aye.

- [Panelists] Aye.

- Opposed nay? The ayes have it and the agenda has been amended. Entertain a motion to approve the agenda as amended.

- Motion to approve.

- Second.

- Motion to approve the agenda as amended by Mr. Bader, seconded by Alder Johnson, all in favor signify by saying, aye.

- [Panelists] Aye.

- Opposed nay? The ayes have it. And that has been approved. So onto item three under regular business. And this is the communication that I was referencing earlier, I'll just read through it so that everybody has an understanding of one of the reasons that we're here. So communication by Alder Johnson approved by common council on 6-1-2021 to approve the creation of an ad-hoc committee to assess the feasibility and necessity of a unified municipal building to include City Hall, police, fire, and municipal court, and for the committee to include appointees as selected by the Mayor with at least two City Council members. A mayor's office representative, four to five community members and appropriate city department heads, and to report out . This was your communication Alder Johnson, do you have any additional comments?

- Yeah, I'll just give a little bit of context, thank you, Mayor for that. So what really kind of started this for me was taking a look, City Council started doing a five year capital improvement plan. So rather than just looking at bonding requests, one year at a time, we were taking a look at five years at a time and what was potentially coming down the pike so that we could kind of better manage some of those expectations. And when the five year capital improvement plan came out, looking at the Parks Department, so for those not familiar, the Parks Department does oversee City Hall. And so there was I believe and I'm sure Director Ditscheit will talk about this when he gives his overview. But I believe there were about \$10 million worth of bonding requests for repairs to City Hall. And so recognizing that the Police Department has also had some conversations about a public safety building as Alder Dorff alluded to, she had served on a committee on that in the past as well. I think I saw it as an opportunity for us to have a holistic conversation about, hey, what if we combined the police department or public safety building with City Hall, use that \$10 million, leverage that in a slightly different way while still meeting our overall long-term facility needs. So I appreciate that the mayor and staff, have all also considered some of our other facilities, not in the communication, I think that's a smart approach.

It's a good time for us to even talk about staffing such as the facility manager, could that perhaps be a recommendation if it makes sense to come out of this body as well. But from my understanding, having talked to the previous Chief of Staff, Celine Jeffries, talking to Director Ellenbecker, and others, that there historically has not been a group of all represented department heads around this topic are certainly not in a public forum. So I just think it was a good opportunity for us to try this one more time, but bringing all of the needed experts to the table, including representatives from the public. So that was kind of the impetus behind this.

- Thanks Alder appreciate that background. And I do see, we have Attorney Mather here, who's probably gonna give us some unfortunate news related to quorum. So Attorney Mather, go ahead.

- Well with an introduction like that. Good morning, everyone. Yes, so I did consult with Claire Silverman at the League of Wisconsin Municipalities, just to double-check. But because there are issues that may end up before the Finance Committee at a future date, and there is an issue on this particular agenda that does specifically relate to the use of funds, which obviously would fall within the Finance Committee's purview. There is an issue with a negative quorum if we have two finance committee members here. So I would suggest that you defer by seniority and so-

- Oh no, no, please don't, please don't suggest that. Let me just say, first of all, I am so sorry that I didn't catch this before, because it was when the Mayor this morning said the word finance that it just impacted on my brain. So I was on the other Ad-Hoc Committee, this one was Alder Johnson's, I know I'm senior here, but Alder Johnson, do you want to be on this committee? I guess that's just what I think is fair, I don't know.

- Well, could it maybe even a point of order for Attorney Mather on this as well, is the issue because of item number seven, related to the finance committee decision. And if that is the case, is it possible for just one of us to abstain from that vote?

- So it's not a matter of just not voting on the issue, it's actually even discussing the issue together.

- Shit, I was hoping I could just stay on as a member, nonvoting member, I was gonna offer that, but now, I can't even discuss it?

- But we do that with every other committee. How is this different?

- Just maybe not as a named member, I mean, I guess to get around it, we could appoint another alder instead. And I need to apologize 'cause I'm the one that made the appointments. And so just felt given Alder Dorff's background and expertise, it made sense to have her along with Alder Johnson. Director Grenier seeking recognition?

- Thank you, Assistant City Attorney Mather, we do have the standard language at the end of the agenda, indicating that please take notice that a majority or quorum of the common council will attend this ad hoc committee and will constitute a meeting of the common council for purposes of discussion and information gathering relative to the agenda. Could we amend that statement to simply also include the finance committee by name at future meetings, thereby avoiding this?

- Good question.

- I think Steve missed his calling as an attorney.

- Please don't suggest that to him Alder. Let me actually look into that, I don't wanna give you a definite answer right now, I need to look at that language a little bit more closely, but that's definitely something that I can look into, I just don't wanna give you a straight yes or no right now without looking into it a little bit more.

- I believe we may have used that on similar types of issues in the past 'cause the intent is to make sure that we are providing public notice, that we may have a group that could be constituting, a quorum of either the common council or the committee in providing proper public. It's not that it's prohibited, we need to be able to provide proper public notice, which we may not have done for this meeting. But again, I think we have used that language or some derivative there of on prior similar types of issues in order to get the city protected.

- Alder Dorff.

- And then to be safe, could I just please abstain from all votes today? I mean, I'm sorry, I made some motions and such, but see if Alder Johnson and I go and join improvement services, which we do and we talk and we give our opinions and you know what, there's six of us there, we're a negative quorum for counsel when six people are there. So I would be happy to just pull back from my vote today with that help Attorney Mather?

- So that language, that Director Grenier just pointed out at the end of the agenda that actually addresses the circumstance where two of you may attend another standing committee and there may be six of you, so then there's a negative quorum. But it's a little bit different here because you guys happen to be on the same standing committee. And unfortunately, so up until now, you weren't aware that there was a quorum issue. So now that you've been made aware of, really the only way to... Are you guys gonna lose quorum if one of them leaves? I think really the only way to address it for today is for one of you to leave this meeting. 'Cause as I said before, just discussing any of the items, is a problem as far as open meetings goes.

- Okay, but I shouldn't have to leave 'cause any other alder could just join the meeting. I shouldn't discuss, I shouldn't say a word, but I shouldn't have to leave. 'Cause I could turn off my video, but I am an alder, I'm allowed to come to this meeting.

- Except that we have this negative quorum issue.

- But as a voting member, yep, or just take me off right now and I'll be part of the committee and come to every meeting, vote me off the island. I'm still gonna give my expertise and my experience to this committee. But you can vote me off the island right now and I'll just stay, then I'm okay.

- I understand what you're saying, I don't have a great answer for you right at this moment. I am certainly going to look at the language that Director Grenier pointed out and figure out if there is a way that we can modify that to apply to the various standing committees. That's a very good point that the circumstance may arise anytime to people of the same standing committee attend any other standing committee or non-standing committee for that matter. So it's definitely something that I'm going to look into, however, at this moment, regardless of what I find out, that language isn't on the agenda. So at this moment, there's not anything that we can do to modify that. So I'm not saying in perpetuity, I'm just saying for today.

- Am I allowed to listen, but not be on as myself? Am I allowed to listen to what goes on today, so I have a grasp in case I am on it again? Am I allowed to listen?

- I would recommend that you leave, the meeting is being recorded so you can watch it later.

- Okay, I'll watch it later. See ya.

- Thanks, Alder Dorff, apologies for the complication here.

- That's okay, I brought it up.

- Yeah, glad you did. You obviously wanna be doing things the right way, so appreciate that.

- Thank you.

- And hopefully we'll see you at the next meeting in a different capacity or maybe in the same one, if we can get the language right.

- And I'll try, I will listen to this meeting before the next meeting, thank you.

- Thanks Alderman. Chief Faulds.

- I just wanna make sure we're clear on this, Attorney Mather, the language about the quorum is at the bottom of the agenda, right? Am I seeing that correctly? Okay, so I thought maybe you thought it was not there. Right, we're good.

- No, it's there, but it specifies just common council, it doesn't directly address any individual committee. And that's the issue that we have here is that both alders are on the Finance Committee.

- Gotcha.

- Thank you.

- Yeah.

- All right, well, a lot of parliamentary fun, especially for our citizen members today, apologies for that. Any additional discussion on item three on Alder Johnson's communication? Any questions for him or thoughts that others wanna share?

- Mayor, I just wanna be in compliance, I guess, if Alder exiting the meeting because of that, do we have to reconsider anything that she's motioned or seconded?

- Yeah, that's probably a fair question. Director Ellenbecker do you have her recorded on any of those votes? I can't recall.

- Yes, I believe that she helped approve the agenda. I believe Alder Johnson made the motion and Alder Dorff seconded the agenda.

- Okay, but actually that was the original agenda, but then we reconsidered it and actually the reconsideration was Garritt Bader and Brian Johnson.

- Okay, so we should be okay?

- I think so.

- Okay, thanks and thanks for that question, Alder Johnson. Any more discussion on item three?

- A motion to receive and place on file.

- Entertain a second.

- Second.

- Second.

- Alder Johnson makes a motion to receive and place on file item D three, that was seconded by Mr. Martzke. All in favor, signify by saying, aye.

- [Panelists] Aye.

- Nay? The ayes have it, and we are onto item four, over view of the Berners Schober 2015 evaluation of city owned facilities by Director of Public Works, Steve Grenier. Director Grenier.

- Okay, thank you. Back in 2014, Department of Public Works had a number of projects at our East and West facilities and needed to prioritize those facility needs. So we sought bonding money through the, I believe 2014 bond issue, to complete a facilities evaluation for our East and West side garages. As we were preparing the scope for that, received outreach, I think we contact police fire parks who have the majority of the other city owned facilities, identified what we were doing, and it was later determined that the funding we had sought was enough to get a comprehensive building evaluation for all city owned facilities. So we contracted with Berners Schober Associates, who's been a longtime partner of the city to complete a facilities evaluation on all city facilities. Copies of those reports that were completed in 2015 by Berners Schober Associates are included as part of the packet. And as you can see what BSA looked at was a variety of different activities, such as the electrical system, mechanical system, structural building envelope. The intent was to provide low, medium, and high priority repairs that needed to be completed. And since the original preparation of those documents in 2015, all departments have been using those documents as a guide for completing both maintenance and capital repair projects on their facilities. A couple of years ago, the finance department began development of a forward-looking five year capital improvements program and departments have been forwarding projects that were developed out of the Berners Schober billing evaluation studies as part to their capital improvement program. But what we don't have, we still have each department kinda operating independently of each other, submitting individual projects. It has long been the position of the Department of Public Works that a facilities management division needs to exist under city government that can prioritize the building needs across a variety of different buildings, citywide, and would have the responsibility and oversight for both maintenance and capital projects.

- Any comments from the committee or questions for Director Grenier? Understanding this is a very lengthy document and we weren't expecting everyone to have read it before our first meeting.

- Mayor is this intended to be the basis for everything going forward? Not to say you should throw the baby out with the bath water, but is this the foundation of what we're gonna be starting from?

- Well, I think at least from my point of view, it made sense to present all this to the committee. One discussion that I was interested in having at this meeting, maybe down the line, was a question of Director Grenier and others in the city, whether or not there are areas of this analysis that are in need and real need of updating? There's some big gaps in what's been presented or if we still feel pretty confident in the information that's been provided. So that's kinda way that I was looking at things.

- Was that a question Mayor?

- Yeah.

- I don't know if Mr. Bader wants a respond at all, but on that point, I would ask that question of you Director Grenier if you have any kind of broad thoughts on the document.

- I think the document is still valid. If we look at the document and check the boxes as it were for projects that have been completed since the document was published. However, given the fact that we last completed the document in 2015, that is seven years, I would suggest that the document be revisited and updated.

- I think the main reason why I asked was for everyone on this committee to understand, or maybe at least appreciate, is the focus largely police fire possible, City Hall building, or is it looking holistic at many of the

other facilities that were just referenced that Steve talked about that obviously would not be in such a facility like that. Are there two focuses or how are we gonna be prioritizing our time in this committee?

- Yeah, I think from at least from my point of view, we want that focus to be on the original communication, certainly. But if this is an opportunity to take another look at this analysis and make sure that we have everything covered and updated. Like Director Grenier said, seven years is a long time, especially in this world, especially given some of the changes that we've seen recently with supply chain challenges and other things. So I would also invite, Mr. Griffiths, and sort, Mr. Martzke to weigh in on some of those questions and what they think about the validity of this document and what you think maybe, some of the biggest weaknesses might be given its age.

- Yes, certainly it was a snapshot in time. It was the facilities as they were seven years ago, for those items that may have been, for example, five years past their useful life at that point are now five plus seven years past their useful life. And so some of those issues that were identified as maybe tolerable, maybe more pressing today. And so I think as the city looks to upgrade their buildings, I think it does need to be done in a comprehensive manner. This is an individual building by building analysis, it is not a citywide analysis of potential chess moves within it. And so I think the basis of the commission and for what's been put forth is more of the chess move piece. But I see this document as a foundational document to kind of address the magnitude of what is needed at each of these facilities, whether that's a facility that's either gonna be acquired or a facility that's gonna be removed from the list, or what the operational costs are in some of these as well, because not only are these maintenance items and ongoing costs, but we should also be considering what the longterm operational costs of these facilities are as well. And that type of information is not what was commissioned in this document and is not included in that. If that provides a little insight into it?

- Yeah, that's very helpful. Any others have comments or questions?

- Ian, from your perspective, when you look at something like this, is it easier to modify this report?

- I would say it's probably easier to modify, my guess is that as we go through this, it would be, I'm not sure the magnitude of the items that have been dealt with that were high priority. If maybe just a quick analysis of that would maybe steer me one way or another, but my gut reaction would be that there was a tremendous amount of legwork that was done for this document, visiting each building with mechanical engineers, electrical engineers, plumbing, fire protection, as well as architectural and structural. So to have that all revisited would be a challenge or it's certainly possible, but that's a lot of leg work.

- And really, again, one of the original reasons why I asked was trying to understand a timeframe for what results are expected of us and by when to perform certain actions. Ian just brought up a good point, which is what facilities are moving versus which ones aren't. There may be many that need work, the focus of this is a little bit more, again, selfishly kinda real estate play of what needs to move maybe to different locations, i.e, police department, possible fire combination, that sort of thing. There's more the focus of this committee versus some of those other facilities on the spreadsheet we saw which all maybe need work, but aren't something that would move from the land on which they're currently residing.

- Yeah, certainly some of those buildings are park shelters and less consequential buildings. And it's likely that those haven't changed a whole lot, but I certainly know like sixth floor, City Hall was remodeled in the last couple of years. And so there are changes there, but I also know that there are infrastructure elements at City Hall that addresses yet. So maybe we take the largest parts and pieces of these chess pieces and kind of define which buildings are higher priority. And maybe that scope of work could be a little smaller and a little faster.

- Good thoughts. Others with questions or comments on this item?

- Whether it's now Mayor or later, I would make a motion at some point that the focus of the committee be geared towards those major buildings or the ones that have the potential to move or largely relocate here at some point.

- Yeah, and I don't know if, and we have item seven here, which relates to the funding, that's at our disposal, arguably supplemented with other funds, whether they be federal or internal to the city. But I think we could have that discussion down at item seven, but I'm open to the discussion right now as well. Okay, so not seeing other comments here, I think it would make sense to maybe move along at this time to a presentation item five, which is an overview of the current status of City Hall by our Parks Director, Dan Ditscheit.

- , action just to dispense of the previous item, just move to receive and place on file.

- Yep, very well, we have a second for that?

- Second.

- Alder Johnson makes motion to receive and place on file item four, seconded by Mr. Martzke. All in favor signify by saying aye.

- [Panelists] Aye.

- Opposed nay?

- The ayes have it, Director Ditscheit.

- Yeah, so if you look at the agenda packet pages 969 to 974, that focus is a little bit more on City Hall, and the report that BSA did in 2015 as it relates to City Hall. And then the very last page on 974 is a more detailed analysis of that report that we've done recently with more detailed budgetary estimates of some of that work along with a proposed phasing plan. So to step back a little bit in that report, what it states is that the majority of the electrical and mechanical and roof are very old. So the building was built in the 1950s, those elements have not been replaced since, other than probably the roof has been replaced in that timeline but the major electrical components and mechanical components have not been replaced. The only thing that's been done in City Hall with major renovations is we replaced the elevators a few years ago and we did a major renovation to the sixth floor. The renovation to the sixth floor was more kind of office space restructuring and cosmetics improvements. It wasn't looking at the HVAC in any great detail or electrical. So we're at the point right now where it's an old building with very old mechanical and electrical systems where it's to the point where we really have to start making some decisions as a city, what do we wanna do with those? A lot of these components cannot be replaced anymore, we've been repairing them year to year as needed, but if we have any major catastrophes to either the mechanical or electrical, I think it's fair to say that City Hall would be down for months, potentially, depending on what happens, 'cause these fixes they're not cheap fixes, and by the time you bid out the work and order the materials and do the installation, it'd be problematic to run City Hall. So some of the bigger issues that need to be done is roof replacement. That in that report from 2015 said it should be replaced in three to five years, it hasn't been replaced yet. If you look at that last page of proposed fixes, you can see that that's kind of in year two and it's shown as \$810,000 to replace that roof. The other major need is replacing electrical. So right now, much of the electrical doesn't meet current code, and so we can't replace like for like. We'd have to do everything different from how it is now, if we have a major failure. So right now the transformers are in the basement and one of the utility rooms. By code those transformers have to be outside of City Hall and show a cost there of 1.5 million to upgrade the electrical. So not only does that move the transformers to outside of City Hall, but it also upgrades our power system infrastructure so that we can support our key emergency servers. So if the power goes down, we're able to retain service for emergency situations as far as our servers go. In addition, that would also be replacing our diesel generator, which is years old, so right now that generator is ancient. And then finally we would replace all of the main panels and subpanels in the basement along with all the disconnects, which is those would also be replaced. So

it's a lot of work that would be done, and it's a large cost of 1.5 million. Now, if we do plan for this, we can make these changes with very little disturbance to City Hall operations. So if you plan for it, you can phase it in such a way that we could keep City Hall open the majority of the time and still . But if you have a catastrophic failure, there's no way to phase that in, in any structured approach. And then the bigger expenses though, are all the mechanical expenses. And this would be the HVAC systems, the water boilers, the air units, anything like that. All of our units, as I mentioned, are original to the 1950s. It's hard to find replacement parts on the equipment we have and when they do fail, which it's a matter of time when it's going to fail, we can't replace like for like in these systems either, 'cause what we have right now does not meet current code. And so we have to do things very differently when we're replacing these systems. So one of the biggest code issues with the HVAC is the central portion of City Hall, which is a lot of the hallway space and also some of our interior office spaces that don't face the windows. None of those have air ducts, and so that does not meet current code, so there's no air returns, there's no venting in any of those buildings, and it's just currently reliant upon air circulation underneath the doors or when the doors are open, and that's how you have the filtration of the air system. And that just doesn't meet code now, so as part of this, one of the larger expenses is creating a big air duct throughout all six floors of City Hall where you can get proper ventilation to the entire building in all of the spaces. And then in addition, the boilers are currently in the basement, what's being proposed here is those would go on the roof in a new utility penthouse expansion. So utility work or I'm sorry, HVAC and mechanical work is roughly \$5 million based on these current estimates that you see in here. And so what we did recently is we worked with BSA to fine-tune the report from 2015. So we're pretty confident in the scope of work for the electrical upgrades. We show that in kinda year one of 1.5 million, but we would have to do additional exploration and engineering to design the mechanical systems. But we did a report in 2000 and we worked with BSA to kind of refine the scope of work to what you see here, but we're not really set with the final engineering of the mechanical and HVAC systems, but we are pretty set on the trickle modifications that would need to be made. So like I said, just to summarize real quickly, everything's very old in this building, it's out of date and it doesn't meet code. And it's just a matter of time when these facilities are going to fail. And if we plan for the replacements in a structured approach, we can do it with very little disruption. If we don't plan for it, it could be pretty severe if we have a problem.

- Thanks Director, questions or comments related to Director Ditscheit's presentation.

- Director D, do you know how many total square feet City Hall is, or maybe Ian, you might know that number?

- That's probably in the report, Paul, if you've read it.

- And I don't know that off the top of my head.

- I don't either actually, we can get the square footages that's easy, we can get a breakdown of every building.

- Paul for rough estimates, I think it's about 13,000 square feet per floor, I was playing with that this morning, so roughly multiply by six, not including your basement, of course, your HVAC penthouse.

- Now I do have just one more thing to add, and that is other renovations within City Hall. So throughout the years, various different departments have requested different renovations on their floors. And those renovations are not really taken into account in this current estimate of 6.5 million in repairs. So some of 'em are going to have to be considered sooner than later. So Director Grenier can probably speak to this, but probably the most important one that needs to be addressed sooner than later is some renovations to the third floor. So right now all of the computer cabling really needs to be replaced on the third floor. And I believe that estimate's around \$100,000 but I don't know, I'd have to check that for sure. That's because we have so many computer systems that need a lot of power. So right now it's very inadequate as far as our computer service on the third floor. In addition, they're running out of usable off staff office space. So there's a desire to renovate that meeting room in the third floor room 310 into additional office space for public works employees. So that really is a renovation we should be considering sooner than later, but then there's a lot of

other renovations that different floors have requests. And if you look at that last page on 974, I just listed a few of kinda the bigger ticket items as potentials but we haven't put any cost to those renovations and we haven't set any priorities to those renovations because I think we really do need to focus on the electrical and mechanical changes before we do some of these other large ticket renovations to the various floors.

- And Dan, are you interested in me showing the screen or you think that's fine?

- Yeah, I mean, if you have a report open up, otherwise I have that page 974 open on my screen where I could share that if you want.

- Yeah, I have it open.

- Okay.

- I guess just as a point of followup, the dollars that are in the report from 2015 were reflective of pricing at that time, and doesn't reflect the current bidding environment or current cost and availability of material. Certainly things like roofing and other things have gone up substantially and just finding people to do the work, let alone, being able to afford the work to have it done is a significant issue.

- Yeah, and in fact, these estimates that you see in front of you on this page, these were done last year, so it doesn't really reflect current bidding processes. So it is a lot more expensive now when we're bidding out work than it even was last year is what we're finding out.

- Correct.

- So the total cost, as you see there is \$6.5 million for electrical, mechanical and roof replacements, and doing all of those repairs and renovations in a five year window. Obviously those that number is gonna go up year to year and we'd have to modify those numbers accordingly. But if you scroll down a little bit, Diana, I just wanna point out some of those other renovations that have been discussed. And these are not an all-encompassing list of renovations, these are kind of some of the bigger ticket items that have been discussed. So talked already about the third floor renovations regarding public works needs. On the second floor, there's an interest to install a dedicated women's restroom because the council chamber is there. Right now there's a men's room, but there is not a women's room. So right now for the women's room, there's a single stall unisex bathroom on the other side of the hallway and that is currently the women's room, which isn't desirable for large City Council meetings. And then a couple other ones is there's a desire to potentially consider moving some of the services on the first floor, up to the fourth floor. We have a large area of the fourth floor that is vacant right now in office space, and so there's a desire to potentially move the assessor's office, finance department and purchasing department into that vacant office space. Obviously we'd have to do major renovation to the fourth floor to accommodate that, but then what that does, is it frees up a lot of room on the first floor. And by doing that, you could possibly move Muni Court into the first floor and create a large meeting room so that people don't have to go on the elevators to just come to a standard meeting. I don't think the intent is to move City Council to the first floor, but it could be just for any sort of large public meeting, could then meet on the first floor of City Hall instead of having to go to other parts of the building. So those are some of the bigger ticket items, but there's a lot of small renovations that various departments have asked for. And they're real needs, just things are old.

- Hey, Dan, you referenced those six floor renovations a few years back, do you any idea what those cost and is that just a very rough guideline for what different floors, but maybe need, even if it's more cosmetic and not so much operational.

- So when the renovation of the sixth floor was done, it was about a million dollars for the renovation. I don't think that included the architectural work, I think that was the cost for the renovations, but that was three, four or five years ago. And I'm sure that number has gone up drastically since then. The other thing I wanna

point out with the roof is we do have a lot of leaks in that roof. And I think the year that they did those renovations to the sixth floor shortly thereafter, they had a lot of ceiling panels that had a lot of water stains from leaks in the roof. So we have repaired many of those water leaks, but per the report in 2015, that roof, it should have been replaced already, it's beyond its expected life expectancy. And so we do really have to make that a high priority so that we don't cause structural damage to that roof structure.

- I guess I would just interject here, if I can. I think it emphasizes the importance of the order in which things are done and the need to look comprehensively at this. Certainly the roof needs to be replaced, but if one of the options for the mechanical systems is to put the mechanical systems on the roof, which comes first? And what is that investment in that? And is one investment worth it? If that is a bigger chess movement in play, and I mean, certainly the items then that you brought forth regarding the electrical systems and a potential catastrophic failure are very real, the potential for that is high. And if it does, you have to design those systems, you have to procure those systems and you have to get 'em installed, and that's not gonna be easy in terms of timeline and the effect on City Hall, so certainly those are key items.

- Yeah, and in the first year, what we proposed in our CIP initially was to replace the electrical and then hire an engineer to design the mechanical, and then we had the roof replacement the following year. And that way we could design the mechanical, figure out how large of a penthouse structure we needed and actually take that into account when we replace the roof, so we're not replacing the roof twice.

- And I would just add to that, Ian, something that when we were contemplating this during the bond request last year, I'm a big believer in let's get all options on the table before we start narrowing down what the right decision is. And so if there is a hypothetical situation where we say what a new facility is really, what's in the best interest of the taxpayer, what would happen with the existing City Hall, and obviously that would likely come with a different use. So when you start looking at this electrical upgrade, is that the same process, no matter what the use is, or do things get altered a little bit, so just trying to kind of have that conversation as well.

- Yeah, absolutely. I mean, certainly if that building was, I don't know, turned into apartments or a different use, it would have a different electrical load and you may well do the HVAC in a different manner. So yeah, these are large scale decisions that should be addressed and identified, so that the investment that is made is a valid investment and will see some sort of return on it. If those systems haven't been replaced in 50 years, 60 years, then replacing them now only for the building to be a different use five years from now and have to be modified again, doesn't make any sense either.

- And on that point, if we were to authorize additional analysis and maybe heightened analysis of some of these key buildings, is it possible to really get a good handle on the feasibility of conversion or the marketability if the building is converted to a different use, is that something that's done commonly or a process that you're familiar with and open to any members?

- From my perspective, I'd say it's a perfect candidate for an RFP out to the broader real estate development community, here you go. Here's the building that we have it for the right proposal, \$1 it's yours, and let that other group largely do all the work that Ian was just referencing as maybe needed for that desired use.

- Yeah, I agree. I think part of the question becomes what is the timeline for a larger, broader picture and what are the timelines for need? I think those are key decisions that, I mean, if it's five years from now, you know what I mean? Design of a major municipal facility takes a lot of time and it's not something that wants to be rushed, it needs to be well thought through. And just like City Hall, a building that lasted or has lasted to this point 50, 60, 70 years. That's a good investment for the City of Green Bay for a building that has had very little investment in it since the day it was done. And so there's longevity there, there's also an aspect of sustainability within that, that it can be argued that I think that longevity is the best form of sustainability. So all of the embodied energy, all of those pieces that go into the construction of a building of that magnitude should be part of the picture as well.

- No, man, not to further complicate the discussion, but I think there needs to be an operational discussion as well. And Dan, you talked about some potential modifications to City Hall and I like that we're thinking that way, what could that potentially look like? And I think to broaden that scope a little bit, that if you are a user, a resident of our community coming to City Hall, how do you create a good user experience in taking into account what percentage of people come to City Hall for what purpose and how can you redesign that layout in a way that creates a good customer experience? And how could that potentially look in the existing facility versus a new one? So I think that operational piece is really important as well, once we look beyond just the facility needs.

- No, I would certainly agree with that, in addition though, I would also note that the nature of the way that work is done has changed pretty dramatically in the last two years as well. I mean, we're much more in-person than an organization kinda doing similar work in the private sector probably is right now, but still we're able to do a lot more remotely or are doing many more things remotely than we were pre-pandemic. So I think just in terms of operational questions that probably factors into.

- Yeah, this meeting's a great example of it.

- I was just going to add something that might be of interest. I was born and raised in the City of Kaukauna, and about maybe half a decade ago, they made the decision to raise several of their existing buildings in favor of building new. I was just trying to do some web searching to see what that project cost. Obviously smaller city, employees to try to house, but that project from my familiarity only really was a success because you were able to do something before you moved staff, and then you had the time to address some of these very difficult projects in existing buildings. So just might be something that would be worth looking at in terms of what their total cost was, 'cause it included a new fire station as part of a second phase to that project.

- But I think that's the heart of why we're meeting here, 'cause looking Dan, the information you had, let's say that number is really six and a half for urgent stuff and with current bidding and cost and all that, let's just say that's maybe seven and a half now. If you were to take your roughly a million dollars per floor and even say that's a million and a half for the same reasons, you're easily pushing north of 15 million to address and modernized City Hall. And at roughly 13,000 square feet of floor, Paul chime in, if you got a better number, but you apply any cost per square foot on that, you're starting to get pretty close where your mind can conceive the benefits of building new.

- When you add that... Sorry, Paul, go ahead.

- I was just gonna say that you've gotta study this item six for the replacement of the police station. And I think they valued that at about 35 million couple years ago when that study was completed. I mean, for the sake of discussion, I would just say double the number if you're gonna combine the facility. So you're looking yet a bonding request north of 75 million to do everything that's talked about. I think that's just off the cuff numbers of what you're really looking at.

- Yeah, and I think the merits of that, if you know that you need to invest that money either way whether it's in a unified building or otherwise, But then you look at City Hall and if you can bring that back onto the tax roles, through a private development by unifying the building, that's kind of the other piece that I've been thinking about.

- And then I'll add onto that, Brian, with the idea of Dan, what is your annual capital improvement project looking out 10 years? Because that's easy to forget about, there's a lot of, of money that's gonna just continue to have to be spent on a building. Not to say a brand new building has no ongoing operational cost, but it does reset the clock for at least a decade or two. And then the other thing that was going into my mind, and again, forgive me, I don't spend my days totally in public municipal government, but what other needs could the existing site for the City Hall help with the City of Green Bay? Does it become a site for housing assistance or

some other public need that that location serves itself well for? As Garritt suggested, you might find out through private development, what could be successful there as well.

- I think this has been a really good discussion, any other thoughts or questions on this one? Okay, I entertain a motion to receive and place on file.

- So moved.

- Second.

- A motion has been made by Alder Johnson to receive and place on file. This item, the overview of the current status of City Hall by our Parks Director, that was seconded by Mr. Bader, all in favor, signify by saying, aye.

- [Panelists] Aye.

- Opposed nay? The ayes have it, onto item six, overview of Bray Architect's presentations. Director, Ellenbecker, were you able to provide any kind of an overview of what was done here or?

- No, it's included in the packet and I do not have any representatives who are on the former group. Happens to be on page 978 of the packet, but back then there was a time the Steering Committee, that really Alder Lamers Chief of Staff, Celestine Jeffreys was on it. We had a captain and a commander from the Police Department, and we had a assistant fire chief on the team and also the judge from the Muni Court. And at that point they really went through, at that point, they used Bray Architects and just really went out and really did a spatial needs analysis, kind of if they could really have everything they wanted really kind of they went and looked at it. So again, this was back in '16 and '17 and they just really started the process of what it is, if they could have what they wanted, this is what they wanted, this is what they would need. And then they also went as far as trying to maybe find some locations within the City of Green Bay. What really put this one at pause was unfortunately, as they were moving forward, we weren't really at that point, we weren't at a point where we could start, we hadn't been planning to start building a public safety building so it really kind of got put on hold. We really didn't have the money to buy the lot at the time that they had recommended, and so it really kinda got put on hold. And so again, of course it was a funding thing that really slowed this one down, really hadn't been moving forward without thinking about the funding to go with. So I don't have much more to say on this, other than, like I said, there were two different presentations that went into the Finance Committee. And so I just attached the two documents, so you can kinda see what they were thinking at that point. There was a thought of maybe pleas, possibly fire administration, and then that was in, kind of out and then maybe whether or not Muni Court could be in and out. And so it was really something they were thinking about at, in '16 and '17.

- Right, well, thanks for that overview. And just to reiterate some of what Director Ellenbecker has said, and to reinforce what Alder Johnson said earlier, there's a lot of good work that was done by this group, but the key gap was that financing piece. And so I think it was maybe the first CIP that I was involved in, had to go to Finance Committee and say, hey, I'm not real comfortable just slotting this in given the fact that we don't have a good way to necessarily pay for this. And given what Mr. Martzke just said with the ballpark estimate of we're looking at 75 million plus, I think that really has to be a key point of the discussion of this committee is working with others or some other outfit with our finance team to identify a really solid financial path to incorporate these upgrades or renovations or complete reimagining's of how we do things with city government, because as it stands, I think everybody understands, municipal finance is a difficult concern these days. And when you're trying to factor in all of these additional costs, that's a real challenge for us. And then another thing, just to note of that prior discussion, the terminology has been public safety building, going back four or five years, whenever this discussion got going. I think it makes sense to reevaluate whether or not, we actually would benefit from combined police and fire in one facility. There's been recent discussion with Chief Litton and others within fire indicates that it might actually make more sense to include fire administration

adjacent to a new firehouse, which is certainly needed on the near west side of town. I think that's fire station three, that's a beautiful old historic structure, but not that well designed for modern firefighting necessarily. And then kind of connected to that, I would love to have a better understanding of how marketable that fire station would be for private development in addition to Fire Station 1, which currently houses just the fire administration. So just some thoughts on that prior work. Any additional?

- It would seem that there are some very complex financial analysis on the trade-offs between decisions that need to be done. I'm wondering, has anything like that been done to date? So as we think about build versus renovate, and then the ongoing expenses associated with each one of those, do we have any idea what that looks like?

- Director Ellenbecker.

- No, to date that has not been done.

- Okay.

- I think Jesse brings up a good point because if the idea is to possibly combine or bring together certain elements whatever those are, could that number that Paul talked about before, be different? If you're already combining something in, and it's a marginal, extra cost, a certain combination, but maybe not the rack rate that you would have with standalone facilities.

- Yeah, certainly there's an efficiency when you're bringing in one service to a building to affect multiple essentially tenants within that. So, yeah, I think there's an operational efficiency as well. I mean, and I think the other piece that should be looked at is what are the utility costs for some of these buildings? I mean, maybe City Halls, utility costs are not as high because it's not delivering the amount of air to each of the spaces that it needs to, or it may be the fact that there is no insulation in the outside wall, that it is an uncomfortable building to be in because all heat is escaping out the windows or at the wall. So I think, there's a whole other included in the study that was done by our office in 2015. That was purely the parts and pieces, and it doesn't address the operational piece of that. And I think that is a huge factor, vision, as this comes together, that can't be just left to one side that needs to be part of the analysis.

- Diana, I'm curious 'cause the Mayor brought it up, referring some of this to Ellis for analysis as well. I mean, if this group were to move forward and able to get some numbers around here's the cost to construct, here's the cost to renovate, you kinda create multiple scenarios. Does Ellis do that type of analysis where they can say, here are the different public financing mechanisms you have and here's the outcome that makes the most sense. For example, if you put some of these properties back on the tax roll, that's new increment, you could create a TID and borrow against that, some of it could be levy supported. There's some value left to opportunity zones, although that may not be there by the time you can put a shovel in the ground around unless Congress acts. But my point is that there are options there, right? You could have a private developer build something and lease where we have an option to purchase. I'm just kinda curious if that's the type of analysis that Ellis can do for us?

- Yes, it has. Yes, I believe, we would certainly get a scope of services if we were gonna go out to contract with them. However, at a very, very high level for the last two years, I have been telling them as we work through debt and levy limits that we have this public safety building or municipal building, whatever we wanna call it, it's on the horizon, it needs something that we need to consider. And so that is certainly something that they can do, they would look at, they've made recommendations they know 'cause as they look at our debt structure, they also look at when are kids gonna close or what other kind of new funding sources you have and they would be able to structure something out. Again, I mean that would be we have to have more tax increment coming in so that we could pay for the larger debt service. I mean that would be the preferred way to pay for a large building as this. So I would at this point, yes, and I believe that is a service they've already offered up, but I certainly can reach out to them after this meeting and again, give them if they could just even

gimme like not a quota, maybe some kind of some background on what kind of services they do offer, I certainly can get that. But at this point I do believe that that's something that they would be very interested in since they already work with our current debt, they already know our current budgeting, our current equalized value, levy limits. I think they certainly would be able to help us out for this process.

- Thank you.

- And I would be particularly interested in the difference between the capital investment that would be needed versus the ongoing operational expenses of those older buildings. And to Alderman Johnson's point, the potential offsets that could be out there when you transition from one building to another.

- Any other discussion on this item? Alder Johnson?

- No, I was just gonna move to receive and place in file if there's no other questions.

- Motion to receive and place on file made by Alder Johnson.

- Second.

- Seconded by Mr. Bader, all in favor will signify by saying aye.

- [Panelists] Aye. have it. And now we're down to item seven, consideration with possible action for the use of the remaining 2018 bonded money for public safety building in \$34,361.60. So wanted to put this on the agenda as our only potential action item, principally so that the Ad-Hoc Facilities Committee was aware of these resources that have kind of been left over from that 2018 analysis of a public safety building. I don't know that this would cover the entirety of an updated analysis of what we were thinking earlier. And as I said previously, I think there is the potential to supplement this with American Rescue Plan Act knowledge, if that's the intent of this committee and the intent of council. This is a clear organizational need and we do have a significant pot of money that's dedicated for those kinds of investigations and purposes. So interested in just having a discussion about how we could put these resources to use and or potentially supplementing it with additional dollars.

- So my gut tells me that there really wouldn't be an action we take today, as you alluded to mayor and maybe a hold is appropriate, just so that we know and understand that funding is there. I think the first step would be building out some type of scope of an RFP in terms of what we really wanna see.

- Right, I think, one potential action would be to refer this item to staff and directing them to bring back some elements of a financial strategy as we were just discussing as well as an analysis that speaks to some of those operational needs, as well as significant capital costs that we're talking about.

- So I could certainly support a referral. I'm just trying to think obviously if the intent is to come back to the next meeting with staff's recommendation and then the committee here could kinda weigh in on that recommendation, provide additional input.

- That's what I was thinking, yes.

- Okay, okay.

- Any other comments from committee members on that question or potential action?

- Yeah, what was going through my mind is, again, from an outsider's perspective, the fact that today's packet is almost a thousand pages long shows that we do, when I say we, the city has commission studies to understand the scope and the extent of the project. But I think I agree with Alderman Johnson's concept of let's lay out a

roadmap so that we don't continue to just spin our wheels and we end up just knowing what's wrong with our buildings and maybe not having a way to put it into any meaningful action. And that please understand that comment is not intended to be negative towards any one person, but there is a little bit of, it seems to me like the problem gets to be so large and there's just such a complex solution, it stagnates. So I would support asking staff, okay, what are our bonding options or what are our options for what we could maybe afford and some unique thoughts on structure. But then I would also go down the path of, and maybe what are the pieces of the strategy that need to get put out. And maybe it's a couple of RFPs, one on the financial side and the other one that could be on kind of a master planning side.

- I propose maybe a real overly simple goal for next time, which is if, back to my earlier comments of trying to understand what does this committee want to achieve, and what's our focus be? It seems like the focus should really be City Hall, police facility, fire facility, and whether those are all combined or separate or partly combined or whatever. I would love to know that A, that's what we think we should be focusing our time on. And then B, for next time, the respect of overseers of those efforts in the past to at least give us a brief executive summary, if you will, of here's what we've done so far, here's what would need to be re-reviewed or restudied. And then we can analyze that next time and say here's our three buckets, here's where we need to go from where we've been. I think long before we even talk about what our different financing vehicles, that's obviously important, but I like to first know where we're really starting from. And I would take the value, the opinion of those folks very seriously.

- Yeah, I think that a good point, although, especially with regard to the police station, not a whole heck of a lot has been done. So there's not that much information to share on that front, fire administration would be a similar answer, the municipal court sort of status quo. We've heard from our Parks Director on City Hall, so that's my only point on that front.

- Do we know from place and fire, if the needs have marketably changed or the physical conditions have notably noted, what am I trying to say? And really deteriorated most of my speech here since the most recent reports were done?

- I would just say generally the police station is in rough shape, in need of some significant upgrades. Chief Davis can certainly . Definitely need some new carpet on the second floor, that was my most recent observation, but Chief Davis feel free.

- Yeah, I mean, obviously it hasn't gotten any better. I haven't seen this report, so I don't know how to compare what we have now, but I would just say there's a couple issues where that have probably gotten worse. One is structural, the roof, for example, we've gotta spend almost \$200,000 now repairing the roof. And it all has to be replaced because there are 80 to a hundred spots, so it's actually cheaper to replace it than it would be to patch all those. But the other thing for our facility that we've noticed that I think has changed probably since this report, because just in the last few years, we've started in the profession to rethink what we use our facilities for. This facility definitely represents like a 1960s way of thinking about police facilities. There's no community space in it, no connection to other things. I think there is a trend and a good one, in my opinion of co-locating police facilities with things like parks or affordable housing developments or things like that to integrate 'em into the community better rather than making them this kind of standoffish thing that's on its own. Hopefully that's helpful to the discussion.

- Yep.

- Curious if others have additional thoughts, obviously I think the easiest motion here is to refer to staff and then we can bring back maybe a few different options for the committee to mull over.

- Are you looking for a motion for something right now?

- Yeah, if someone's interested in offering one, yeah.

- I guess a motion got set a moment ago to have this committee's focus centered on those primary facilities, City Hall, police, fire, and have an executive summary or brief report, whatever, back by next time we meet that says, here are the existing reports, were they reviewed and what is the next steps from those reports.

- Eric can I suggest you amend your motion to include the Municipal Court as well?

- Absolutely, so amended.

- And like I said, that certainly makes sense to me. You could sort of say, that's what we did here, that's my only concern is it doesn't seem to me that this is really moving the ball too much forward. I mean, we can work within that and maybe offer a few proactive items related to that scope, but that's my only comment.

- Well, and maybe to what Dan talked about earlier, City Hall, maybe there's not much need that regard other than some updating a cost for certain things that Ian had talked about earlier in the meeting. Fire to your comments before Mayor, maybe there's not a lot needed there, but with police, what the chief just said, maybe that's is that the one item that takes maybe a little more immediate refreshing or another look to see exactly what is desired compared to the Bray analysis?

- Yeah, I don't think it would take that much to look at those buildings and identify what's been done, what hasn't been done and put some increased costs to those. I think that would at least give us a starting point that, okay, this is reflective of today, and not reflective of 2015, and from there we can make decisions. I think the financial analysis piece is a big part of this, this is great discussion, but if there's no way to finance this, then that's gonna be a challenge.

- And beyond just financing it, you might be able to finance it, but maybe you shouldn't finance it. Maybe you should never ever, just because you can finance, it doesn't mean you should.

- Sure, absolutely.

- But yeah, I think that there's been a lot of really good points about why you may want to do one option or the other, but I think to fully understand the decision, you need to understand what are the cost trade-offs of one decision versus the other. And it doesn't have to be perfect, but we gotta get in the ballpark.

- Absolutely. Other thoughts on that motion. Okay, Mr. Bader made that, do you wanna restate that, Mr. Bader, just so we have it?

- Sure, to focus this committee's scope on the primary billings of City Hall, police, fire, and municipal court, and to receive back a brief summary of where the most recent reports was needed next, whether refinements to some of those numbers are needed, so we know our base scope of each building for the next meeting.

- Okay, and are you that's broad enough to encompass a potential financial analysis or some of those questions that Alder Johnson and Director Ellenbecker and others had gotten into?

- Well, my gut says no only because if the idea of possible combining could happen, we were saying, and you have cost savings from combining different facilities, can we even know what you can combine if you don't know, in a case of specifically fire, the Chief's comments just a moment ago, how that looks like. So if you would need say roughly 80,000 square feet of new City Hall using current square footages, is the cost per square foot to build that more 250 versus 350, if you're gonna combine with something. I don't know what you can estimate that right now until we have a better idea on what the individual needs for those uses are, and then what could be combined.

- Well, you do know your cost right now and an estimate of what those repairs would be in the future. You can put estimates just like you just did right now, 250 to 350 on understanding what the expense would be for the alternative.

- I guess I would suggest that maybe that'd be a separate motion, then, the financing part of things, if the physical needs is one part, is then the financial capacity possibilities a second, maybe that would include current utilities that came up before current utility usage, current operating expenses data.

- Yeah, I mean, this kind of a legalistic question. We've got one item here that has consideration with possible action. So I think we'd probably need to kind of encompass what we're trying to do with one motion related to this item.

- So the motion is also for staff to present the utility operation financing estimates that think both Jesse and Ian and some respect Paul had referenced, I'm fine with that . I feel like the motion is growing here, but somebody held pair down what they would like-

- Yeah, I think from a parliamentary perspective, I think the Mayor's right. You have one agenda item, so you have one opportunity really to have one motion that captures everything. And so what I would recommend is a motion that refers this to staff and then bullet point, each item that you want staff to work on.

- Can I ask a question of item seven, or is that item stating that there's 34,000 in remaining funds to be used from the 2018?

- Correct.

- So that's not a lot of money, but it might be enough to get the respective consultants to go back and do a quick review of the documents they've already given us and provide us that update. You have Bray that did the police study, it might be as simple as saying you did this in 2018, what do you feel the dollar amounts are in 2022 or '23. If we narrow down the scope to the four buildings that Garritt mentioned in his proposed motion, that might be enough money to ask Berners Schober to simply go back and review those four buildings and update that portion of the facility study, so you bring that up to date, and then you'd have the groundwork of understanding that the four existing facilities need X amount of items and the recommendation for a new police facility is X amount of dollars.

- Yeah, I like the sound of that.

- I concur.

- Well, now, whether or not you could get those respective consultants to update their stuff with that amount of money, I guess that would be the first step. And I don't know if the city's procurement process requires them to go out for an RFP or because you've already engaged those still technically be under contract, whatever, not sure how you facilitate that discussion, but.

- Yeah, that's a good question. I don't know, Director Ellenbecker, if you have any thoughts on that at all, or the motion that proposed.

- Just to answer your last point, I believe because we've already had them as we've already contracted, and this would be an update and be as architectural service. I don't believe we'd have to go for RFP, of course, I'll check with my procurement manager, but I think that that would be. And again, also to talk to Paul's point, yeah, again, 34,000 is not a lot of money legally available, that was really set aside by the council at one point to look at a public safety building analysis at that point. So again, it's not a lot, but it's money that's here, it's ready, it can be spent, it gives you a little bit of as a team to help move forward something. And then if we need more funding, as the Mayor said, maybe we go on tap our ARPA funds, but that certainly sounds like something that

we would be able to go forward and reach back out to Berners Schober to update those, at least those four buildings.

- Well, Director Ellenbecker, correct me if I'm wrong, but we could just forward that as a sole source request, right? And because if, I mean, quite frankly, if you were to take BSA's report here and give it to any other, they're gonna want to verify, validate they're redoing the whole study at that point anyway.

- Yep.

- Correct.

- Okay. The other question I guess I would have is, well, a point I would make is I would think you'd wanna hold back on ARPA funds until we have a sense of better direction, simply because if the way that we're headed is to an eventual RFP that discusses a potential replacement of these facilities, that's a bigger undertaking with obviously some additional consultant dollars needed. And then the last thing I guess I would ask is simply, is it a easy task to somehow create a projection or provide this committee with the information on what the city's bonding capacity could look like for a major capital project? If we say that this is a \$50 million project or a hundred dollar project or whatever those numbers are, can that be very quickly calculated so that we even know that there is capacity in the future to do this, because I think that would then help us frame the , if we only know that we have 50 million to work with, then potentially the project has to be looked at in a different way, whether it's a private sector partnership or some other financing, or maybe it's just scaled back.

- Well, that's a good question. I mean, one of the short answers is from a statutory perspective, we almost certainly have capacity to borrow, the kind of sums that we've talked about, whether or not that's a wise financial decision is really what we need to get into, but Director Ellenbecker, if you have any additional thoughts.

- No, and again, I think I would prefer to defer that over to Ellis and again, yes, look at our depth capacity, look at the long term, how many years could you bond this for? I mean, 'cause the useful life of building obviously should be, we might be able to bond this out for 40 years. So they would be able to help stagger that all out and give us better answers.

- Yeah, I'd concur with that. I think as not been in the finance piece of it and knowing what the capacities of the city are, any narrowing down of that would be helpful for me just to have a sense of magnitude and perspective on it, that would be very useful to frame these discussions going forward and how we might approach 'em.

- Great, so I think what I heard from Mr. Martzke was a motion to dedicate that remaining balance of \$34,361.60 to an update of the overviews that were presented today, is that correct?

- Specific to the four buildings that we mentioned previously, City Hall police...

- So technically, do you want me to withdraw my motion and let Paul's motion stand on the floor?

- Yeah, I don't think there was a second for your motion Garritt, so if you felt comfortable with Paul's motion, you could second it.

- Sure, I'll second Paul's motion.

- Additional discussion on that?

- I continue to agree with Ms. Ellenbecker's comment though about getting some analysis done on the operations side and I'm comfortable with it not, necessarily being at this juncture, but I think that's a very wise

thought because where my mind goes to, is if we know the capacity is there after some initial financial analytics are done, it starts to drive conversations about significant operation savings that you just can't even think about right now. A reception area that can direct you to three different locations in a building that currently you'd need three separate reception folks in three separate locations, snow removal services, it goes on and on. Obviously there's some additional impacts that happen when you consolidate locations together. But I think we may be surprised when we start to think about just the redundancy that we have to operate again, of no fault of anybody, it's just the reality of having disconnected services.

- Right, I think that's well said. Other comments on the motion? Seeing none all in favor will signify by saying aye.

- [Panelists] Aye.

- Opposed nay? And I'm sorry, Mr. Griffiths. Just thought it might be appropriate to make that . Fantastic, so the ayes have it, that motion is successful and then we've got, determining our next meeting date, roughly speaking, is this a decent time for people?

- How often is it anticipated that we need to, or want to meet?

- I mean, I would imagine we're gonna try to get back together as soon as possible, when these updates are ready. I think we're probably looking at a little bit of a time out here for a month or two or maybe more before that could be prepared, but I would defer to the experts on the call too, if they have an understanding of how quickly we could get back.

- I guess I can chime in on the architectural engineering side of things. I think if we had the opportunity to sit down with the public works and parks department to go through what has, and hasn't been done in some of these buildings, as well as the police and fire, then I think we could pretty quickly update those numbers and identify things that have changed in that document. I don't think it would take that much time and I think it can be done pretty economically.

- Okay, so not a super concrete answer for you, Mr. Bader, but I don't anticipate it being an every couple week kind of affair, especially right now, as we're gathering information.

- I think if we had a month now, you'd have more sufficient time to get our portion of the work done if that's the way it goes. And I, again, I don't own the finance piece of what that timeline might look like, but on the architectural engineering side, I would feel very comfortable within a month that we could get that update information out.

- Okay, and that's certainly what we could target from a scheduling point of view. We don't necessarily have to designate a particular time right now. I can ask Terry from my office to help coordinate our next meeting time. Just wanted to get a sense for whether or not, Monday mid morning is good, or if somebody really had .

- So long as it's around the 10 o'clock time, that's good, otherwise I have all of our weekly scheduling for staff and kind of our corporate meetings, first thing on a Monday. So if the first two hours can be kept open, that'd be great, and 10 o'clock onwards, I'm good.

- Okay.

- I would, second that meeting time is being pretty favorable.

- Moving back in half an hour. Go ahead.

- Thank you, same with me though. It may be better on not a Monday just from getting the week going, but I can be flexible as well, if this is a good time for everyone else to meet.
- I was just gonna say 10:30 is a little bit better for me, but I can do 10.
- Okay. All right, so I think we got a sense for what works for the committee. I'd entertain a motion to receive and place on file.
- So moved.
- Second.
- Motion to receive and place on file and item eight was made by Alder Johnson and seconded by Mr. Bader. All in favor, signify by saying, aye.
- Aye.
- Opposed nay? The ayes have it and now we need a Chair. Any volunteers?
- Those crickets are back.
- And I mean, it goes without saying that I'd be have happy to serve as Chair, if that's what you all are most comfortable with. Alder Johnson, obviously, is familiar with parliamentary procedure, could definitely do the job for us as well. So whatever that is, is fine.
- I'm gonna respectfully take myself out of the running. I got this little public market project that I'm through the goodness of being a board member, helping to guide and that's a limited bandwidth to do my formal life, so I will not be part of that.
- I guess I would be in same position where I'd rather focus time and energy and effort onto some of the thinking about it, as opposed to the running of it.
- I mean, if nobody else wants to do it, I mean, I would volunteer if it's just handling the parliamentary piece and engaging with staff a little bit, but if someone else from the committee preferred to take on that role, I would certainly defer as well. Turns out I'm not chairing any other committees at the moment, so it kinda...
- Sounds like Alder Johnson's looking for a nomination.
- I so nominate.
- Second.
- Mr. Griffiths nominates Alder Johnson to serve as Chair of our Ad-Hoc Facilities Committee, that was seconded by Mr. Bader. All in favor will signify by saying aye.
- [Panelists] Aye.
- Opposed nay? The ayes have it and then a successful Vice Chair. Really don't have to do anything if Brian skips town on us.
- I can take on the role of Vice Chair.
- All right, there we go.

- I nominate Paul.

- Alder Johnson nominates Mr. Martzke, seconded by Mr. Griffiths. Any discussion? All in favor, signify by saying aye.

- [Panelists] Aye.

- Opposed nay?

- The ayes have it. Adjournment, motion to adjourn? Motion to adjourn made by Alder Johnson, seconded by Mr. Griffiths all in favor, signify by saying aye.

- [Panelists] Aye.

- Opposed nay. The ayes have it, we're adjourned, thanks everybody sincerely for the discussion today, I think it was really valuable. Thank you.



Report to the
Ad Hoc Facilities Committee
of the City of Green Bay

MEETING DATE

November 15, 2022

AGENDA ITEM # D.I

Consideration with possible action the review of the Facilities Assessment Updates for City Hall, Municipal Court, Police Station, and Fire Station #1.

BACKGROUND

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

1. CityHall_Updated 11.7.2022
2. FireStation I
3. MunicipalCourt
4. PoliceStation

FACILITY ASSESSMENT

Document prepared for:

City of Green Bay

Green Bay, WI

City Hall

Comm. No. 22CGB12.00

September 30, 2022

Facility Assessment

City of Green Bay | Green Bay, WI

Comm. No. 22CGB12.00

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report description

An assessment of City Hall was conducted in 2015 by Berners Schober which reviewed the condition of the building's architectural, structural, mechanical, plumbing and electrical elements. This report, done in the summer of 2022, is an update to the previous assessment. Each building was re-surveyed by trade and the reports updated. Below are brief summaries of the changes to the building in the intervening 7 years.

architectural

Exterior building elements have not changed significantly since the previous assessment. The roof of the building and penthouse are in need of replacement. Single pane windows are recommended for replacement.

Interior finishes were reviewed with an emphasis on those which were damaged or in poor condition. The elevators have been replaced since the previous assessment. The 6th Floor was renovated during the past 7 years, including the staff break room which provided accessible sink and counter areas.

code/accessibility

The Wisconsin building code has been updated since the last assessment to referencing the 2015 International Building Code (IBC). The 2015 IBC references the 2009 ICC A117.1 Accessible and Usable Buildings and Facilities code. The 2010 ADA Standards remain in effect since the previous assessment. Major building elements, such as the stair and elevator shafts, are unchanged. Notes from the 2009 assessment related to fire ratings still apply but were not reiterated.

Since the 2015 assessment, some of the accessible elements have been corrected. A chart is included in this report section that documents compliant and non-compliant elements of the accessible toilet rooms. Drinking fountains with water bottle fillers have been installed on all floors except the basement.

structure

Structural elements have exhibited little change since the previous assessment.

plumbing

Water heater was replaced with a new electric unit. Previous unit was gas-fired.

fire protection

There has been no change to the fire protection system since the last assessment, with the exception of alterations to address remodeled areas.

mechanical

No major changes/updates to the mechanical systems have been made since the last evaluation. Duct systems were modified to serve the renovated space. The boiler tubes have been refurbished, which will extend the life expectancy of the steam boilers.

electrical

No major changes/updates to the electrical systems have been made since the last evaluation. Some additional interior lighting has been upgraded to LED.

ITEM	DEFICIENT (d) Immediate Replacement	CRITICAL PRIORITY (cp) Replace in 1-2 years	HIGH PRIORITY (hp) Replace in 3-5 years	COST ESTIMATE
City Hall				
architectural-ext			Roof replacement	\$750,000
architectural-ext			Tuck Pointing	\$5,000
architectural-ext			Exterior window replacement	\$563,200
architectural-int			Floors-Composite tile at basement	TBD
architectural-int			Exterior metal door and frame (long & short term)	\$200 – \$6,000
code			Accessible route	\$400 – \$1,000
plumbing	Storm/clearwater system			\$40,000
plumbing			Valves	\$5,000
plumbing			Insulation	\$20,000
plumbing	Eyewash(es)			\$5,000
plumbing	Therm. mixing valve (TMV)			\$7,500
plumbing	Backflow prevention			\$500
plumbing			Elevator sump pit	\$500
fire protection			Fire pump Fire pump controller	\$55,000
fire protection			Jockey pump Jockey pump controller	\$10,000
fire protection	Standpipe system			\$65,000
HVAC - AHU-1			Housing	\$520,000
HVAC	Air intake			\$incl
HVAC		Coils		\$incl
HVAC			Insulation	\$incl
HVAC	Mechanical room duct work			\$incl
HVAC			Distribution duct work	\$1,252,000
HVAC			Induction terminals	\$3,380,000
HVAC - AHU-2			Housing	\$210,000
HVAC			Coils	\$incl
HVAC	Ductwork			\$incl
HVAC			Insulation	\$incl
HVAC - 3			Housing	\$210,000
HVAC			Coils	\$incl

HVAC	Duct work			\$incl
HVAC			Insulation	\$incl
HVAC - 4			Housing	\$210,000
HVAC			Air intake	\$ incl
HVAC			Coils	\$ incl
HVAC			Fan	\$ incl
HVAC			controls	\$ incl
HVAC	Ductwork			\$ incl
HVAC			Insulation	\$ incl
HVAC - 5	Housing			\$ 30,000
HVAC		Coils		\$ incl
HVAC			Filter	\$ incl
HVAC			Exhaust fans	\$40,000
HVAC			Exhaust Ductwork	\$50,000
HVAC			Boilers	\$350,000
HVAC		Pipe insulation		\$26,000
HVAC			Room terminal units	\$65,000
HVAC			Mechanical room	\$11,000
HVAC	Boiler room			\$13,000
HVAC			DDC control	\$50,000
electrical			Branch panel, mixed loads	\$18,000
electrical			Update/replace fire alarm devices	\$500,000
electrical		Seal fire alarm penetrations		\$5,000
City Hall Total				\$8,467,700 – \$8,474,700

architecture

building description

The existing city hall building was constructed in 1956. The six-story structure has an exterior consisting of granite panels and face brick masonry with a precast concrete wall cap. There is mechanical penthouse on the roof that is also constructed of face brick and has a pre-cast concrete cap. This building holds several City of Green Bay Department offices as well as the City Council Chambers.

building envelope

roof

The existing roof is a rubber membrane covered with a pea sized ballast system. It was recommended in our previous study in 2015 that the roof needed replacement in its entirety. This replacement work would also the removal all of the copper flashings on the current roof. The roof of the existing mechanical penthouse should be replaced along with all damaged pre-cast concrete copings as these two roofs are the same age and condition. The existing roof is 11,170 sf with 500' of flashing and trim. The Mechanical Penthouse roof is 2,430 sf and has 250' of flashing that would be replaced.

exterior walls

The exterior of the building is clad on the first floor with granite panels. These panels are in very good condition for a building of this age. The upper five stories are clad with a cream-colored face brick. From observance at the ground level most of the brick appears to be in good condition. The building could be power washed to clean the streaking from window ledges above. There are more than likely a few areas in which tuck pointing might be required but were not visible from the ground.

The window wells to the east have some rust staining below the grating and could be part of a maintenance cleaning program to maintain the exterior condition of the building. There is a hollow metal door and frame at the bottom of the stair leading to the window well area that is very rusted and should be considered for replacement.

exterior windows and doors

The exterior doors are wide style aluminum doors with single pane glass and are in good condition. The operation, pulls, power assist system and closers are all in good working order.

The exterior windows are aluminum framed casement windows with single pane uninsulated glass panels. The interior of these windows has a secondary sliding, single-pane glass panel. These windows are not thermally broken, and the glass provides little or no insulation value to the building. In addition, there are numerous locations on the upper floors that are show signs of water damage at the jambs, which will get worse over time. It is highly recommended that all the windows should be replaced with a thermally broken frame with insulated low-E glass.

legend

D	Deficient – Immediate Replacement	CP	Critical Priority – Replace in 1-2 years	HP	High Priority – Replace in 3-5 years	F	Fair – Replace in 6-10 years	C	Compliant/Adequate	N	New	N/A	Not Applicable
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architectural elements	grade	budget cost	notes	comments
exterior elements				
Roof condition	HP	\$ 750,000	A1	Complete replacement
Exterior facade condition	HP	\$ 5,000	A2	Tuck pointing masonry
Exterior window replacement	HP	\$ 563,200	A3	Replace exterior windows

notes:

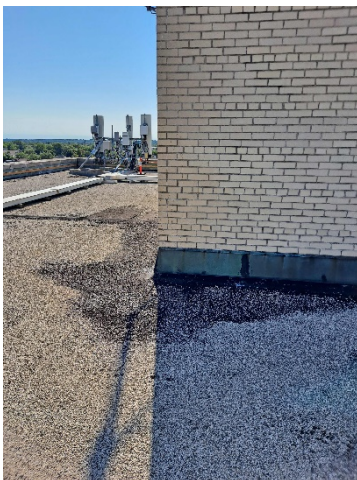
- A1.** Remove and replace both mechanical penthouse roof and 6th floor roof including replacement of copper flashing with stainless steel and all damaged pre-cast concrete wall caps.
- A2.** Tuck point existing main building and mechanical penthouse.
- A3.** Replace all 256 windows (various sizes) at the exterior, patch interior jambs and repaint all window jambs.



Existing roof



Existing roof



Mechanical penthouse - tuck pointing



Mechanical penthouse - tuck pointing

**City Hall
Parks Department
Architectural-Exterior**



Penthouse pre-cast coping replacement



Replace exterior windows



Rust on window well walls



Rusted door to window well



Rust on window well walls

architecture

building description

City Hall is a brick and granite clad structure dating from 1956.

interior conditions

The following are updated condition notes from the previous assessment conducted in 2015.

basement

Floors

- 9” composite tile in print shop area has cracked and missing tile at multiple locations throughout the space. Staff reports that a previous asbestos survey found asbestos in the adhesive for the tiles, but not the tiles themselves. Areas of missing or damaged tile should be addressed in order to prevent old adhesive from becoming airborne.

Walls

- Chipped paint at lower portion of corridor walls and handrails in mechanical room.

Doors and frames

- Paint at frames is worn and chipped in multiple locations.
- Metal door from boiler room to exterior is rusted at sill. Weatherstripping is missing at door. Daylight visible at door perimeter.

first floor

Floors

- Carpet at high traffic areas (legal suite, reception areas) is showing wear.

Walls

- Sealant at perimeter of wall-hung lavatory in single-user toilet room is smeared on wall/not consistent.
- Former wall locations and other patches in walls of open office are visible due to different wall texture and/or paint sheen.

Ceilings

- Minor chip in ceiling panel at office with brown wall.

second floor

Walls

- Paint has chipped at gypsum board outside corners.

third floor

Floors

- Multiple chips in vinyl tiles, specifically at room with printer and interior corridor.

Walls

- Paint has chipped at gypsum board outside corners.
- Bent louver blades at wall under window.

Doors

- Scratches in finish of wood door at storage rooms.

Ceilings

- Inconsistent gaps in perforated spline ceiling tiles.
- Uneven gaps between perimeter trim and spline ceiling tiles, likely due to cupping of the ceiling tiles.

fourth floor

Floors

- Athletic flooring is shifting, causing gaps between floor tiles.
- Older athletic flooring with interlocking edges has de-laminating surface at several tiles.
- Bubbled carpet at NE office. Long-term condition. Carpet is worn at traffic areas.

Walls

- Chipped paint at metal door frames.
- Missing cover at light switch.

Doors and windows

- Chipped paint at metal door frames.
- Window jambs behind interior clear panel are deteriorated or broken at some windows. Possibly due to moisture build-up between panel and exterior single-pane windows. Typically occurs on south and west-facing windows.

Ceilings

- Missing light fixture at internal corridor of unused space.
- Loose spline ceiling tiles at several areas of unused space.
- Water-stained ceiling panel at room outside of IT space. Adjacent window head has either unmatched paint or patched area.

fifth floor

Walls

- Square gap in wall at intersection of marble panels, plaster wall, and rubber base (Human Resources lobby area)

Doors

- Scratched wood finish at door wood frame (Human Resources area).

Casework

- Gap in plastic laminate countertop.
- Crack and de-laminated area of plastic laminate countertop at wall corner intersection.

sixth floor

Walls

- Paint has started to peel from surface of glazed ceramic block in single-user toilet room.

penthouse

Walls

- Brick on interior southwest wall is effervescing. This appears to be due to a deteriorated roof edge condition on the exterior portion of the penthouse at this location.
- Efflorescence under windowsill at east wall.

legend

D	Deficient – Immediate Replacement	CP	Critical Priority – Replace in 1-2 years	HP	High Priority – Replace in 3-5 years	F	Fair – Replace in 6-10 years	C	Compliant/Adequate	N	New	N/A	Not Applicable
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architectural elements	grade	budget cost	notes	comments
floors				
Composite tile at basement	HP	\$\$	A1	Cost determined by abatement consultant
Carpet	F		A2	
Vinyl composite tile at 3 rd floor	F			Replace chipped tiles.
Athletic flooring	F		A3, A4	
walls				
Chipped paint at corners	C		A5	
Sealant at wall-hung lavatory	F		A6	
Walls – miscellaneous	C		A7	
Brick at penthouse	F		A8	
doors and frames				
Wood doors	C/F		A9	
Interior metal doors and frames	C		A10	
Exterior metal door and frame	HP	\$200 (short term) \$5K-\$6K (long term)	A11	
casework				
Casework	F	\$300 - \$800	A12	
ceilings				
Ceiling tiles and panels	C			General maintenance to replace and secure tiles.

notes:

- A1.** Consult with abatement professionals on how to best replace chipped or missing tile in areas where tile is encapsulating probable asbestos containing material (ACM) in the adhesive.
- A2.** Broadloom carpet at first and fourth floors (and other areas) is worn but serviceable. Recommend planning for carpet tile for future replacement to better facilitate updates to worn areas only.
- A3.** Provide new adhesive to secure tiles where gap has formed in athletic flooring.
- A4.** Replace interlocking tiles which have de-laminated surfaces. (Verify if attic stock is on hand.)
- A5.** Touch-up paint as needed throughout building. Consider corner guards at high-traffic areas.

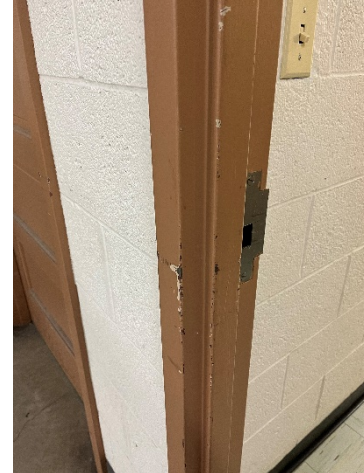
**City Hall
Parks Department
Architectural-Interior**

- A6.** Remove existing sealant at perimeter of lavatory. Patch paint if necessary and re-apply sealant.
- A7.** Maintenance staff: correct bent metal louver blade; replace missing switch cover; in-fill gap at wall in Human Resources (wood or gypsum board patch and paint).
- A8.** Clean effervescence off brick in penthouse and monitor for reoccurrence after exterior conditions are corrected.
- A9.** Lightly sand and re-finish scratched wood doors and wood frames.
- A10.** Touch-up chipped paint at interior doors and frames as needed.
- A11.** Short-term recommendation: replace weatherstripping at perimeter of exterior door. Sand rusted surfaces and apply rust-inhibiting paint. Long-term recommendation: plan for replacement of door and frame.
- A12.** Provide clear sealant at gap in plastic laminate. Recommend replacing cracked and de-laminated surface. If matching laminate is available, installer may be able to remove just damaged portion.

Basement



Chipped floor tile



Chipped paint

**City Hall
Parks Department
Architectural-Interior**



Chipped paint at wall



Missing weatherstripping at rusted door

First floor



Worn carpet – legal area



Excessive sealant at lavatory



Ripped carpet seam



Visible wall patches

**City Hall
Parks Department
Architectural-Interior**



Small chip in ceiling panel



2nd & 3rd floors: typical chipped paint at exterior corner

Third floor



Chipped floor tiles



Bent louver blades



Scratched wood door



Typical spline ceiling issues

Fourth floor



Gap in rubber floor tile



De-laminated interlocking floor tiles



Bubbled carpet at NE office



Chipped paint at HM frames



Typical spline ceiling issues



Missing light fixture

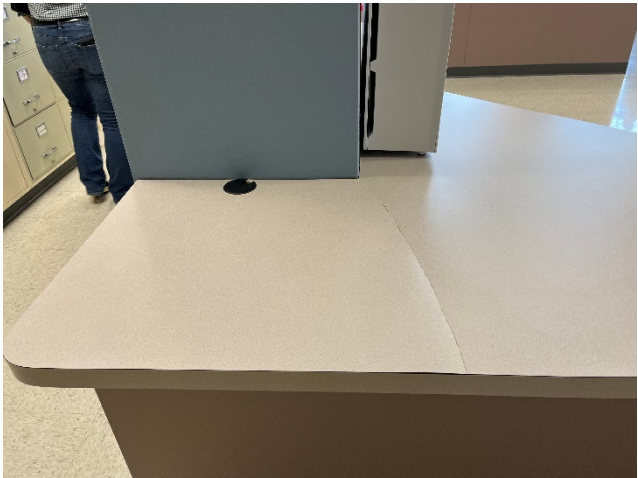


Damaged ceiling tile – adjacent to IT room

Fifth floor



Plastic laminate gap



Cracked, damaged plastic laminate



Fill gap in wall



Scratched wood finish

Sixth floor



Peeling paint from glazed block

Penthouse



Effervescence on west wall



Effervescence on east wall

**code compliance and accessibility
building data**

code references based on 2015 IBC

Year(s) Constructed	1955 (date on building 1956)	Gross Area	Basement: 14,021 SF First Floor: 13,349 SF Floors two - six: 13,433 SF Penthouse: 2,346 SF Total: 96,881 SF
Occupancy Classification <i>(Chapter 3 of IBC)</i>	The WI building code at the time of construction and additions would have placed the building under Chapter 54 Factory, Office, Mercantile occupancy category. Current code would place it under B Business .		
Construction Type <i>(Chapter 6 IBC)</i>	Construction Type I-B (2-hour concrete beams, columns & floor slabs, 1-hour roof)		

summary of code compliance/life safety

The Green Bay City Hall complied with the building code, as adopted by Wisconsin, at the time it was constructed. If a future modification or renovation is undertaken, any items/areas modified or updated would need to be brought into compliance with the current code. Additional modifications may be triggered, depending on the scope of work.

Careful review of code should be done prior to any renovation project to identify other mandated upgrades.

This assessment will identify items that have changed or are identified differently from the previous assessment in 2015. Updates to the existing facility that are required will be noted as such. Others will be noted for reference when planning future renovations.

egress

Two means of egress area available from all areas of the occupied floors of the building. The penthouse has a single means of egress, which is allowable for its area and use.

stairs, ramps and shafts

Currently, stair shafts are designated for up or down movement only, to minimize potential spread of Covid 19 between occupants. In the case of a fire or emergency, either stair shaft is available for use.

handrails and guardrails

There is no change to this aspect of the building from the previous assessment. Handrail extensions past the lowest tread are not present but grandfathered in as compliant when built. These are not a significant safety hazard. Note that the recommendation for additional guards on the rails at open sides of stairs is still pertinent. The openings between guards are over 12” wide. While grandfathered in as compliant at time of construction, these openings would not comply with current code requirements for openings of less than 4”.

summary of accessibility/ADA compliance

ADA standards

The Americans with Disabilities Act places establishes an additional level of requirements on public and commercial facilities in terms of accessibility. Unlike a building code, it is a federal law which requires continual compliance, regardless of when a building was built. Accessibility items noted in this report fall under this category and should thus be addressed in a timely manner.

In addition, Wisconsin has adopted the 2015 suite of International Building Codes (IBC). Chapter 11 of the IBC directs that “buildings and facilities shall be designed and constructed to be accessible in accordance with this code and ICC A117.1-09.” This codifies most of the same accessibility standards as those found in the ADA.

accessible route

Drinking fountains with water bottle fillers have been installed at most floors. Extensions to the wall or other obstructions have been provided to ensure that the drinking fountains do not protrude more than the allowable 4” from the corridor wall.

The City Council room has a two-level platform at the front of the room, which is not accessible. While there would be space for a ramp to the lower level, there is not space to the upper platform unless some of the lower seated spaces were removed. The second floor Committee Room has a similar single-level platform.

The fifth-floor accessible toilet room has a table in place which impedes on the clear floor space for the toilet fixture.

The light switch for the first-floor accessible toilet room is not in the room, but in the passageway leading to the toilet room.

doors

Most doors used by the public and staff have been converted to either lever handles or push/pull hardware, both of which are accessible. Some doors still have knob hardware, which is not accessible. Doors observed with knobs were either not required to be accessible or were not the sole entrance to a usable room.

casework

A portion of each reception desk in various offices is at accessible height for those in wheelchairs.

plumbing fixtures and grab bars

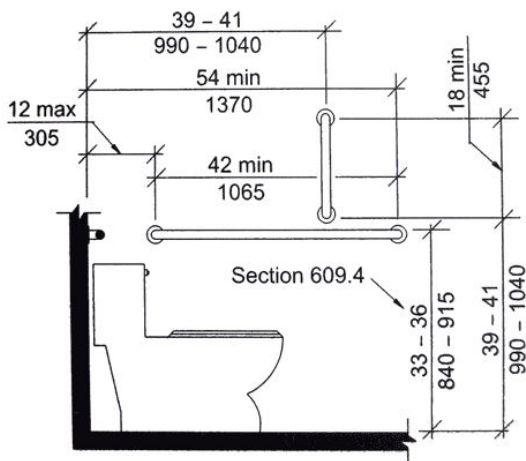
Drinking fountains with water bottle fillers have been installed in public corridors. For full accessibility to standing height people, cups are provided at the drinking fountain in the second-floor corridor, near the City Council Chambers.

The sixth-floor staff break room has been provided with a sink that has forward-approach accessibility. Lavatories are at accessible height, but do not provide pipe protection to areas below.

All toilets in accessible toilet rooms are below the minimum accessible height. Some of these fixtures have been provided with height extenders to offer a seat height that is closer to (but not at) accessible height.

Toilet room on third floor has a grab bar mounted to an access panel. It was not verified whether this supports the required amount of weight for compliance. (ADA 609.8 requires grab bars to support a vertical or horizontal force of 250 lbs.)

A vertical grab bar is required at all accessible toilets per ICC A117.1 604.5.1. These bars were not present. (See image below.)



**Fig. 604.5.1
Side Wall Grab Bar for Water Closet**

City Hall Parks Department Code & Accessibility

The chart below summarizes accessible elements in each of the accessible toilet rooms. ADA/ICC A117.1 ranges are noted at the top of the chart for reference. Heights not in compliance are highlighted yellow.

Floor/room	toilet seat height	grab bar heights		lavatory rim height	notes
ADA / ICC A117.1	17" to 19"	33" to 36"		34" maximum	
ICC A117.1	Min. 18"	33" to 36"		34" maximum	Code required heights
1 st - Women/Accessible	16 ¼"	33 ¼"	33 ½"	32 ¼"	Light switch is in corridor.
2 nd – Accessible	20 ¼"	34 ¾"	36 ½"	33 ½"	
3 rd – Accessible	15 ½"	35 1/8"	33 1/8"	33 7/8"	
4 th – Accessible	15 ¾"	34 3/8"	32 ¼"	33 1/8"	
5 th - Accessible	16 3/8"	34 3/16"	34 3/16"	33 ¼"	
6 th - Accessible	16 ¾"	34 ½"	34 3/8"	33 ¼"	

legend

D Deficient – Immediate Replacement	CP Critical Priority – Replace in 1-2 years	HP High Priority – Replace in 3-5 years	F Fair – Replace in 6-10 years	C Compliant/ Adequate	N New	NA Not Applicable
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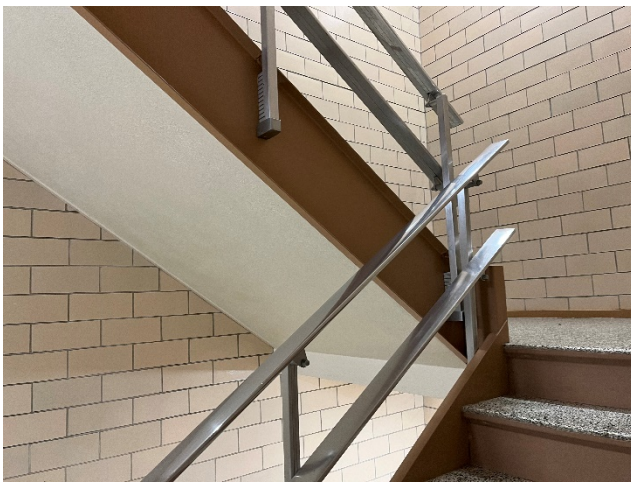
architectural elements	grade	budget cost	notes	comments
Code compliance / Life safety				
Egress and Safety	C			
Stairs, ramps and shafts	C			
Handrails/guardrails	F		CA1	
Accessibility / ADA compliance				
Accessible route	HP	\$400 – \$1,000	CA2	
Clear floor space	F		CA3 CA4	
Doors	F		CA5	
Casework	C			
Plumbing: lavatories	F		CA6	
Plumbing: toilets	F		CA7	
Grab bars	F		CA8	

notes:

- CA1.** Recommend in-fill panels at inner sides of stair tower guards to meet current codes and prevent objects over 4" from passing through.
- CA2.** Provide permanent or portable ramps to allow accessibility to raised platform levels of City Council Chambers and Committee Room.
- CA3.** Light switch for first floor accessible toilet room should be relocated to inside of the room.

City Hall Parks Department Code & Accessibility

- CA4. Relocate table in fifth floor accessible toilet room if persons with accessibility needs work on this floor.
- CA5. As part of continuing maintenance program, continue to replace knob handles with lever handles.
- CA6. Provide pipe protection. See Plumbing section of report for additional information.
- CA7. Begin program to replace toilets in accessible toilet rooms to provide fixtures that meet seat height requirements. See Plumbing section of report for additional recommendations.
- CA8. Re-mount grab bar in fourth floor toilet room to compliant height.



Large openings in open side of stair rails



Lack of handrail extension past lowest tread



Council platform not accessible



Committee room platform not accessible

City Hall Parks Department Code & Accessibility



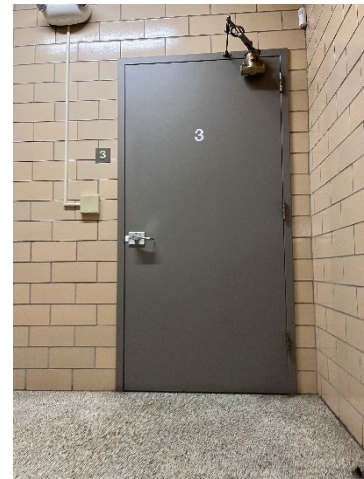
Drinking cups provided at water fountain



Sink with front-approach accessibility



Knob handle on door



Typical lever handled door



3rd floor: grab bar mounted on panel



5th floor: Typical missing vertical grab bar

structural system

summary

The structure consists of cast-in-place concrete floor slabs, beams, and columns bearing on a concrete foundation system.

legend

D	Deficient – Immediate Replacement	CP	Critical Priority – Replace in 1-2 years	HP	High Priority – Replace in 3-5 years	F	Fair – Replace in 6-10 years	C	Compliant/Adequate	N	New	NA	Not Applicable
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structural elements	grade	budget cost	notes	comments
Year				1956 (Berners-Schober Comm. No. 2020)
structure type				
Foundations	C			Cast-in-place concrete foundation/basement walls bearing on individual spread or continuous strip footings.
Basement	C		S1	Floor is typically a 4" concrete slab on grade with 6x6 - 10/10 welded wire mesh reinforcing. 5" slab in boiler room.
First floor	C			3" concrete/terrazzo topping over a combination of 4" solid one-way slabs and 4" +2", 6" +2", and 10"+2" tile & joist slabs supported by cast-in-place concrete beams and columns.
Second floor	C		S2	3" concrete/terrazzo topping over a combination of 4" solid one-way slabs and 4" +2" and 6" +2" tile & joist slabs supported by cast-in-place concrete beams and columns.
Third, fourth, fifth, and sixth floors	C			3" concrete/terrazzo topping over a combination of 4" solid one-way slabs and 4" +2" tile & joist slabs supported by cast-in-place concrete beams and columns.
Roof/penthouse floor	C		S3	Combination of 4" or 5" solid one-way slabs and 4" +2" tile & joist slabs supported by cast-in-place concrete beams and columns. 3" concrete topping in penthouse.
Penthouse roof	C			6" +2" tile & joist slabs supported on load-bearing masonry walls.
building risk category	NA			Risk Category II.
construction type	NA			Construction Type I-B (2-hour concrete beams, columns & floor slabs, 1-hour roof)
vertical expandability	NA			None.
typical column spacing	NA			N/A
overall structural condition	C			The existing building is structurally sound with no significant deficiencies noted.

notes:

- S1.** There is minor shrinkage cracking in the concrete slab on grade in the basement at various locations. The cracking is not a cause for structural concern at this time.
- S2.** There is some minor settlement cracking in the glazed tile walls near the corners of the stairwells. However, the tile is non-load bearing, and no remedial action is recommended at this time.
- S3.** In addition to the recommended masonry repairs identified in the Architectural section, there is some expansion cracking in the face brick near the outside corners of the penthouse. It is not impairing the structural function of the walls, so no remedial action is immediately necessary. However, these cracks should be routed and sealed whenever the recommended repairs are performed.



**Shrinkage cracks in basement slab
(Note S1)**



**Settlement cracks in glazed tile walls of stairs
(Note S2)**



**Expansion cracking of brick penthouse
(Note S3)**

plumbing systems summary

City Hall was constructed in 1956. The original piping is in fair condition and can be replaced as needed. Insulation could be added to the hot water piping for energy savings. Thermostatic mixing valves (TMV's) should be added to correct code issues. Eyewashes require tempered water – add TMV's.

Building is served by interior roof drains on the main roof and serving the Penthouse roof. There is no secondary drainage for the building.

Plumbing fixtures are older, flush valve(s) which could be updated to conserve water. Each floor has a dedicated ADA compliant toilet room. Building utilities in general appear adequate.

legend

D	Deficient – Immediate Replacement	CP	Critical Priority – Replace in 1-2 years	HP	High Priority – Replace in 3-5 years	F	Fair – Replace in 6-10 years	C	Compliant/Adequate	N	New	N/A	Not Applicable
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plumbing systems	grade	budget cost	notes	comments
Water piping condition	F		P1	Copper piping
Sanitary piping condition	F		P2	PVC & cast iron
Storm/clearwater system	D	\$40,000	P3	Cast iron, roof drains, no secondary
Valves	HP	\$5,000	P4	Gate & ball
Domestic water service	C		P5	4" main – combined w/FP
Insulation	HP	\$20,000	P6	Add insulation
Code issues	D	See below	P7	TMV, backflow prevention
equipment				
Domestic water heater	F		P8	Electric unit replaced since last assessment
Recirculation pump(s)	F		P9	Grundfos
Water softener	F		P10	(2) Diamond units
Eyewash(es)	D	\$5,000	P11	Add TMV's
Therm. mixing valve (TMV)	D	\$7,500	P12	Add TMV (code issue)
Drain tile, sanitary sump/pump(s)	F	\$500	P13	Submersible, Simplex
Plumbing fixtures	F		P14	
Backflow prevention	D	\$500	P15	Add vacuum breaker(s) on hose connection
"Shop" air compressor	NA			
Elevator sump pit	HP	\$15,000	P16	No pit or pump installed
Chilled Water Unit	F		P17	For drinking fountains

plumbing systems	grade	budget cost	notes	comments
exterior				
Storm Drainage, Roof Drains	F	See P3	P18	No secondary drainage
Utilities	F		P19	4" water main, 4" sanitary sewer

notes:

- P1. Water piping is copper, soldered joints. Original main is galvanized piping. Fair condition. Piping is missing insulation in some areas.
- P2. Original sanitary is cast iron, hub & spigot and threaded galvanized. Piping from the later remodeling(s) is cast iron no-hub or PVC.
Recommendation: replace sanitary waste/vent piping with new PVC as required.
- P3. Storm system has interior roof drains on the main roof. The Penthouse roof discharges over the roof edge, onto the main roof below - no roof drain(s) or scuppers. As a result, the rainwater is deteriorating the concrete and brick below the roof edge. No secondary overflow roof drainage system is installed. Storm piping within the building is not insulated.
Note: Secondary drainage needs to be addressed per code and the Penthouse roof needs roof drains or scuppers installed for proper drainage. Existing roof drains should be replaced in the next roofing project, as they are in poor condition.
- P4. Older valves are gate, newer valves are ball and butterfly. Several older valves are leaking, as evidenced by the pail(s) in basement hanging below the valve(s) that are leaking.
- P5. Building is served by a 4" water main. Domestic main is 3" with a 2" meter set and 3-valve bypass. There is also a separate 3" water main with booster pump that serves the building's standpipe system.
- P6. Water piping is insulated with glass fiber and/or elastomeric insulation. Insulation is missing in some areas. Insulation could be added for energy savings and to prevent condensation.
- P7. Code issues: No thermostatic mixing valve (TMV) at the water heater. Add TMV per code. Eyewashes require tempered water – install TMV's. Add hose end vacuum breakers to all faucets with hose connections.
- P8. Water heater is a electric AO Smith model LTE-80D 200, 208/240V, 5500/5500 dual watt, 80-gallon unit. *[previous WH in yr 2014 was gas fired]* Add TMV to the water heater piping. Set temperature to max. 110-115 degrees F. - per code.
- P9. Recirculation pump is Grundfos model #UP26-99, ¾" connection.
- P10. Water softener is a Diamond duplex residential unit with brine tank. Units serve the boiler feed only.
- P11. Eyewashes require tempered water. Install TMV's to each unit.
- P12. Add TMV at water heater. Set temperature to 110-115 degrees F. (max. temperature allowed per code.)
- P13. Drantile sump/pump is Simplex submersible. Sanitary sump pump, previously a Duplex, is now Simplex. Pump serves basement fixtures only. Piping is galvanized and PVC. Sumps should have a high-water alarm installed.

P14. Each floor has a dedicated ADA compliant toilet room with a wall-hung WC (water closet), sensor control flush valve. Lavatory is wall-hung with electronic sensor faucet. Lavatory should have safety covers installed per ADA requirements. Men's/women's public toilet rooms have wall-hung WC's with concealed flush valves. Lavatory is wall-hung with sensor faucet; urinal is floor mounted with electronic flush valve. Piping is concealed in pipe chase behind fixtures. Each floor has a new EWC (electric water cooler) with ADA accessible bottle filler. Chiller in the basement could be removed, since it was set-up for the original vitreous drinking fountains-see note P17. Some floors have breakroom stainless steel sink(s) with lever control faucet. Basement has a few janitors' sinks and a prefab shower stall. Exterior: several non-freeze sill faucets.

Recommendation: replace existing 3.5 gpf water closets with 1.6 gpf fixtures as required. Install safety covers at lavatory p-trap and water stops, especially at the ADA toilet rooms.

P15. Basement: Watts 909, ¾" RPZ backflow preventer for the boilers. Penthouse: Watts 9d for the AHU's. Install hose end vacuum breakers on all hose threaded connections. Vending machine water connection should have a Watts SD3 in-line vacuum breaker installed per code.

P16. No sump pit/pump installed in the elevator shaft. Pump would be required by today's code but is grandfathered in as compliant since the building was constructed in 1956. Pump/sump should be added if there are water issues in the elevator shaft. Route pump discharge to the closest storm sewer.

P17. There is a Filtrine chiller in the basement with a dedicated piping system that serves the drinking fountain in the basement and the newer electric water coolers on each floor. Presently the chiller is serving electric water coolers that already have a cooler on them. If the last remaining drinking fountain in the basement was replaced, the chiller unit in the basement could be removed.

P18. The upper Penthouse does not have roof drainage, rainwater discharges over the roof edge to drains on the main roof. This discharge pattern is deteriorating the concrete and brick walls of the Penthouse. The main building roof has interior cast iron roof drains, that are in poor condition and should be replaced. There is no secondary overflow roof drainage system installed, which would be required by today's code. Areaways have a drain(s) installed, which connects to the drain tile system for discharge. West entrance canopies discharge to grade, over the roof flashing edge.

P19. Building is served by a 4" water main, 3" for domestic water and 3" boosted main for the fire protection standpipe system. Sanitary sewer is 6" routed to Walnut Street. Several 6" storm sewers routes to Walnut and Jefferson Streets. Parking lots have interior catch basin(s). The north parking lots pitch west to catch basins located at the drives. The east parking lot pitches south to catch basins and a curb inlet.



Storm and water piping



Cast iron vent piping

**City Hall
Parks Department
Plumbing**



Vent, water piping in penthouse



Expansion joint (4th floor) toilet chase



Flush valve in toilet chase



Piping in toilet chase – typical



2" water meter, 4" water main



Sanitary vent piping

**City Hall
Parks Department
Plumbing**



Chiller for drinking fountain(s)



Leaking valve(s)



Electric water heater



Water softeners-duplex



HWR recirculation pump



Eyewash – boiler room



Eyewash – penthouse



Drain tile, sanitary sump/pump



Pump discharge piping



WC – ADA (typical per floor)



Lavatory – ADA (typical per floor)



WC – public toilet room



Lavatory – public toilet room



Urinal – men's public



Electric water cooler – typical corridor



Dual electric water cooler(s)



Toilet room – 2nd floor



Drinking fountain - basement



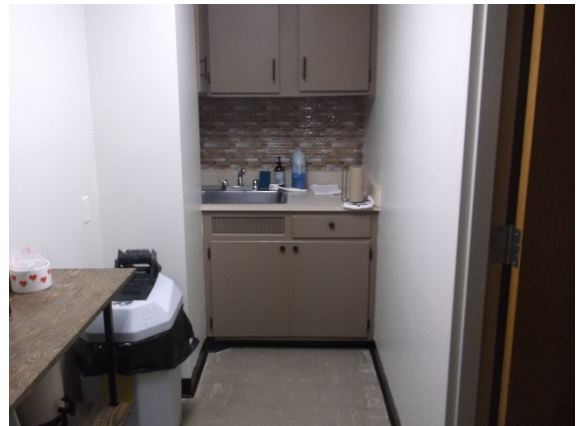
Janitors' sink – boiler room



Clean-up sink



Break room sink



Break room sink



Kitchen sink – 6th floor



RPZ backflow preventer

**City Hall
Parks Department
Plumbing**



Roof drain



Penthouse roof



Canopy roof(s)



Area well – east face



Area well drain

**City Hall
Parks Department
Plumbing**



Parking lot - north



Parking lot - east

fire protection systems

summary

City hall was built in 1955 and had a standpipe system and fire pump installed at that time. The fire pump serves only the standpipe system, no sprinkler system is installed in the building.

Based on its condition the fire pump appears to be the original pump. The fire pump is showing signs of severe corrosion and leaking and is not located within its own rated enclosure as required by the current edition of NFPA 20. If the fire pump is replaced it will required to be brought up to the current adopted standards.

The standpipe system is a Class II system, which includes 1 ½” hose valves. The 2015 Edition of the IFC requires that a Class III Standpipe system, which includes both 1 ½” and 2 ½” hose valves, be installed in all buildings with a floor height higher than 30’ above the level of access. It also requires that the valves be located within exit stairways. The existing hose valves are located in the corridor on each floor, adjacent to the stairwells.

legend

D	Deficient – Immediate Replacement	CP	Critical Priority – Replace in 1-2 years	HP	High Priority – Replace in 3-5 years	F	Fair – Replace in 6-10 years	C	Compliant/ Adequate	N	New	N/A	Not Applicable
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fire protection	grade	budget cost	notes	comments
Water service	C		FP1	6” Water service
Backflow prevention	C		FP2	3” Watts double check valve
Fire pump	HP	\$55,000	FP3	Fairbanks Morse
Fire pump controller	HP	See pump	FP3	
Jockey pump	HP	\$10,000	FP3	No jockey pump at fire pump
Jockey pump controller	HP	See pump	FP3	
Wet pipe sprinkler system	NA		FP4	
Sprinkler heads	NA			
Percent of building unit sprinkled	0%			Not sprinklered
Fire suppression system	C		FP5	IT room
Standpipe system	D	\$65,000	FP6	1 ½” hose valves

notes:

FP1. A 6” water main enters the building in the basement mechanical room on the south side of the building. The main is reduced to a 3” main before passing through the backflow preventer.

FP2. A 3” Watts Model 709 double check valve backflow preventer protects the domestic water supply from contamination by the standpipe system. The isolation valves on the backflow preventer are locked in the open position but are not electronically monitored. The standpipe system has a 3” check valve inline from the FDC (fire department connection) that is located on the south wall of the building.

Note: the FDC should have an alarm bell installed above it - to identify location.

FP3. Based on its condition the fire pump is believed to be the original fire pump installed in 1955 although it appears to have been relocated at some point in time. No nameplate was found on the fire pump, but the test card attached to the piping indicates that it is a 200 GPM 40 PSI fire pump. The fire pump does not have a jockey pump installed that is required to maintain pressure in the system.

The fire pump is in poor condition; it is leaking and shows signs of severe corrosion. The pump, located in the mechanical room, is not in a dedicated two-hour enclosure. The current installation meets the installation standards when the pump was installed, but any changes or updates to the fire pump system will be required to meet the current adopted standards. NFPA 20 2013 Edition requires that a fire pump in a non-sprinkled building shall be separated from the rest of the building by two-hour construction. Upgrading the fire pump will also require adding jockey pump and controller.

However, NFPA 14 allows for the installation of manual Wet Standpipe Systems in non-high-rise buildings if the local AHJ finds that installation acceptable. This means that an upgrade of the standpipe system to meet today's codes could result in the removal of the fire pump, pending the AHJ's approval.

FP4. IFC 2015 Edition requires that in buildings, where the floor level of the highest story is higher than 30 feet above the level of access, a Class III Standpipe System be installed in the building. A Class III Standpipe consists of both 1 ½" hose valve and a 2 ½" hose valve. This building is equipped only with a Class II system consisting of 1 ½" hose valves. IFC 2015 Edition also requires that hose valves on a Class III system be located within every required stairway. The existing hose valves are located in the corridor, not within the stairway. As stated in FP3, an upgrade of the standpipe system to a Class III system would allow for the installation of a semi-automatic system.

In the penthouse cables and wires are zip tied to the standpipe piping, nothing is allowed to be attached to the fire protection piping.

FP5. The IT room (4th floor) has a Ansul Halon 1301 fire suppression system and nozzle installed in the room. The system is controlled by a AutoPulse Z-10 agent release control panel.

FP6. The existing standpipe system is a 1 ½" system. The current standard requires 2 ½" hose valves on the system. IFC 2015 also requires that hose valves on the standpipe system be installed in every required exit stairway. The valves are currently installed in the corridor on each floor. Upgrading the standpipe system would involve installing new risers in each stairway and new hose valves on each intermediate landing.



Backflow preventer



Fire pump

**City Hall
Parks Department
Fire Protection**



FDC check valve



Cable attached to standpipe



Hose valve cabinet



Ansul Halon 1301 – IT room



Halon control panel – IT room



Valve cabinet - basement

**City Hall
Parks Department
Fire Protection**



Hose valve – penthouse



Fire dept. connection

HVAC systems summary

The building was constructed in 1956 and has undergone numerous renovation projects affecting the HVAC systems. The boilers are original to the building's construction. The refractory is inspected and maintained each year. The boiler controls and burners have been upgraded and/or replaced. The boilers were retubed and should have another 15-20 years of useful life. The steam system serves air unit heating coils and steam-to-water heat exchangers that provide hot water to the building's heating units. The penthouse heating system was replaced years ago and remains in fair condition. The pumps appear to be in fair condition. The basement heating system pump was replaced years ago as well and is in fair condition. The basement system is not insulated.

The main building ventilation system is a built-up high pressure induction air unit located in the mechanical penthouse. The unit is original to the building's construction, but the major components have been replaced. The coils continue to show signs of deterioration and will require increased maintenance until they fail. This air unit serves induction units located under each window. The induction units are original to the building's construction. The unit's drain pans are deteriorating and on occasion become plugged, causing overflows into the building's envelope cavity. There are no filters on the units which allows the coils to become dirty/plugged and not perform adequately. The units are served by a two-pipe system which allows either heating or cooling of the entire building. A two-pipe system was a cost-effective way of providing heating and cooling at the time of construction, however it leads to temperature fluctuations on opposite sides of the building in the spring and fall. The occupants will typically be more uncomfortable than with a four-pipe system.

There are three additional air units. One air unit is dedicated to the basement, one dedicated to the council chambers, and one dedicated to interior spaces on the upper floor. The units are original to the building's construction, but the major components have been replaced. The cooling coils are continuing to deteriorate and will require increased maintenance until they fail.

A water-cooled air unit is located in a closet on first floor and serves the reception desk and a room on second floor. The unit requires replacement, or the space should be served off a larger central system. Occupant dissatisfaction with the unit's operation has led the staff to simply turn the unit off.

The chiller was replaced in 2008 and the cooling tower in 2011. The pumps have also been replaced. The piping, in general, is in fair condition. Pipe insulation is missing or has deteriorated around the air unit coils and is causing rust and deterioration of the piping. The lack of insulation at the induction unit coils allows condensation to form and drip into the building's envelope cavity.

Four main exhaust fans serve the building's exhaust ventilation requirements. The fans are in poor condition, and the ducts, mostly original to the building, are dirty and leak. Exhaust ventilation is reduced significantly at the lower levels. A fan, that previously served a blueprint machine, is believed to still be abandoned in the areaway. The fan is powered with the manual on/off/auto switch located in a break room.

There are rooms throughout the building that are occupied and not ventilated. The corridors throughout the building are used as plenums to transfer the air from the outer offices to the return grilles located in the corridors or to the interior toilet rooms. The printing department, located in the basement, has cooling, ventilation, and humidity issues associated with being connected to the single zone air unit #4.

The IT department cooling unit was installed approximately 13 years ago (per staff) to provide additional air conditioning to this department. No major issues with the unit's operation were noted. Floor and ceiling tiles have been modified/removed which short circuits the air flow throughout the room and allows infiltration from adjacent spaces.

The building controls are primarily pneumatic with some DDC control added to the air units, chiller, and boiler systems to provide some central monitoring. Air compressors are located in the boiler room.

**City Hall
Parks Department
HVAC Systems**

legend

D Deficient – Immediate Replacement	CP Critical Priority – Replace in 1-2 years	HP High Priority – Replace in 3-5 years	F Fair – Replace in 6-10 years	C Compliant/Adequate	N New	N/A Not Applicable
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HVAC systems	grade	budget cost	notes	comments
AHU-1				Original 1956.
Housing	HP	\$520,000	H1	Upstream of coils in fair condition.
Air intake	D	(incl.)	H1	Outside air dampers are shut.
Coils	CP	(incl.)	H1	Steam, Chilled water. Chilled water coil casing is deteriorating.
Fan	HP			20000 CFM, 50HP
Filters	HP			30%
Controls	HP			Pneumatic actuators, some DDC interface.
Insulation	HP	(incl.)	H1	Insulation missing at some ductwork. Minor damage to insulation throughout penthouse. Cooling coil piping is in poor condition.
Mechanical room ductwork	D	(incl.)	H1	Original except where replaced during projects. The main exit corridor is used as a return plenum on each floor. No economizer.
Distribution ductwork	HP	\$1,252,000	H1	No fire dampers at the floor penetrations. Shafts are not fire rated/protected.
Exterior room comfort				
Induction terminals	HP	\$3.38M	H2	Most units original to building. Two-pipe system. Thermal issues throughout building. No filters on unit. Deteriorating drain pans.
AHU-2				Original 1956
Housing	HP	\$210,000	H3	Rusting around the coils.
Air intake	D			From AHU-1
Coils	HP	(incl.)	H3	Chilled water coil casing is deteriorating.
Fan	F			4800 CFM, 3 HP
Filters	F			30% (From AHU-1)
Controls	F			Pneumatic actuators, some DDC interface.
Ductwork	D	(incl.)	H3	Original except where replaced during projects. The corridor is used as a return plenum. No economizer.

**City Hall
Parks Department
HVAC Systems**

HVAC systems	grade	budget cost	notes	comments
Insulation	HP	(incl.)	H3	Insulation missing at some ductwork. Chilled water insulation is in poor condition.
AHU-3				Original 1956
Housing	HP	\$210,000	H4	Rusting around the coils.
Air intake	D			From AHU-1
Coils	HP	(incl.)	H4	Chilled water coil casing is deteriorating.
Fan	F			2000 CFM, 1 HP
Filters	F			30% (From AHU-1)
Controls	F			Pneumatic actuators, some DDC interface.
Ductwork	D	(incl.)		Original except where replaced during projects. The corridor is used as a plenum. No economizer.
Insulation	HP	(incl.)	H4	Insulation missing at some ductwork. Chilled water insulation is in poor condition.
AHU-4				Original 1956
Housing	HP	\$210,000	H5	Upsize the replacement unit to serve the entire basement.
Air intake	HP	(incl.)	H5	
Coils	HP	(incl.)	H5	Steam and chilled water. Chilled water coil added later, downstream of unit.
Fan	HP	(incl.)	H5	1700 CFM, 1/2 HP
Filters	C			30%
Controls	HP	(incl.)	H5	Pneumatic actuators, some DDC interface.
Ductwork	D	(incl.)	H5	Ductwork has been revised and extended to serve mainly the copy room and some office area. The corridor is used as a return plenum. No economizer.
Insulation	HP	(incl.)	H5	Exposed duct. Outside air duct did not appear to be insulated.
AHU-5				
Housing	D	\$30,000	H6	Unit is turned off due to staff dissatisfaction.
Coils	CP	(incl.)	H6	City water cooled. Recommend 1.5-ton air cooled condensing unit.
Filter	HP	(incl.)	H6	20%

**City Hall
Parks Department
HVAC Systems**

HVAC systems	grade	budget cost	notes	comments
Chiller/cooling tower			H7	
Chiller	C			Installed 2008, 160 tons, R134A
Cooling tower	C			Installed 2011
Pumps	C			320 GPM, 10 HP(CT) and 480 GPM, 10 HP(CWS)
Insulation	C			Some damaged areas.
Data room cooling units			H7	
Housing	F			Approximately 13 years old. No issues indicated by staff.
Condensing units	F			
exhaust fans				
General exhaust	HP	\$40,000	H8	Four centrifugal fans. Consider replacement with a single unit. Exhaust fan and ductwork is needed in basement.
Exhaust ductwork	HP	\$50,000	H8	Mostly original. Minimal replacement during renovation projects. Lint/dust is coating the grilles and ductwork. Recommend cleaning, sealing, and rebalance.
heating system				
Boilers	HP	\$350,000	H9	Original boilers. Controls and Burners are upgraded. Refractory ok (per staff). 15,180 EDR, 15 PSI steam.
Pumps	C			(2) 0.5 HP boiler feed pumps. (2) 10 HP secondary pumps (330 GPM) Fractional HP basement Pump (16 GPM)
Converters	F			
Piping	F			
Pipe insulation	CP	\$26,000	H9	Penthouse seasonal water pumps are not insulated for pumping cold water. No insulation on basement steam to water converter. Original insulation is deteriorating.
Room terminal units	HP	\$65,000	H10	Older Units. Zone thermostat controls units in multiple rooms. Thermal issues.
mechanical room ventilation				
Mechanical room	HP	\$11,000	H11	Refrigerant leak sensor installed. Fan appears to be adequately sized. Recommend control improvement for ventilation to control space temperature.
Boiler room	D	\$13,000	H11	Combustion intake at high louver, not ducted to structure above or to floor.

HVAC systems	grade	budget cost	notes	comments
controls			H12	
Air compressor	C			Two Simplex 2 HP units with extra tank.
Room control	F			Original pneumatics. Replace with low voltage DDC during mechanical improvement projects.
DDC control	HP	\$50,000	H12	Upgrade required with major mechanical replacement project. Installed 2002.

notes:

- H1.** AHU-1 is a built-up unit. The intake and filters also serve AHU-2 and AHU-3. The intake dampers are closed. A contractor told staff that the leakage through the damper provides 5% outside air which is approximately 1,250 CFM. The building exhaust is approximately 4 times greater which indicates the building is under a constant negative pressure. It is recommended to balance the system to provide the additional outside air, achieve a positively pressurized building, and improve the indoor air quality.

The air unit housing has continued to deteriorate. Some upstream components are in fair condition while the coil areas are more deteriorated. The major components have been maintained and upgraded to keep the unit operational well beyond the unit’s expected useful life. The unit’s coils will require increased maintenance until they fail. There is no return fan or relief air damper on this unit to allow the unit to economize and take advantage of moderate weather conditions. This unit utilizes the buildings exit corridors as plenums which is no longer allowed by code as it creates a safety hazard in a fire emergency. The ductwork floor penetrations did not appear to be protected at each floor. It is recommended to replace this air unit and reconfigure the duct systems to provide an economizer and protect penetrations between floors.

The distribution supply ductwork is located in the outer walls between sets of induction terminals. The return ductwork is located in a centralized shaft. The high priority (HP) grade is given to allow this item’s estimated cost to be grouped into the building cost summary but with continued maintenance the unit should remain functional for another 10 years. New building codes would require fire dampers at each floor and the duct shafts to be 2-hr rated. Although installation of fire dampers and rated shafts will improve building and occupant safety, the existing building code does not require it for an equipment replacement project. Renovation projects which modify the shaft, ductwork, or equipment will require the shafts to be upgraded.

- H2.** The building’s exterior rooms are served by induction units under each window. These units are served by a two-pipe system which provides either hot or chilled water. The inability to heat and cool rooms individually leads to overheating and overcooling of rooms in the spring and fall. To aid in manually manipulating the units, staff has provided adjustable deflector panels on the windowsills to allow the occupants to deflect the air into the room or to cover the sill outlet and minimize the amount of air coming from the unit.

The unit’s drain pans continue to deteriorate and on occasion plug, which then overflows into the building’s envelope. There are no filters on these units which allows lint to plug the unit’s coil. Staff cleans the coils when a unit’s cover plate is removed for maintenance. The induction unit is poorly ducted to the sill grille which allows air to be immediately recirculated into the induction unit. In addition, the induction unit’s intake is extremely small compared to new units and this restricts its ability to induce more air and allow greater air exchanges within the rooms. Pipe insulation has, in general, been removed to maintain the induction units and control valves. Condensation forms on the bare pipe and it drips into the envelope wall.

The recommendation is to replace and upgrade the induction unit system. The budget offered in the legend above will replace the induction units with a four-pipe system. Alternates to this type of system include variable refrigerant flow and a ducted VAV system. The budget for these systems increases to 4.7 million. Each system type has advantages and disadvantages in regard to energy efficiency, ceiling type, occupant disruption, and thermal comfort. It is recommended to review each system type and how it affects the building occupants prior to budgeting for this project.

- H3.** AHU-2 is original to the building and serves the interior spaces on the upper two floors. The unit has been maintained and the major components have been replaced to keep the unit operational well past its expected useful life. The unit housing is continuing to deteriorate around the coils. Pipe insulation is missing, and condensation is deteriorating the piping and valve components. This unit utilizes the buildings exit corridors as plenums which is no longer allowed by code as it creates a safety hazard in a fire emergency. It is recommended to replace this air unit, add an economizer, and revise the ductwork serving the floors. Recommend replacing this air unit simultaneously with the other penthouse units.
- H4.** AHU-3 is original to the building. The unit has been maintained and the major components have been replaced to keep the unit operational well past its expected useful life. The unit housing continues to deteriorate around the coils. Pipe insulation is missing, and condensation is deteriorating the piping and valve components. This unit utilizes the buildings exit corridors as plenums which is no longer allowed by code as it creates a safety hazard in a fire emergency. It is recommended to replace this air unit simultaneously with the other penthouse units and consider omitting this unit if a variable refrigerant flow system is utilized as indicated in H1 above.
- H5.** AHU-4, located in the basement, is primarily meant to serve the copy room although the duct main has been tapped to serve some office space. The unit was originally heating only but a cooling coil has been added downstream to provide air conditioning. The ductwork did not appear to be insulated. The unit uses the main basement corridor as a plenum to return the air. There are multiple spaces that are occupied that are not ventilated. The print shop area has temperature and humidity issues through most of the year. This unit is in fair condition but is well past its expected useful life. It is too small to serve the entire basement area. A project to replace the air unit, revise the duct system and properly ventilate the basement rooms is recommended.
- H6.** AHU-5 is a water-cooled unit serving the welcome desk on first floor and a room on second floor. The staff has this unit turned off due to the occupants' dissatisfaction with its operation. Recommend replacing this unit with a blower coil and a 1.5-ton condensing unit. For additional room comfort reheat coils could be added in subsequent projects to allow individual room control. A variable refrigerant flow system as indicated above would allow this unit to be omitted.
- H7.** The chiller, cooling tower, and IT department cooling unit have all been replaced within the last 13 years. Staff did not indicate issues with any of the units' operations.
- H8.** The office building exhaust system is served by multiple centrifugal fans. Dust and lint build-up is prevalent at toilet room grilles and in the ductwork. Air flow within the lower-level rooms is diminished and can be attributed to older leaky ductwork combined with the dirtying of the systems. Fire dampers at the floor penetrations were not readily visible and may not exist. Duct cleaning, taping and sealing, and air balancing are recommended. Multiple exhaust fans can be replaced with a single exhaust fan as these fans primarily serve toilet rooms which are required to be ventilated when the building is occupied.

A side wall propeller fan installed in the basement recirculates air between the room and the corridor. This fan is recommended to be removed and/or ducted to meet code. Recommend improving the basement ventilation including the expansion/renovation of the existing exhaust system.

- H9.** The boilers are original to the building's construction. The refractory is inspected annually and is repaired as needed. The boilers were retubed since last evaluation and this will extend the expected life of the internal components for another 15-20 years. The boiler burners and controls have been replaced and upgraded over the years. The high priority (HP) grade is given to allow this item's estimated cost to be

grouped into the building cost summary. With continued maintenance the unit should remain functional for another 10-15 years. However high efficiency hot water boilers or convertors will be needed if the building undergoes major renovations to improve the indoor air quality and comfort. These are steam boilers that serve three air unit steam coils and two steam to water heat exchangers. Originally, the boilers served an absorption chiller, which has since been removed. The air units have very little steam load. The current steam load is primarily the steam to water converter serving the hot water used in the induction terminals. It is recommended to replace the steam boilers with hi-efficiency condensing hot water boilers. Replacement of the boilers with steam boilers will escalate the construction estimate offered in the legend above. It is recommended to pipe the boiler relief valves to the floor in the interim.

One steam to water heat exchanger is located in the basement and serves the basement and some first-floor heating units. There is no insulation on the unit or the piping through most of the basement. The pump appears to have been replaced in the last few years. Recommended removing this converter system when the boilers are replaced with water boilers.

The steam to water heat exchanger system in the penthouse mechanical room has been replaced. This unit serves the induction terminals. The pumps appear to be new and are used for both hot and chilled water. The pumps are not insulated and condensation forms on the pumps and the adjacent piping. This condensation will damage insulation and advance the corrosion of the piping and pump. Recommend removing this converter system when the boilers are replaced and insulating the pumps to prevent condensation.

- H10.** The basement heating units are combined and are controlled by zone thermostats. The zoning creates uneven heating and thermal discomfort throughout the basement. Recommend revising the control by adding a thermostat at each occupied room and a control valve at each heating unit.

Steam unit heaters are located sporadically around the building and appear to be original. The units require replacement (or removal) when the boilers are replaced.

- H11.** The penthouse mechanical room has an exhaust fan that is operated by a refrigerant leak detector. The electrical and communication equipment installed in the mechanical room generate heat. Recommend revising the exhaust fan control to ventilate the room based on room temperature as well as refrigerant leak detection.

The boiler room combustion air is served by several dampered louvers. These intakes terminate at the louver about mid-height on the wall. Current code requires the combustion duct to terminate at high and low points in the room. Recommend correcting the combustion ductwork when the boiler system is replaced.

- H12.** The air compressor serving the buildings pneumatic controls appears to operate sufficiently. One of the units appears to be about 7 years old. As systems are replaced, low voltage DDC controls are recommended for installation as this will allow greater monitoring of the system. A DDC front end computer is located in an office in the basement. The DDC controls were installed in 2002 and will require an upgrade as the mechanical systems are replaced.

**City Hall
Parks Department
HVAC Systems**



AHU-1 steam coil



AHU-2 and 3 coils



AHU-2 and AHU-3



AHU-4



Water cooled blower coil (AHU-5)



AHU-1 intake



Typical exhaust fan



Mechanical room fan



Basement room ventilation fan



Typical unit heater



Boiler (1 of 2)



Boiler chemical feeder

City Hall
Parks Department
HVAC Systems



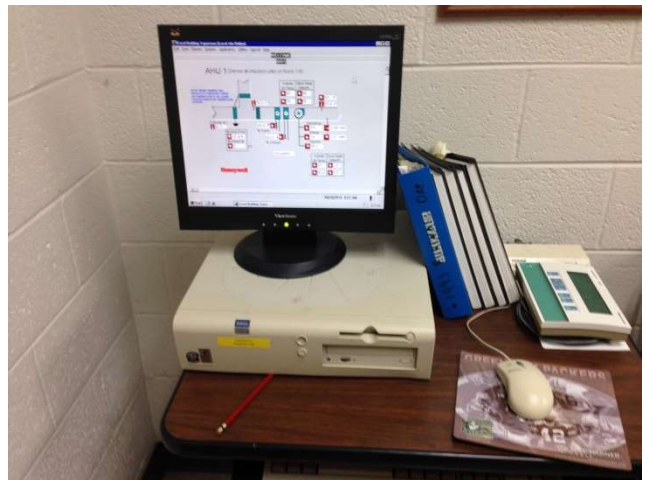
Condensate receiver



Air dryer



Air compressors



Temperature control computer



Induction unit water pumps



Basement hot water system

City Hall
Parks Department
HVAC Systems



Building steam to water converters



chiller



Condenser pump



Chilled water pump



Cooling tower



IT department condenser

**City Hall
Parks Department
HVAC Systems**



Typical induction unit piping



Condensation below induction unit (in wall)



Exhaust grille (typical)



Vestibule heater (typical)

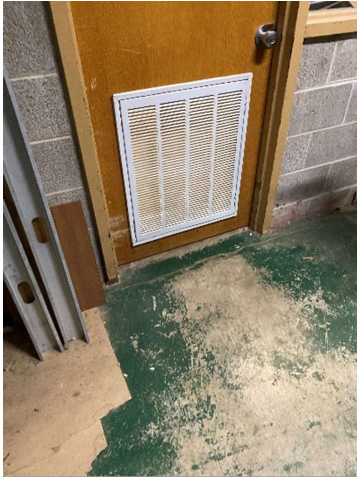


Gas meter



Exhaust fan discharge (abandoned)

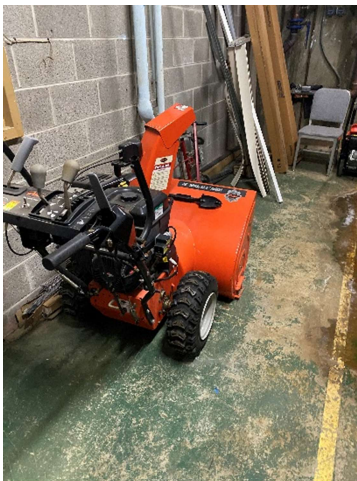
**City Hall
Parks Department
HVAC Systems**



**Transfer grille
(wood shop to hazardous storage)**



**Print room dehumidification
(humidity issues)**



**Hazardous storage
(poor ventilation)**



**Room circulation fan
(temperature issues)**

electrical systems

summary

City Hall is served by a 2000 Amp, 120/208 Volt, three phase electrical service. The Main Switchboard (MSB) is a Square D model Saflex fusible-switch type; it is in the basement. The MSB is original to the building (circa 1956). Although the equipment appears in fair condition, Square D no longer supports this style of switchboard. Often the mechanical component of a switch (the action of OPENING and CLOSING) becomes difficult to operate or simply fails to operate. Eventually replacement parts become difficult to find. The MSB consists of three service disconnect switches, and a distribution section. Each of the service disconnects is labeled – although more prominent labels and labels identifying each disconnect by number (e.g. – Service Disconnect No. 1, Service Disconnect No. 2, etc.) is recommended. The switch providing the normal power feed to the automatic transfer switch (ATS) is labeled “Emergency Circuits Disconnect”. Recommend changing this label to “Normal Power to ATS” since “emergency” circuits are fed from the generator and are not disconnected by this switch when utility power is lost. There is a project waiting for funding which replaces all the distribution equipment.

Understanding how power is distributed in the penthouse could be improved by installing a motor control center. Currently the feeder serving the penthouse is tapped several times to serve numerous disconnect switches. There is a project waiting for funding which replaces all the distribution equipment.

A 60-KW diesel-fueled generator provides standby power. The generator is enclosed in a weather-housing and is located on-grade near the southeast corner of the building. It feeds an automatic transfer switch (ATS) rated 225-amps. The ATS is located in the basement across from the MSB. Although the generator serves both lighting and non-lighting loads the presence of battery-operated emergency lighting throughout the building, plus the absence of a second ATS, indicates the generator is not relied upon for emergency egress. The generator is reportedly exercised under load each week. The diesel fuel tank is double-walled and situated in the generator’s support structure.

The main emergency power panel (EPP) is located adjacent to the ATS. EPP is a Square D Load Center with a 200A main circuit breaker. The panel has 24 1-pole spaces available.

A manual transfer switch with a pin-and-sleeve receptacle for connecting a temporary generator was installed in the basement by the communications provider whose transmitting equipment is installed on the building’s rooftop. The normal feed to the manual transfer switch is tapped from the bus of the MSB despite there being a spare 200A switch available in the distribution section of MSB.

Branch panels for both normal and emergency power are manufactured by Square D. Many of these panels are Square D model QO and are recessed (flush-mounted) in walls in the stairwells. One panel is in the Men’s room on the first floor. Although the condition of these panels is good, Square D no longer manufactures the model QO, and replacement parts are becoming more difficult to acquire. Having them located in the stairwells is unusual, and the fact they are flush mounted makes it difficult to access if a new conduit is needed for a new circuit. In some instances, proper working access (standing on a level surface) is not provided. Overall, the condition of the branch panels is good, but their age means replacement circuit breakers will become increasingly difficult to acquire. It would be very difficult and costly to relocate the panels, but it is possible to improve a poor situation by replacing the interiors and panel covers to improve reliability and ease of access. There is a project waiting for funding which replaces all the distribution equipment.

Generally lighting fixtures throughout the buildings are in good to fair condition and utilize T8 fluorescent lamps and electronic ballasts. An exception to this is the lighting fixtures on fifth and sixth floors which have been updated to LED fixtures.

Battery-operated emergency egress lighting fixtures occur sporadically throughout the building. Each one that was tested worked, however, the quantity of the fixtures, fixture placement, and overall performance do not comply with current standards. An exception to this is on sixth floor. All of sixth floor is code compliant.

The building is protected by an EST fire alarm system. It is a zoned system. The control panel is in a small room on the north end of the first floor. A remote annunciator has been added at the fire fighter’s entrance on first floor. The existing pull stations, smoke and heat detectors, strobes and horn/strobes were not updated at the time the new

fire panel was installed. Coverage with visual and audible/visual alarms is inconsistent – some areas are compliant, some are not. Use of smoke and/or heat detectors is also inconsistent.

Various unsealed corridor wall penetrations were observed throughout the building. Most of these penetrations appear to be due to distribution of fiber optic cabling or other communications cabling.

legend

D	Deficient – Immediate Replacement	CP	Critical Priority – Replace in 1-2 years	HP	High Priority – Replace in 3-5 years	F	Fair – Replace in 6-10 years	C	Compliant/ Adequate	N	New	N/A	Not Applicable
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electrical systems	grade	budget cost	notes	comments
electrical service				
Utility service entrance	C	\$1.5 Mil	E1	MSB switchboard is served from a pad mounted transformer.
normal power distribution equipment				
Main switchboard MSB	F	See notes	E1	Age lessens reliability of switches opening and closing; switches should be lubricated periodically. Plan for eventual replacement.
Branch panels	F	See notes	E1	Replace obsolete panel interiors; replace panel covers.
emergency power distribution equipment				
Generator	F	See notes	E1	60 KW natural gas generator in fair condition.
Transfer switch	HP	See notes	E1, E2	225 Amp ATS in fair condition.
Branch panel	HP	\$18,000	E1	Three small Square D load centers in fair condition with limited future capacity. Mixed loads.
lighting				
Throughout entire building excluding floors 5, and 6.	C		E3	Consider upgrades to LED light fixtures.
Exterior	F	\$1000	E4	Replace HID with LED.
lighting controls				
Conference or meeting rooms	C			Existing occupancy sensors
Offices	C			Existing occupancy sensors
Toilet rooms/ small storage rooms	C			Existing occupancy sensors
emergency egress lighting and exit signs				
Corridors, stairways, elevator lobbies	HP	See notes	E1, E2	Add a second ATS and panelboards dedicated to emergency egress lighting.

**City Hall
Parks Department
Electrical**

electrical systems	grade	budget cost	notes	comments
Exit signs	HP	See notes	E1, E2	Add a second ATS and panelboards dedicated to emergency egress lighting.
fire alarm devices				
Upgrade/replace all devices.	HP	\$500,000	E5	Increase coverage of visual and audible devices to be compliant.
Seal penetrations	CP	\$5000		Fire alarm and all low voltage penetrations.
tele-data system				
Servers, racks, cabinets, cabling, jacks, electronics	C			Cat 6 cabling.

notes:

- E1. A Service Upgrade and Emergency and Normal Power Distribution project (approximately \$1.5 million) was bid but never constructed.
- E2. A second ATS and branch panels dedicated to emergency egress lighting is the better option long term since the facility already has a standby generator. While unit equipment (battery operated emergency lighting) is the least expensive first-dollars solution, it has ongoing maintenance material and labor costs related to replacing batteries every 3 to 5 years.
- E3. Continue to upgrade all light fixtures to LED when feasible. Approximately \$150K per floor.
- E4. Consideration should be given to replacing older exterior HID fixtures with new LED ones.
- E5. At a minimum, consider adding additional visual and audible devices to be code compliant. Approximate budget of \$25K.



MSB main switchboard



Main emergency panel

**City Hall
Parks Department
Electrical**



Panels in stairway



Panels in stairwell to penthouse



Penthouse distribution



Fire alarm panel



Fire alarm annunciator



Card access system

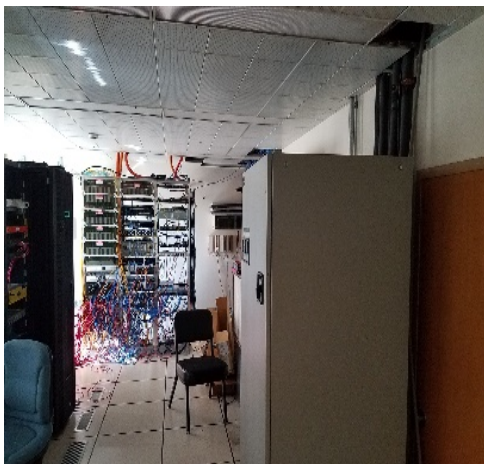
City Hall
Parks Department
Electrical



Exit sign



Battery light



Server room



Lighting



Lighting



Lighting



Kitchen receptacles



Unsealed penetration



Exterior lighting

FACILITY ASSESSMENT

Document prepared for:

City of Green Bay

Green Bay, WI

Fire Station #1

Comm. No. 22CGB12.00

September 30, 2022

Facility Assessment

City of Green Bay | Green Bay, WI

Comm. No. 22CGB12.00

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report description

An assessment of Fire Station 1 was conducted in 2015 by Berners Schober which reviewed the condition of the building's architectural, structural, mechanical, plumbing and electrical elements. This report, done in the summer of 2022, is an update to the previous assessment. Each building was re-surveyed by trade and the reports updated. Below are brief summaries of the changes to the building in the intervening 7 years.

architectural

Interior finishes were reviewed with an emphasis on those which were damaged or in poor condition.

Since the previous building assessment in 2015, the roof has been replaced. The current EPDM roof is in good condition.

code/accessibility

The Wisconsin building code has been updated since the last assessment to referencing the 2015 International Building Code (IBC). The 2015 IBC references the 2009 ICC A117.1 Accessible and Usable Buildings and Facilities code. The 2010 ADA Standards remain in effect since the previous assessment. Major building elements, such as the stair and elevator shafts, are unchanged.

Since the 2015 assessment there appear to have been no changes to accessible features. The assessment is written with recommendations for future continued use.

structure

Modification to original notes to better explain structure. No significant changes to structure itself.

plumbing

No significant changes since the previous assessment.

fire protection

There has been no change to the fire protection system since the last assessment.

mechanical

The garage vehicle exhaust system has been replaced and repairs were made on the leaking condensate pump since the previous assessment.

electrical

No major changes/updates to the electrical systems have been made since the last evaluation.

ITEM	DEFICIENT (d) Immediate Replacement	CRITICAL PRIORITY (cp) Replace in 1-2 years	HIGH PRIORITY (hp) Replace in 3-5 years	COST ESTIMATE
Architectural			Site conditions - Concrete aprons	\$15,000 - 20,000
code		Electrical panel and plumbing main in same room.		See Plumb report
code			Accessible route	\$2,000-\$3,000
code			Plumbing fixtures – toilets and lavatories	\$3,000-\$4,000
structural		4" + 2" tile and joist slab supported by load-bearing masonry walls		\$6,000
plumbing			Piping insulation	\$25,000
plumbing	Code issues			\$8,000
plumbing	Add pump/piping (code issue)			\$17,000
plumbing	Add thermal mixing valve (TMV) (code issues)			\$10,000
HVAC			Humidification	\$15,000
HVAC	No ventilation in first floor office.			\$22,000
HVAC		Occupied space thermal comfort		\$65,000
HVAC			Occupied space thermal comfort	\$170,000
HVAC	Men's room exhaust			\$6,000
HVAC	Women's room exhaust			\$6,000
HVAC			Kitchen hood, fan and ductwork	\$50,000
HVAC	Rooms with chemicals stored have no ventilation.			\$22,000
HVAC	Damaged & missing pipe insulation			\$17,000
HVAC		Poor location and insulation		\$8,000
HVAC	Mechanical room, poor ventilation			\$12,000
HVAC			Steam unit heater and unit ventilator	\$28,000
HVAC	Make-up air unit			\$56,000
HVAC	Exhaust			\$133,000
HVAC			Pneumatic control	\$17,000

HVAC			Toilet room exhaust	\$1,500
HVAC	Storage room exhaust			\$1,500
HVAC	Dryer exhaust			\$1,000
electrical			Elec panel in poor condition-Bulldog	\$6,000
electrical			ATS in fair condition	\$6,000
electrical			Load centers in fair condition-limited future capacity. Mixed loads.	\$18,000
electrical	GFCI receptacles needed			\$1,500
electrical			Add occupancy sensors	\$4,000
Fire Station #1 Total				\$752,000 – \$759,500

architecture

building description

Fire Station #1 is a historic structure built in 1929 and constructed of brick with stone accent bands. The exterior brick is in very good condition for a building of this age. There only a few areas where some tuck pointing could be addressed to prevent further damage to the building. The area most in need of tuck pointing is the chimney on the roof. There are large settlement cracks that should be addressed on the chimney.

A recent hazardous materials assessment by North Star Environmental Testing, LLC was provided as information for this report.

building envelope

roof

Since the previous building assessment in 2015, the roof has been replaced. The current EPDM roof is in good condition.

exterior walls

Brick and stone trim on all sides. The exterior walls appear to be in good condition with a few minor repair areas to be addressed.

exterior windows and doors

None of the exterior doors are ADA compliant due to the exterior concrete stoop settlement. See Code section of this report for additional information. The hollow metal doors are faded and could use a coat of paint. When doors are painted, it would be recommended to replace the weatherstripping around the doors. Plywood transoms over the doors are weather-damaged and should be replaced. Note that these panels were noted as Category II non-friable in the Hazardous Materials Assessment provided to the City of Green Bay.

exterior site conditions

The driveway apron has significant cracking throughout.

interior conditions

floors

The recent hazardous materials report indicates the presence of Asbestos Containing Material (ACM) in some of the vinyl tiles which have since been encapsulated under new carpeting on the second floor, specifically in the Dayroom area. The breakroom, previously thought to have ACM, is not indicated as such in the report. Ceramic tile and terrazzo floors are in generally good condition.

Items remaining from previous assessment include the following:

- Minor amount of adhesive on ceramic mosaic tile in west first floor storage rooms.
- Older carpets are worn but serviceable.

doors and frames

Some interior wood door frames have chipped paint. Most doors are in good condition. See Code section of report for information on door hardware.

walls

Some spalling of brick and concrete at base of wall in garage. Glazed ceramic tiles are missing a multiple locations of east stair shaft and men's toilet room. A large settlement crack in the north side of the east stair shaft has re-occurred. An area of plaster over the door frame to the truck bay has cracked off, exposing the metal drywall edge bead. A circular hole in the wall at the chief's office appears due to the location of a previous intercom system.

ceilings

There are several locations throughout the station where individual ceiling tiles are missing. Some areas at the offices on second floor have water-stained ceiling tiles. The source of the leaks appears to have been addressed by a roof replacement in recent years.

miscellaneous

The insulation on the pipes in the first floor women’s room is not called out as ACM but looks to be friable and exposed to the room interior.

legend

D	Deficient – Immediate Replacement	CP	Critical Priority – Replace in 1-2 years	HP	High Priority – Replace in 3-5 years	F	Fair – Replace in 6-10 years	C	Compliant/ Adequate	N	New	N/A	Not Applicable
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architectural elements	grade	budget cost	notes	comments
exterior elements				
Roof condition	C			
Exterior facade condition	F	\$5,000	A1	
Exterior windows and doors	F	\$4,500	A2	
Site conditions	HP	\$15K - \$20K	A3	
interior conditions				
Floors	F		A4	
Doors and frames	F		A5	
Ceilings	F		A6	
Miscellaneous	F		A7	

notes:

- A1. Tuck-point as needed on few wall locations. Tuck-point and repair masonry at chimney.
- A2. Replace plywood transom in-fill panels. Paint doors and frames. Replace weatherstripping.
- A3. Concrete at driveways is cracked and spalling. Recommend replacement.
- A4. Plan to continue carpet replacement of worn areas.
- A5. Re-paint wood door frames.
- A6. Recommend replacing missing ceiling tiles to help maintain conditioned space.
- A7. Refer to plumbing section for notes on replacing pipe insulation at women’s room.

**Fire Station #1
Fire Department
Architectural**



Exterior brick in good condition



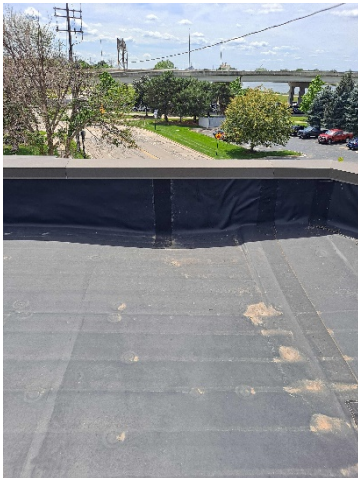
Door not egressing to grade



Cracked driveway apron



Cracked driveway apron



Roof in good condition



Tuck pointing needed at chimney

**Fire Station #1
Fire Department
Architectural**



Transom faded and broken



Tile with adhesive on it



Spalling brick due to moisture exposure



Missing wall tile



Missing wall tile at plumbing wall



Cracked/missing plaster over door

**Fire Station #1
Fire Department
Architectural**



Cracked plaster at stair



Chipped paint at wood door frame



Missing and stained ceiling tile



Patch hole in wall



Friable insulation on piping

**code compliance and accessibility
building data**

code references based on 2015 IBC

year(s) constructed	Original building: 1929	gross area	4,955 SF floor plate 10,356 total area
occupancy classification (chapter 3 of IBC)	1 st floor is S-1 Moderate-hazard Storage, non-separated from B Business. 2 nd floor is B Business occupancy with R-3 residential as incidental use.		
construction type (chapter 6 IBC)	1929 building code commercial building construction is closest to IBC 2015 Construction Type II-B		

summary of code compliance/life safety

Summary of the building type and occupancy classification from the previous study is still applicable. In general, any renovation to a space would need to meet current codes, as modified in the International Existing Building Code.

egress and safety

One means of egress is available out of the storage rooms west of the apparatus bay, with a second route available through the apparatus bay itself. The same is the case for the toilet room on the east side of the apparatus bay.

The lower-level mechanical space and mid-level storage areas both egress through the east stair to the exterior. The plumbing main is located in the mid-level electrical room, as it was at the previous assessment. This is a code issue which should be addressed. The second-floor egresses through the stair shaft to the east, and the exterior steel stair and jump platform.

stairs, ramps and shafts

The stair is not in a rated shaft, but this condition is original to the building and thus presumed to have complied with code at the time of construction. As noted in the previous study, the rooms opening off of this stair shaft would not be allowed by current code, but even in a renovation would be allowed to remain because it is “technically infeasible” to change the configuration.

handrails and guardrails

As noted in previous study, the large openings in the guards of the handrails do not comply with current code but are allowed to remain. While the size of the openings may not be a safety hazard for adults, adding a second handrail on the outer wall, where feasible, would increase safety during egress.

summary of accessibility/ADA compliance

ADA standards

The Americans with Disabilities Act places an additional level of requirements on public and commercial facilities in terms of accessibility. Unlike a building code, it is a federal law which requires continual compliance, regardless of when a building was built. Accessibility items noted in this report fall under this category and should thus be addressed in a timely manner.

accessible route

None of the existing hinge doors are close enough to grade to meet accessibility requirements. Overhead doors for vehicles are at grade but are not allowable as a legal means of egress or entry. As a historic building with no elevator, there is no way to provide an accessible route to the main spaces of the building located on the second floor. This report will address accessibility from the standpoint of people with mobility challenges, but not in wheelchairs.

doors

There are a variety of doorknob styles in the building; knob (not accessible), lever, and push/pull. The door at first floor from stair to apparatus bay is less than 32” wide at the stops, which does not meet current code or

Fire Station #1 Fire Department Code & Accessibility

accessibility minimum requirements. The lockers in the women’s room interfere with clear floor space to use the door to the room.

casework

Kitchen casework, while not technically accessible, meets the needs of those who can access it.

plumbing fixtures

There are no toilet or shower facilities in the building which comply with accessibility guidelines. Even for those who are not in wheelchairs, there are modifications that could make use of the facilities easier and safer. See notes in the chart below and in the plumbing section for specific suggestions.

The first-floor women’s room has multiple issues: the door clearance noted above, the lack of privacy at the toilet stall and shower, lack of accessibility, unused urinal, and friable insulation at the radiator pipes. If the building is slated for continued use, this room should be considered as an opportunity to reconfigure to provide a single-user accessible toilet and shower room.

Lavatories are mounted at accessible height and provide clear floor space to access. Drinking fountain on second-floor is at accessible standing height.

legend

D	Deficient – Immediate Replacement	CP	Critical Priority – Replace in 1-2 years	HP	High Priority – Replace in 3-5 years	F	Fair – Replace in 6-10 years	C	Compliant/ Adequate	N	New	NA	Not Applicable
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architectural elements	grade	budget cost	notes	comments
Code compliance / Life safety				
Egress and safety	C			
Electrical panel at mid-level	CP		CA8	Cost is listed in Plumbing report.
Stairs, ramps and shafts	F		CA1	
Handrails/guardrails	F		CA2	
Accessibility / ADA compliance				
Accessible route	HP	\$2,000-\$3,000	CA3	
Doors	F		CA4 CA5	
Casework	C			
Plumbing fixtures – toilets and lavatories	HP	\$3000-\$4,000	CA6	
Showers	F		CA7	See note: need to define scope of work.

notes:

CA1. Shaft not required to comply with current codes. No change needed at this time.

CA2. Recommend installation of handrail on outer wall of stair where it does not interfere with access to other spaces.

Fire Station #1 Fire Department Code & Accessibility

- CA3.** For the safety of all users, a new threshold and/or step is recommended to minimize the trip hazard at exterior entry doors.
- CA4.** Lockers at the women's room impeded on the clear floor space required at the door. The room and building are not currently accessible, but if future modifications are done, consider alternate placement for better functionality at the lockers and door access.
- CA5.** Recommend replacing knob hardware with lever hardware.
- CA6.** Note the recommendation in text above to reconfigure the women's room to a single-user accessible room. Recommend the following upgrades for safe usage:
- Remove the urinal in the Women's room and utilize the corner area to create a single accessible toilet stall with appropriate grab bars.
 - Recommend updating faucet controls to lever handles on lavatories for easier/accessible use.
 - Note that entry to the room is not currently accessible. Plumbing renovations should be considered in conjunction with entry reconfiguration.
- CA7.** Showers are not accessible. These are listed as Fair because their function is not necessary for safe usage of the building, and the rooms in which the showers are located are not currently accessible. If a renovation is considered, the first floor Women's room could be converted to a single-user, accessible toilet room and shower. As a full design project, that cost is not estimated due to the need to define full scope of work.
- CA8.** The plumbing main is in the electrical room on the mid-level floor. This is a code violation. See Plumbing section of this report for cost estimate.



Recommend 2nd handrail



Egress door not at level of egress

**Fire Station #1
Fire Department
Code & Accessibility**



Recommend threshold at entry



Recommend lever door hardware



Remove unused fixture



Potential area for accessible toilet

**Fire Station #1
Fire Department
Code & Accessibility**



Recommend lever faucet handles

structural system

summary

The structure consists of cast-in-place concrete floor slabs bearing on steel girders or load-bearing masonry walls and wood roof joists over steel girders or wood stud bearing walls.

legend

D	Deficient – Immediate Replacement	CP	Critical Priority – Replace in 1-2 years	HP	High Priority – Replace in 3-5 years	F	Fair – Replace in 6-10 years	C	Compliant/Adequate	N	New	NA	Not Applicable
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structural elements	grade	budget cost	notes	comments
year				1929 (Berners Schober Comm. No. 1262)
structure type				
Foundations	C			Cast-in-place concrete foundation and/or basement walls bearing on individual spread or continuous strip footings.
Basement - boiler room/generator 4' below first floor	C		S1	Floor is a 4" concrete slab on grade with 6x6 - 6/6 welded wire mesh reinforcing.
First floor	C			Floor is a 6" concrete slab on grade with 6x6 - 10/10 welded wire mesh reinforcing.
First floor (above boiler/generator room)	CP	\$6,000	S2	4" + 2" tile and joist slab supported by load-bearing masonry walls.
Storage room 7' above first floor	C			2 x 8 wood joists 16" on center.
Second floor	C			4" + 2" tile & joist slab supported on steel girders and load-bearing masonry walls.
Roof	C			2x10 wood joists at 16" on center typical, supported by steel girders or 2x4 wood stud bearing walls.
building risk category	NA			An active Fire Station would be Risk Category IV, however, the current office function of the building would be considered Risk Category II.
construction type	NA		S3	Construction Type II-B (2-hour exterior bearing walls, 1-hour beams, columns & floor slabs, 0-hour roof)
vertical expandability	NA			None.
typical column spacing	NA			
overall structural condition	C			The existing building is structurally sound with no significant deficiencies noted.

notes:

- S1.** There is a vertical crack in the east foundation wall of the room housing the generator. However, it does not extend into the brick wall above and the owner is not aware of any water infiltration through the crack. Therefore, no remedial action is recommended at this time.
- S2.** There are five concrete joists above the generator room that have exposed reinforcing bars. Although this condition has been present since the original construction, reinforcing bars in joists require a minimum of 3/4" of concrete cover to maintain a 2-hour fire resistance for the slab assembly. Recommend application of cementitious repair mortar to develop required cover to steel reinforcing.
- S3.** The 1985 publication "Fire Resistance Ratings" by Engineering and Safety Service (American Insurance Services Group) would have credited the plastered 2x10 roof system with a 1-hour rating which would have brought the current IBC Construction Type up to Type **II-A**.



**Cracked foundation wall in generator room
(Note S1)**



**Exposed reinforcing in joists above generator
(Note S2)**

plumbing systems
summary

Fire Station #1 was constructed in approximately 1929. The original piping is in poor/fair condition, it has been replaced as needed when issues arise. Insulation could be added to the hot water piping for energy savings. A thermal mixing valve (TMV) and hot water recirculation pump with return piping should be added to the system. These are code issues which need to be corrected. The location of the water main in/above the Electrical Closet is another code issue that should be corrected.

Building is served by two 4” roof drains. EPDM roof has no secondary drainage or relief scuppers -Code issue.

Plumbing fixtures in the second floor men’s toilet room are older and could be updated to conserve water. The first floor women’s toilet room was converted from a men’s and the urinal is still installed. Building utilities in general appear adequate.

This building is not equipped with an automatic fire sprinkler system. In order to add a wet sprinkler system to the building, the water main size would need to be increased from the current 2”. The exhaust hood in the kitchen (for gas range) should have a NOVEC 1230 (or equal) kitchen suppression system installed.

legend

D	Deficient – Immediate Replacement	CP	Critical Priority – Replace in 1-2 years	HP	High Priority – Replace in 3-5 years	F	Fair – Replace in 6-10 years	C	Compliant/ Adequate	N	New	N/A	Not Applicable
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plumbing systems	grade	budget cost	notes	comments
Water piping condition	F		P1	Copper piping
Sanitary piping condition	F		P2	PVC & cast iron
Storm/clearwater piping	F		P3	Cast iron
Valves	F		P4	Gate & ball
Domestic water service	C		P5	2” main
Insulation	HP	\$25,000	P6	Add insulation
Code issues	D	\$8,000	P7	Relocate water main
equipment				
Domestic water heater	F		P8	Gas-fired
Drench shower station	NA			
Recirculation pump(s)	D	\$17,000	P9	Add pump/piping (code issue)
Water softener	NA			No water softener installed
Thermal mixing valve (TMV)	D	\$10,000	P10	Add TMV (code issue)
Grease interceptor	NA			Grease interceptor not required.
Kitchen equipment	F		P11	
Plumbing fixtures	F		P12	

Fire Station #1
Fire Department
Plumbing

plumbing systems	grade	budget cost	notes	comments
Oxygen storage	NA			
Backflow prevention	C		P13	1 1/2" hose connection
"Shop" air compressor	NA			HVAC pneumatics only
Laundry equipment	F		P14	
Drain tile sump/pump	NA			
Ambulance/truck garage	F		P15	Trench drain, garage catch basin
exterior				
Storm drainage, roof drains	F		P16	Discharge to street
Lawn irrigation	NA			
Utilities	F		P17	

notes:

- P1. Water piping is mainly copper, soldered joints. Fair condition. There is some original galvanized pipe in the boiler room. Kitchen sink on second floor has PEX water piping installed. Majority of the water piping in the boiler room is not insulated.
- P2. Original sanitary is cast iron. Some newer PVC piping in the boiler room and garage. Vent piping on the second floor was replaced to cast iron no-hub connection. A 4" vent on the roof is cracked. One Studor vent in the garage vents the trench drain(s).
- P3. Storm piping is cast iron hub & spigot. Piping is not insulated. Noise issue on the 2nd floor office area due to lack of insulation on the piping.
- P4. Older valves are gate, newer valves are ball.
- P5. Building is served by a 2" water main. 2" water meter with 3-valved by-pass in the boiler room.
- P6. Minimal water and none of the storm piping is insulated. Insulation should be added for energy savings (IECC) and to control noise issues.
- P7. Code issues: water temperature is set at 119° Fahrenheit, the maximum temperature allowed is 110-115 degrees Fahrenheit. No thermostatic mixing valve (TMV) at the heater. Add TMV per code. No recirculating pump at heater. Add recirculating pump. Hot water piping length exceeds 100'-0" per code. Water main is installed in the electrical closet and needs to be relocated. (reference notes P9 and P10 also.)
- P8. Water heater is gas fired, atmospheric direct vent to chimney, AO Smith ProMax. Model FCG 75 300, 75-gallon, 75,000 BTU. Hot/cold water connection at the heater is 1". Piping is not insulated.
- P9. Install a hot water recirculation (HWR) pump and HWR piping. Length of hot water piping exceeds 100'-0" allowed per code. Hot water run time to second floor kitchen sink exceeds 1 minute. Building would need to comply with the IECC code for recirculation within 2'-0" of the fixture.
- P10. Add TMV at the water heater. Set hot water temperature to 110° Fahrenheit max. Above 115 degrees F is a code issue.
- P11. Kitchen equipment: Two compartment stainless steel sink, single lever faucet, with garbage disposal. No dishwasher in the kitchen. Gas range should have a fire suppression system installed in the hood.
- P12. Plumbing fixtures: there are no ADA compliant fixtures in the building.

Fire Station #1 Fire Department Plumbing

First floor unisex toilet room has a floor drain and a tank-type WC with 15" rim above finished floor (aff). Lavatory, outside the room, is wall-hung with rim at 29" aff.

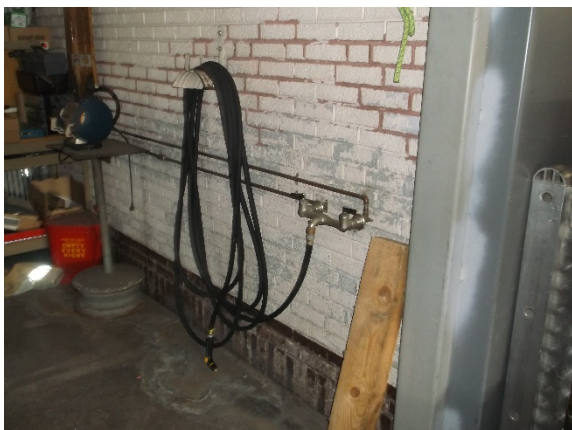
Women's toilet room on first floor is a converted men's toilet room. Floor mounted urinal is still installed but not functioning and should be removed. WC is floor mounted, 16" rim aff. 3.5 gpf valve. Lavatory is wall-hung, 30" rim aff. Mustee modular fiberglass shower unit with Moen shower valve. Room also has a janitors' sink. Toilet room has "multi-functional" use.

The second floor Men's toilet room has floor mounted WC's at 16" rim aff., 3.5 gpf valve. Lavatories are wall-hung, rim at 30-1/2" rim aff. Urinal is floor mounted with Sloan Royal flush valve. Shower is a built-up tile room with two Delta shower valves. Shower room only has one floor drain which is not allowed, as each shower is required to have a separate drain. Piping has "hammering" and should have water hammer arrestors installed.

There is an older version EWC in the meeting room, rim at 37" aff. Also, a new version water bottle cooler in the dining room area is being used in lieu of the older EWC. Plumbing fixtures could be replaced with low flow and water conserving units. There are no exterior non-freeze water sill faucets on the building.

Garage has a residential washer and dryer set-up with an adjacent laundry/janitors sink and service faucet.

- P13. There is a Watts 009 RPZ backflow in the boiler room for the HVAC boiler. 1 1/2" hose fill connection in the garage has an elevated atmospheric vacuum breaker installed. Faucets with hose connection ends have a threaded hose end vacuum breaker installed. All backflow prevention is compliant.
- P14. Residential washer (and dryer), laundry/janitors sink are installed in the garage area.
- P15. Garage: trench drains which discharge to a garage catch basin. Trench drain is vented by a studor vent instead of a "typical" vent through the roof.
- P16. There are two 4" roof drains (east and west side of roof) which discharge separately to the street. Drains are in fair condition but have some issues with tree debris clogging the drains. There is no secondary roof drainage. Parapet relief drains should be added for secondary drainage. (Secondary drainage is now a code requirement but was probably not required in 1926 when the building was erected). Storm piping through the building is not insulated.
- P17. Building is served from a 2" water main. The main routes from South Adams Street. Sanitary sewer is 6". Main routes north to Chicago Street, exits the lower boiler room at 20" aff., gravity discharge. Two 4" storm sewers route to South Washington and South Adams Streets. Parking lot/drives are pitched and discharge to the adjacent streets – no internal drainage or catch basin(s). Technically draining parking space over a public sidewalk is not allowed.



Service faucet - garage



Sanitary piping – boiler room

**Fire Station #1
Fire Department
Plumbing**



Sanitary/water piping – boiler room



PEX piping to kitchen sink



Water piping thru electrical closet



Water service, water meter with by-pass



Storm piping, sanitary vent



Water heater – gas fired

**Fire Station #1
Fire Department
Plumbing**



Water heater vent piping



Hot/cold water piping at water heater



Studor vent - garage



Fill connection(s) in garage



Water closet - unisex



Lavatory - outside unisex toilet room

**Fire Station #1
Fire Department
Plumbing**



Sink, lavatory, urinal – women's



Water closet -women's



Shower – women's



Electric water cooler- meeting room



Kitchen double sink



Kitchen sink – garbage disposal

**Fire Station #1
Fire Department
Plumbing**



Water closet – men's



Urinal & lavatory – men's



Lavatory sink – men's



Shower room– men's



Men's shower room floor drain



Washer/dryer in garage bay

**Fire Station #1
Fire Department
Plumbing**



Sanitary vent & roof drain



Sanitary vent & roof drain



Fill lines backflow preventer



Garage catch basin



Garage trench drain



Parking lot drive

**Fire Station #1
Fire Department
Plumbing**



Parking Lot



Fire hydrant @ S. Washington Street

HVAC systems summary

The building was originally constructed in 1929. Multiple renovation and mechanical upgrade projects have taken place over the last 90 years. The upper level was renovated in 2012 to transition the living quarters into administrative office area.

The second-floor office area is served by a 2007 packaged roof top air unit with gas fired heat. The air unit system provides either heated or cooled air to the living quarters and utilizes zone dampers to regulate air flow and provide a measure of individual room temperature control. Steam radiation units equipped with Danfoss valves for temperature control are located around the building perimeter. The manual control of the steam radiation units combined with automated zone damper control and varying occupancies and envelope orientations is creating some undesirable air unit zone temperature fluctuations, causing thermal discomfort. During the last remodeling project, partition walls were constructed, sub-dividing the thermal zones. The zone thermostats and ventilation diffusers were not modified sufficiently thereby exacerbating the thermal discomfort issues.

Toilet/shower rooms are ventilated by ceiling mounted fans. These fans are timer or light switch operated. Some storage rooms and closets that store paint and cleaning chemicals are not ventilated.

An electric heater has been utilized in in the women's toilet/shower to supplement the steam radiator unit. It is unknown if it is still utilized, but there have been no upgrades to the rooms heating system since the last evaluation.

The kitchen ventilation hood is served by a roof mounted exhaust fan. The hood appears to be and older type 1. The ductwork is constructed of galvanized sheet metal. A cook-top stove is located beneath the hood.

A low-pressure steam boiler, installed in 2007, is located in the lower-level mechanical room. Steam is distributed to the office area and the apparatus room heating units.

The air unit and zone VAV controls are low voltage. Apparatus room ventilators utilize pneumatic controls. The air compressor is located in the lower-level mechanical room.

The apparatus room ventilation system was replaced in 1987 and consists of a make-up air unit, unit heater, and exhaust fan. The make-up air unit outside air duct is capped off. The make-up air unit and exhaust fan serving this room are not believed to be operational. The make-up air and exhaust fan were originally designed to operate via a 60-minute timer switch. A unit ventilator is located over the old machine shop area (now storage). A vehicle exhaust system (previously PlymoVent) was replaced after the last evaluation and is connected to each vehicle and utilized to capture and expel exhaust fumes as trucks leave the building. Additional vehicles and powered equipment are also stored in the garage.

Through-the-wall air conditioning units are still utilized as a recently (2001) designed/bid ductless split project has not been constructed. Ceiling exhaust fans are located in the storage room and an abandoned toilet room off the west side of the apparatus rooms. These fans are timer switch operated.

Fire Station #1 Fire Department HVAC Systems

legend

D	Deficient – Immediate Replacement	CP	Critical Priority – Replace in 1-2 years	HP	High Priority – Replace in 3-5 years	F	Fair – Replace in 6-10 years	C	Compliant/ Adequate	N	New	N/A	Not Applicable
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HVAC systems	grade	budget cost	notes	comments
air unit			H1	Installed 2007. Trane roof top packaged YSC series, 10-ton cooling with gas heat.
Housing	F			
Air intake	C			
Condenser fins	F			
Fan	F			4000 CFM, 3 HP
Filters	C			30% filters
Controls	F			Low voltage, zone dampers.
Ductwork	C		H3	Installed 2007. Not revised during last remodeling project. Rain cap over exterior ductwork.
Insulation	C			Duct liner in exterior ductwork.
Humidity	HP	\$15,000	H1	Residential type unit. Manually filled. Humidification is not a code requirement.
Occupied space ventilation (Office)	D	\$22,000	H2	No ventilation in first floor office.
Occupied space thermal comfort	CP	\$65,000	H3	Air unit zone thermostat and manual radiation control conflict. Air unit discharge temperature is affected. Zones are not split to serve rooms modified in last project.
	HP	\$170,000		
exhaust fans				
Men's room exhaust	D	\$6,000	H4	Ceiling mounted fan. Timer switch operated.
Women's room exhaust	D	\$6,000	H4	Ceiling mounted fan. Light switch operated.
Ductwork	C			
Kitchen hood, fan and ductwork	HP	\$50,000	H5	Type 1 hood. Roof mounted fan discharges below 40" above the roof line. Galvanized ductwork.
Building exhaust ventilation	D	\$22,000	H6	Rooms with chemicals stored within them have no ventilation.
boiler system				
Boilers	C		H7	Installed 2007
	C			Weil McLain, 787 MBH input, 634 MBH output low pressure steam

Fire Station #1
Fire Department
HVAC Systems

HVAC systems	grade	budget cost	notes	comments
Pumps	C		H7	1/3 HP Simplex Condensate pump.
Piping	C			Mostly original throughout building.
Pipe insulation	D	\$17,000	H8	Most of the piping is bare and uninsulated throughout the boiler room and apparatus room. Damaged insulation in multiple exposed locations.
Room terminal units	CP	\$8,000	H9	Radiators and fin tube with Danfoss Valves.
Mechanical room ventilation	D	\$12,000	H10	Damper for boiler combustion. No intake for generator combustion air. Gas meter regulator vent close to intake louver.
controls				
Air compressor	C		H11	Serves boiler room and apparatus room equipment.
Garage ventilation			H12	
Heaters	HP	\$28,000	H12	Steam unit heater and unit ventilator.
Make-up air unit	D	\$56,000	H12	Outside air cut off. 1300 CFM, ½ HP motor.
Exhaust	D	\$133,000	H12	1500 CFM, ½ HP fan motor
Truck exhaust	C			Replaced in last couple years
Control	D	\$17,000	H12	Pneumatic control. 60-minute timer switch.
Toilet room exhaust	HP	\$1,500	H13	Ceiling mounted fan. Timer switch operated. 50 CFM. Installed 1983. Room appears abandoned.
Storage room exhaust	HP	\$1,500	H13	Ceiling mounted fan. Timer switch operated. 100 CFM. Installed 1983
Dryer exhaust	D	\$1,000	H14	Terminates inside.

notes:

H1. The air unit is 15 years old. Expected useful life is about 20 years. The air unit is a multi-zone system utilizing zone dampers to regulate individual room air flow. The unit has a master zone terminal to set the unit to heating or cooling mode. The zone dampers will adjust air flow to maintain space temperature based on a rooms heating or cooling requirements. When installed, this system was an economical way to provide some measure of individual room temperature control. In addition to the zone VAV units, perimeter rooms utilize fin tube or radiators for additional heat. When both systems are operational, the zone damper control can conflict with the radiation control and this causes variations in the air unit discharge temperature which will then affect heating and cooling throughout the office area. Control upgrades through the air unit manufacturer are available to improve the terminal operation and simultaneously control the space fin tube radiation.

In the past portable residential style humidifiers have been utilized to provide spot humidification for specific occupants. Humidification is not required but does improve occupant comfort. As the use of the building has changed over the years, humidification may no longer be desired. However, in buildings

Fire Station #1

Fire Department

HVAC Systems

where occupants spend extended periods of time, or sleep, it is often utilized to improve occupant comfort. Portable units will improve humidity only slightly but may have a greater psychological effect for the occupants. This is because the air unit will introduce a greater amount of dry, outside air than the portable units can properly humidify. To humidify this building, it is recommended to install an electric or gas fired humidifier that is sized to serve the entire office space. A high priority grade has been given to this item for budgeting purposes if there remains a desire to provide humidification and improve occupant satisfaction.

- H2.** A first-floor office uses a radiator for heat and a through wall air conditioner for cooling. There is no outside air ventilation for this room. Recommend extending the ductwork from the air unit system to this room to provide ventilation and to positively pressurize the room in relation to the apparatus room. A project to provide supplemental cooling upstairs and ventilation/cooling in this room via ductless split systems has been designed but has not been constructed as the costs were higher than anticipated.
- H3.** During the last remodeling project, partition walls were constructed, sub-dividing the thermal zones. The zone thermostats and ventilation diffusers did not get modified sufficiently thereby exacerbating the thermal discomfort issues. To increase room comfort, it is recommended to install individual room reheat coils controlled in parallel with the room radiation devices through a single zone thermostat.

Two estimates are indicated in the spreadsheet above. The first estimate is for revisions to the ductwork, dampers and thermostats to accommodate the previous office revisions and improve ventilation and thermal comfort with the system available. Along with the H2 item it will also fund ductless split systems in the conference room. The second estimate is an increase to the first, to replace the zone dampers and manual radiation valves with VAV heating terminal units and automatic radiation valves to provide true individual room comfort control. A second less expensive option is to only replace the manual valves with automatic control valves.

- H4.** The men's toilet fan is ventilated with timer switch operated ceiling fan. The Women's toilet fan is interlocked with the rooms light switch. The type of fan and physical size indicate that they do not provide enough ventilation to properly exhaust the room. In addition, the number of toilet fixtures and showers require that the ventilation be continuous when the building is occupied. Replacement of the fans and interlocking them with the air unit operation is recommended.
- H5.** For stove top appliances, where grease vapors may be exhausted, a type 1 hood is required. This hood has a flat filter which is not allowed in new hoods as grease can drip into the food being prepared. The ductwork is galvanized and not sealed liquid tight. In addition the exhaust fan does not discharge the code required distance above the roof. The building occupancy has changed slightly and indications are that the stove and exhaust system are rarely utilized, unlike the other 6 fire stations. A new type 1 hood equipped with a fire suppression system and vented with approved liquid tight ductwork is recommended if this stove continues to be utilized for cooking food that produces grease vapors.
- H6.** Inadequate exhaust in some toilet/locker spaces and there is no exhaust in the janitors room and storage rooms where chemical/cleaning supplies are stored. Fans where installed, are operated via timer or light switches. An exhaust system improvement project is recommended to improve building ventilation.
- H7.** The boiler system was replaced in 2007. The boiler is a low-pressure steam boiler. The boiler was inspected in 2020. A condensate pump is located behind the boiler. During the last evaluation walk-through the pump was leaking and spare seals were purchased. The pump appears to have been repaired.
- H8.** There is very little pipe insulation installed on the building steam and condensate piping. Insulation was visible in some occupied areas and storage areas. Uninsulated piping is visible in the mechanical rooms and apparatus room, where the majority of the building piping is located. The bare piping radiates uncontrolled heat which will affect thermal comfort.
- H9.** The fin tube and radiator units are controlled with Danfoss valves. Some of the radiator units are covered with sheet metal covers to prevent physical contact. The unit in the women's toilet is positioned poorly, the

Fire Station #1 Fire Department HVAC Systems

insulation is falling apart, and the past electric heater use suggests it is inadequate to maintain the space temperature.

- H10.** The mechanical room ventilation consists of an outside air louver covered with a damper. The ventilation damper opens when the boiler is firing. The louver is otherwise closed. There is no make-up air for the water heater combustion. This damper should remain partly open, even in the closed position to accommodate the water heat combustion needs. A generator is located outside of the mechanical room. If the fire door to the boiler room was shut, the generator combustion air would be shut-off. The intake louver is too close to the gas meter and its regulator. A project to provide combustion ventilation for the generator and pipe the gas regulator away from the intake louver is recommended.
- H11.** A small Simplex fractional horsepower air compressor serves the building pneumatic control system. The building pneumatic controllers consist mainly of a few control valves on apparatus room equipment. The remainder of the control system (air unit, room terminal units, and boiler) is low voltage electric (DDC) controls. It is recommended that building improvement projects include the replacement of the pneumatic controls with low voltage devices. This will allow the removal of the air compressor.
- H12.** A steam unit heater and unit ventilator provide heat to the apparatus room. A make-up air unit and exhaust fan was installed in 1987. These units were originally operated by a manually operated timer switch. The building occupants indicated they believe these units to be abandoned. The exhaust duct has been cut back to a height of 8 feet (originally terminated at 18" above the floor). The exhaust should be extended to near the floor for best contaminant removal. The make-up air unit outside air intake has been capped off.

A vehicle exhaust system is connected to each truck parked in the garage. This system operates whenever a truck is started and the vehicle exhaust is expelled from the garage. The fan is mounted on the roof with an extended stack head.

An enclosed garage has specific exhaust code requirements, and the garage is required to have a negative pressure in relation to the living/occupied quarters. A garage exhaust system may operate continuously, operating at a minimum level when the garage is unoccupied and operating at a maximum level when the garage is occupied or a vehicle is started. Alternately a garage exhaust system may operate intermittently if it meets 4 specific code provisions including the installation of a gas detection system. The vehicle exhaust system alone does not meet the ventilation requirements for an enclosed garage. Although the system mitigates/minimizes vehicle emissions into the space, the building codes have not allowed for the use of a vehicle exhaust system as an exception to the garage ventilation requirements. A garage exhaust fan upgrade project to install new make-up fan, exhaust fan, ductwork, and control systems is necessary to improve garage ventilation and occupant safety.

- H13.** A laundry dryer is located in the apparatus garage. The dryer terminates inside the room. This termination allows warm, moist air to be vented directly into the garage. This vent should be terminated outside.

**Fire Station #1
Fire Department
HVAC Systems**



Roof top air unit



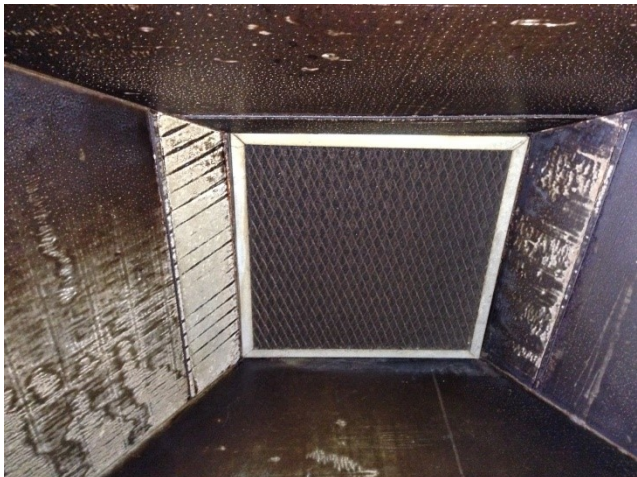
Roof exhaust hood



Ceiling mount fan (typical)



Kitchen exhaust fan



Kitchen hood (inside view)



Boiler

**Fire Station #1
Fire Department
HVAC Systems**



Condensate pump



Radiation unit (typical)



Uninsulated pipe (typical)



Poor insulation condition



Wall built over valve



Radiator at women's toilet

**Fire Station #1
Fire Department
HVAC Systems**



Supply grille (typical)



Destratification fan



Temperature control air compressor



Typical thermostat (This one too close to fridge)



Exhaust fan manual switch (typical)



Dryer vent (indoors)

**Fire Station #1
Fire Department
HVAC Systems**



Unit ventilator (steam)



Through wall air conditioner



Gas meter (intake louver out of frame)



Steam unit heater (bare piping)



Make-up air unit



Vehicle exhaust fan

electrical systems

summary

The building is served by two utility services, a 200 Amp and a 100 Amp, 120/208 Volt, three phase. The panels are in fair condition but have limited future capacity. The water main over the panels is a code violation. The emergency generator serving the building is in fair condition. The emergency system is fed from a single transfer switch which feeds three separate small emergency panels. The panels are in fair condition but have limited future capacity. An additional transfer switch and panel board is recommended to separate the critical and equipment loads from the life safety loads.

The outlets within the garage are not GFCI protected. Lighting fixtures are in good to fair condition and utilize T8 lamps and ballasts and compact fluorescent lamps. There are occupancy sensors located in the toilet rooms and in the conference room, but the facility should install occupancy sensors in offices, storage rooms and janitor's closets. Decorative compact fluorescent building mounted fixtures are in good condition; consideration should be given to replacing with more efficient and lower maintenance LED fixtures in the future.

The server equipment is in good condition and the facility is pulling Cat 5 data and voice cabling and coax for CATV. The fire alarm system includes stand-alone smoke detectors and carbon monoxide detectors throughout the building, which are in good condition.

legend

D	Deficient – Immediate Replacement	CP	Critical Priority – Replace in 1-2 years	HP	High Priority – Replace in 3-5 years	F	Fair – Replace in 6-10 years	C	Compliant/ Adequate	N	New	N/A	Not Applicable
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electrical systems	grade	budget cost	notes	comments
electrical service				
Utility service entrance	C			Two overhead utility services, one 200 Amp, one 100 Amp enter the building on the north side into the 2 nd floor electrical closet. Water main over panels is a code violation.
normal power distribution equipment				
Main disconnect(s)	F			200A Bulldog Electric disconnect in fair condition. MCB in fair condition.
Branch panels	HP	\$6000	E1	Two panels on 2nd floor, two panels on 1 st floor. Bulldog Electric panel on 2 nd floor in poor condition, Square D load centers in good condition.
emergency power distribution equipment				
Generator	F			10 KW Kohler natural gas generator in fair condition.
Transfer switch	HP	\$6,000	E2	Kohler 50 Amp ATS in fair condition.
Disconnect switch	C			50A/2P Square D disconnect on incoming generator feed to the ATS in the boiler room in good condition.
Branch panel	HP	\$18,000	E2	Three small Square D load centers in fair condition with limited future capacity. Mixed loads.

**Fire Station #1
Fire Department
Electrical**

electrical systems	grade	budget cost	notes	comments
Receptacles	D	\$1500	E3	Garage outlets need to be GFCI. Outlets within 6' of sinks need to be GFCI.
lighting				
Garage	C		E4	Industrial fixtures with T-8 lamps in good condition.
Office spaces, conference rooms, and corridors	F	\$2,000	E4	Recessed acrylic lens troffers with T-8 lamps in good to fair condition.
Sleep rooms and toilet rooms	C		E4	Recessed acrylic lens troffers in good condition.
Mechanical spaces, storage rooms, utility areas	F	\$3,000	E4	Ceramic lamp holders with screw-in compact fluorescent lamps, surface mounted wraps and industrial strips with T-8 lamps, in fair condition.
Exterior	F	\$6,000	E4	Decorative wall mounted fixtures are in fair condition. Fixtures are utilizing screw-in compact fluorescent lamps.
lighting controls				
Conference or meeting rooms	C		E5	Existing occupancy sensors
Offices	HP	\$4,000	E5	Add occupancy sensors.
Toilet rooms/ small storage rooms	F	\$1000	E5	Toilet rooms have occupancy sensors in good condition; add sensors in janitor and storage rooms.
emergency egress lighting and exit signs				
Corridors	C			Fixtures connected to emergency panel.
Exit signs	C			LED in good condition.
fire alarm devices				
Smoke detectors	C			Stand-alone smoke and carbon monoxide detectors throughout the building.
tele-data system				
Racks, cabinets, cabling and jacks	C			Cat 5 cabling.

notes:

- E1. Consideration should be given to replacing the existing Bulldog Electric panel (that is in poor condition and will have limited parts available) with a new panel.
- E2. Recommend providing an additional automatic transfer switch and panel board to separate the critical and equipment branch loads from the life safety loads. The existing panels have several circuits listed as "unknown". These circuits should be traced and identified to get a better idea of available capacity.

Fire Station #1 Fire Department Electrical

- E3.** Replace all outlets located in the garage area with GFCI type device. Replace existing kitchen outlets with GFCI type device unless they are currently protected from the adjacent GFCI outlet. If this is the case, the outlet should be labeled per NEC requirements.
- E4.** Consideration should be given to replacing older non-LED fixtures with new LED ones.
- E5.** Occupancy sensors should be installed in the offices, storage rooms, and janitor's closets to provide additional energy savings. If areas are renovated, controls will be required to be updated to meet current energy code.



Electrical utility service entrance



Electrical utility service entrance



200A service meter and disconnect



100A service meter and disconnect

**Fire Station #1
Fire Department
Electrical**



10kw generator



50A transfer switch



Emergency panel #3



Emergency panel #1



Emergency panel #2



Existing panel

**Fire Station #1
Fire Department
Electrical**



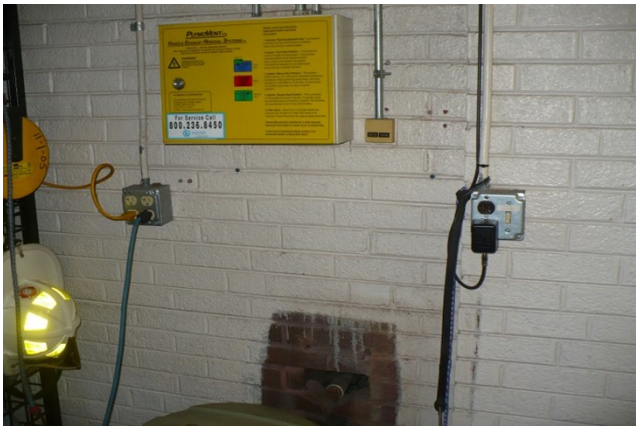
Existing panel



Existing panel



Exterior receptacle



Garage receptacles



Kitchen receptacles



Office lighting

**Fire Station #1
Fire Department
Electrical**



Stand-alone smoke & carbon monoxide detectors



Exterior fixture



Garage lighting



Exit sign

FACILITY ASSESSMENT

Document prepared for:

City of Green Bay

Green Bay, WI

Municipal Court

Comm. No. 22CGB12.00

September 30, 2022

Facility Assessment
City of Green Bay | Green Bay, WI
Comm. No. 22CGB12.00

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report description

An assessment of the Municipal Court was conducted in 2015 by Berners Schober which reviewed the condition of the building's architectural, structural, mechanical, plumbing and electrical elements. This report, done in the summer of 2022, is an update to the previous assessment. Each building was re-surveyed by trade and the reports updated. Below are brief summaries of the changes to the building in the intervening 7 years.

architectural

The roof was replaced since the previous assessment. Minor damage to fascia panels occurred in the winter of 2021/22.

Interior finishes have experienced additional wear. The code issues at the front stair have been corrected.

code/accessibility

The Wisconsin building code has been updated since the last assessment to referencing the 2015 International Building Code (IBC). The 2015 IBC references the 2009 ICC A117.1 Accessible and Usable Buildings and Facilities code. The 2010 ADA Standards remain in effect since the previous assessment. Major building elements, such as the stair and elevator shafts, are unchanged.

Since the 2015 assessment there have been no changes to accessible features.

structure

Structural elements have exhibited little change since the previous assessment.

plumbing

No changes since previous assessment.

fire protection

There has been no change to the fire protection system since the last assessment.

mechanical

The hot water boilers and pump were replaced since the last evaluation and a few supply duct terminations were modified in the basement occupied areas.

electrical

No major changes or updates were done to the facility since the last assessment.

ITEM	DEFICIENT (d) Immediate Replacement	CRITICAL PRIORITY (cp) Replace in 1-2 years	HIGH PRIORITY (hp) Replace in 3-5 years	COST ESTIMATE
Municipal Court				
architectural			Expansion joint	\$2,000
code			Plumbing fixtures	\$400
code			Ramp and handrails	\$1,500
plumbing			Insulation	\$5,000
plumbing	Code issues			\$2,000
plumbing	Add TMV (code issue)			\$6,000
HVAC		Air unit housing		\$250,000
HVAC		Air unit coils		\$incl
HVAC		Air unit fan		\$incl
HVAC		Air unit filters		\$incl
HVAC		Air unit controls		\$incl
HVAC			Air unit ductwork	\$40,000
HVAC			Air unit insulation	\$4,000
HVAC			Occupied space thermal comfort	\$28,000
HVAC			Exhaust ductwork	\$16,000
HVAC			Pipe insulation	\$7,000
HVAC	Elevator machinery room ventilation			\$13,000
electrical	Add additional Emergency lights			\$5,000
electrical		Install additional horns & horn/strobes		\$10,000
electrical		Smoke detector at elevator-per code		\$1,000
electrical	Install shunt-trip control at elevator power			\$8,000
Municipal Court Total				\$398,000

architecture

The building was constructed in 1967 of masonry cavity walls with aluminum fascia panels. The overall building is in good condition.

building envelope

roof

The roof was replaced since the previous assessment and is in good condition.

exterior walls

Brick wall are in generally good condition. Sealant at expansion joints is beginning to show signs of cracking. The fascia panels at the southwest corner of the building are out of alignment with the rest of the fascia. Building maintenance personnel report that this area was hit last winter by a payloader plowing snow. The structure itself was not damaged.

exterior windows and doors

The composite panel portion of the windows has faded but is in otherwise serviceable condition.

interior conditions

floors

Basement carpet is stained and has ripped areas at seams. Mosaic tile in basement toilet rooms is in good condition. Vinyl composite tile at back exit door has two tiles missing and has some staining. Vinyl stair treads and risers are worn but serviceable.

First floor carpet at open office has bubbled in some areas and is showing wear. Carpet in courtroom is in good condition. Toilet rooms and main lobby floors were replaced in the 2000 upgrade and are in good condition.

walls

Walls are in generally good condition. Glazed tiles in basement toilet rooms have holes from previously mounted equipment.

ceilings

There are some stained and misplaced ceiling tiles above the front stair shaft. The basement has a mix of tile styles. Some, primarily in workout rooms, have bowed or mis-placed tiles. Air vents in basement toilet room are rusted. A ceiling tile in the back stair is missing, reportedly from wind entering the building during winter use of the back door.

doors and frames

Metal door frames in basement have chipped paint.

equipment and casework

Toilet partitions in basement are rusting at the lower edges. Most casework is in good condition. The wood trim along the patron side of the reception desk has worn finish off the edges.

legend

D	Deficient – Immediate Replacement	CP	Critical Priority – Replace in 1-2 years	HP	High Priority – Replace in 3-5 years	F	Fair – Replace in 6-10 years	C	Compliant/ Adequate	N	New	N/A	Not Applicable
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architectural elements	grade	budget cost	notes	comments
exterior elements				
Roof condition	N			
Expansion joint	HP	\$2,000	A1	
Metal fascia panels	F	\$1,000	A2	
Metal spandrel panels	F		A3	
interior conditions				
Floors	F		A4	
Doors and frames	C		A5	
Casework	C		A6	
Partitions	F		A7	
Ceilings	F		A8	

notes:

- A1.** Replace dried or cracked sealant at expansion joints.
- A2.** Replace or repair loose aluminum fascia panels at southwest corner of building.
- A3.** Plan for future replacement of metal spandrel panels at windows.
- A4.** Replace missing vinyl composite tiles in back stair. Repair ripped carpet at Cardio room.
- A5.** Repaint door frames in basement.
- A6.** Touch up stain and re-seal finish at reception counter.
- A7.** Short-term maintenance: remove rust and re-paint toilet partitions at basement. Long-term planning: coordinate new partitions with accessibility upgrades. See Code report.
- A8.** Replace all missing or stained ceiling tiles. At back (west) entry, provide hold-down clips to prevent tiles from being dislodged by winter winds and pressure changes.
- A9.** Replace rusted ceiling diffuser in toilet rooms.

**Municipal Court
Police Department
Architectural**



Exterior brick in good condition



Aluminum fascia panels



Dried and cracking expansion joint material



Transom panels at windows



Missing vinyl tile at back door



Ripped carpet at cardio room

**Municipal Court
Police Department
Architectural**



Chipped paint at basement door frames



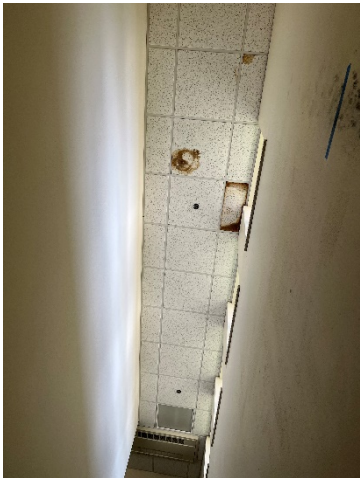
Worn finish at reception counter



Rusted bottom of women's toilet partitions



Rusted bottom of men's toilet partitions



Ceiling at front stair shaft



Rusted ceiling diffuser at basement toilet room



Missing ceiling tile at back stair shaft

**code compliance and accessibility
building data**

code references based on 2015 IBC

year(s) constructed	1967 original construction 2000 renovation of 1 st floor	gross area	Basement: 6,277 SF 1 st Floor: 6,277 SF
occupancy classification (chapter 3 of IBC)	Business		
construction type (chapter 6 IBC)	Construction Type V-B		

summary of code compliance/life safety

Summary of the building type and occupancy classification from the previous study is still applicable. In general, any renovation to a space would need to meet current codes, as modified in the International Existing Building Code.

egress and safety

Two means of egress are provided from all areas on both floors.

stairs, ramps and shafts

Both front and rear stair shafts appear to be code compliant. The front stair is accessed from the central lobby, as opposed to egressing directly to an exit.

There is an exception to the requirement to discharge directly outside in IBC 1028.1 Exceptions 1 and 2, whereby 50% of exits may egress through an area on the level of discharge provided conditions are met. One of those conditions is that the exit doors are “readily visible and identifiable from the point of termination of the enclosure.” Since the exit doors are around a corner from the stair door, this would not comply with the intent of the code. It is presumed to have complied with code at the time of its construction, and is therefore allowed to remain. If a renovation of the stair shaft were to occur, this situation would need to be addressed.

handrails and guardrails

No change from previous assessment: handrail extension at front stair is not feasible due to configuration. Presumed to have complied with code when built.

summary of accessibility/ADA compliance

ADA standards

The Americans with Disabilities Act places establishes an additional level of requirements on public and commercial facilities in terms of accessibility. Unlike a building code, it is a federal law which requires continual compliance, regardless of when a building was built. Accessibility items noted in this report fall under this category and should thus be addressed in a timely manner.

accessible route

The elevator provides accessibility to both floors of the building. The judge’s bench is on a platform which is not accessible. If this is an issue for any judge using the facility, space is available to add a ramp access to the platform.

Passage and door width into basement Women’s toilet rooms is not wide enough to be accessible.

doors

Doors on 1st floor are accessible width and have lever handles. Some doors in basement have knob handles which are not accessible. (Example: entry to Women’s room from locker area.)

casework

Reception counter provides accessibility at both lower seated and higher standing height. Breakrooms should provide a workspace at accessible 34” height.

plumbing fixtures

Basement toilet stall are not accessible. The vertical grab bars are missing from each of the toilet rooms and stalls on 1st floor. These are needed to comply with code and ADA guidelines.

As noted in previous report, both basement and 1st floor break rooms should provide workspace and sinks at accessible 34” height.

legend

D	Deficient – Immediate Replacement	CP	Critical Priority – Replace in 1-2 years	HP	High Priority – Replace in 3-5 years	F	Fair – Replace in 6-10 years	C	Compliant/ Adequate	N	New	NA	Not Applicable
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architectural elements	grade	budget cost	notes	comments
code compliance / Life safety				
Egress and Safety	C			
Stairs, ramps and shafts	C			
Handrails/guardrails	C		CA3	
accessibility / ADA compliance				
Accessible route	HP	\$1,500	CA1 CA2	Cost for ramp and handrails only.
Doors	F		CA4	
Casework	F		CA5	
Plumbing fixtures	HP	\$400	CA5 CA6	

notes:

- CA1.** Route into basement Women’s room is not accessible due to width of passageway.
- CA2.** If a judge is in need of accessibility to the judge’s platform, provide ramp access and appropriate handrails.
- CA3.** If front stair shaft is modified, provide handrail extensions per code.
- CA4.** Recommend replacing knob door hardware with lever handles.
- CA5.** Provide workspace in breakrooms at accessible 34” height. Could be separate table.
- CA6.** Add vertical grab bars to accessible toilet rooms.

**Municipal Court
Police Department
Code & Accessibility**



Narrow entry to basement Women's room



Knob hardware at basement Women's room



Step up to judge's platform



Break room counter/sink at 36"



1st floor unisex toilet room – missing vertical grab bar



Break room counter/sink at 36"

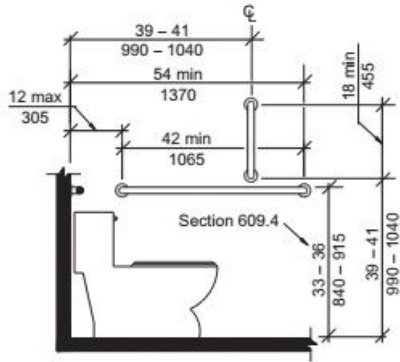
**Municipal Court
Police Department
Code & Accessibility**



1st floor Women's – missing vertical grab bar



1st floor Men's – missing vertical grab bar



Note: For children's dimensions see [Figure 609.4.2](#)

FIGURE 604.5.1 SIDE WALL GRAB BAR FOR WATER CLOSET

ICC A117.1 graphic showing vertical grab bar

structural system

summary

The structure consists of steel roof deck and open web steel joists supported by exterior load-bearing masonry walls, and concrete filled metal form deck over open web steel joists at first floor supported by exterior basement walls and an interior steel frame of steel tube columns and wide flange beams.

legend

D	Deficient – Immediate Replacement	CP	Critical Priority – Replace in 1-2 years	HP	High Priority – Replace in 3-5 years	F	Fair – Replace in 6-10 years	C	Compliant/Adequate	N	New	NA	Not Applicable
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structural elements	grade	budget cost	notes	comments
year				1967 (Former Employment Security Building by State of Wisconsin – Department of Administration)
structure type				
Foundations	C		S1	Cast-in-place concrete foundation/basement walls bearing on individual spread or continuous strip footings.
Basement	C			4" concrete slab on grade with 6x6 #10/#10 wire mesh reinforcing.
First floor	C			3" concrete slab on metal form deck over open web steel joists, supported by exterior basement walls and an interior steel frame of steel tube columns and wide flange beams.
Roof	C			1½" A-20 steel roof deck and type "LH" open web steel joists supported by exterior load-bearing masonry walls.
building risk category	NA			Risk Category II
construction type	NA			Construction Type II-B (0-hour beams, columns, floor slabs, 0 hour roof)
vertical expandability	NA			None.
typical column spacing	NA			
overall structural condition	C			The existing building is structurally sound with no significant deficiencies noted.

notes:

- S1. There is a minor vertically oriented shrinkage crack below the steel beam bearing location in the east foundation wall of the basement storage room. The crack shows no evidence of movement or water infiltration and is not a cause for structural concern. No remedial action is recommended at this time.



Concrete shrinkage crack in basement storage room (Note S1)

**plumbing systems
summary**

The Municipal Court building was constructed in approximately 1967 and remodeled in 2000. The original piping is in fair condition. Majority of the water and storm piping is insulated. A thermal mixing valve (TMV) should be added to the system. This is a code issue which needs to be corrected.

Building is served by four 3” roof drains along the outer edge. Building was re-roofed in 2000. Roof has no internal secondary drainage or relief scuppers, which is a code issue.

Plumbing fixtures in the Basement toilet room are older and could be updated to conserve water. The 1st floor fixtures were updated in 2000. Building utilities in general appear adequate.

legend

D	Deficient – Immediate Replacement	CP	Critical Priority – Replace in 1-2 years	HP	High Priority – Replace in 3-5 years	F	Fair – Replace in 6-10 years	C	Compliant/ Adequate	N	New	N/A	Not Applicable
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plumbing systems	grade	budget cost	notes	comments
Water piping condition	F		P1	Copper piping
Sanitary piping condition	F		P2	PVC & cast iron
Storm/clearwater piping condition	F		P3	Cast iron
Valves	F		P4	Gate & ball
Domestic water service	C		P5	2” main, 4” combined water service
Insulation	HP	\$5,000	P6	Add “missing” insulation
Code issues	D	\$2,000	P7	Add TMV, relocate FP drain
equipment				
Water heater	F		P8	Newer electric heater
Recirculation pump(s)	F		P9	
Water softener	NA			No water softener installed
Thermal mixing valve (TMV)	D	\$6,000	P10	Add TMV (code issue)
Backflow preventer	F		P12	
Elevator sump/pump	C		P13	Simplex
Drain tile sump pump	F		P14	(3) Simplex, (1) Duplex
Sanitary ejector pump	F		P15	Duplex
fixtures				
Plumbing fixtures	F		P11	

**Municipal Court
Police Department
Plumbing**

plumbing systems	grade	budget cost	notes	comments
exterior				
Storm drainage, roof drains	F		P16	
Water main	F		P17	
Lawn irrigation	NA			

notes:

- P1.** Water piping is mainly copper, soldered joints in fair condition. There are some pre-press connections at the water heater. Some sections of piping are missing insulation. Repair as required.
- P2.** Original sanitary is cast iron hub & spigot. 2000 remodeling is cast iron no-hub. Pump discharge piping from ejectors is newer PVC.
- P3.** Storm piping is cast iron hub & spigot. Piping is insulated with glass fiber. Pump discharge is original galvanized or newer PVC.
- P4.** Original valves are gate; newer valves are ball.
- P5.** Building is served by a 4" water service for the combined fire protection and domestic water. 2" water main, 1" meter set with a 3-valved by-pass in the Mechanical room.
- P6.** Water and storm piping is insulated with glass fiber. Some sections of water piping are missing insulation. Repair as required.
- P7.** Code issues: water temperature is set at 120° Fahrenheit - maximum temperature to be 110-115 degrees Fahrenheit. No thermostatic mixing valve (TMV) at the heater. Add TMV per code. Fire protection drain discharges to a janitor's sink in the basement, which is not allowed per code for in-direct waste discharge. Re-route drain piping to a nearby floor drain. Install hose end vacuum breaker on the hose bib at the water main.
- P8.** Water heater is electric, AO Smith model #ECS 40 200, 208/240Volt, 40-gallon unit. Piping has pro-press connections, also missing insulation. Repair as required. 1" HCW connections.
- P9.** Existing B&G 120Volt recirculation pump with timer. ¾" hot water return piping to pump.
- P10.** Add TMV at the water heater. Set hot water temperature to 110° Fahrenheit. A thermostatic mixing valve on the hot water system is required per code.
- P11.** Plumbing fixtures: Plumbing fixtures on 1st floor are ADA accessible. 1st floor Men's and Women's toilet rooms have wall-hung vitreous water closets (WC) at regular and ADA height. Urinal is wall-hung at 17" a.f.f.; lavatory is wall-hung with metering faucet. Safety covers installed. Lobby has bi-level ADA electric water coolers. Judge's Chambers has a tank-type WC installed, vitreous lavatory in countertop, lever handle control on faucet. Toilet room also has a fiberglass modular shower. Staff toilet room has wall-hung WC and lavatory and an older style electric water cooler (EWC) in the adjacent corridor.

Basement fixtures appear to be original vintage. WC's and lavatories are wall-hung, vitreous fixtures. Urinal is floor mount with flush valve. Break room sinks are stainless steel drop-in type with faucet. There is a newer ADA compliant EWC with a bottle filler located in the weightlifting area.

Each floor has a janitor's sink. Basement sink has the fire protection inspector's test indirect waste discharging to it-which is not allowed per code. Test drain needs to be routed to a floor drain. See note P7.

Exterior of building has non-freeze sill faucets installed.

Municipal Court Police Department Plumbing

- P12.** Janitor's sink faucet with hose connection ends has a threaded vacuum breaker installed. Sink faucet also has a diverter valve installed for a soap dispenser connection. **Note:** Typically, these soap dispensers are a source of cross-connection if the faucet is left on, as the cold water bleeds into the hot waterside. This becomes the reason for a lack of hot water and lower temperatures. Hose bib at the water main needs to have a hose end vacuum breaker installed.
- P13.** Elevator sump/pump is simplex, submersible with a high-water alarm installed.
- P14.** Building has four separate drain tile sump/pump locations. One unit is a duplex, other three are simplex pump(s), and all are submersible. Simplex unit in the workout area (located under the mats) has a high-water alarm installed. High water alarms should be installed on the other pumps also. **Note:** Typically, pump discharge connection(s) are made into the top of the gravity sewer – not into the side of the piping as these are installed.
- P15.** Sanitary ejector pumps are duplex top-mount. Pumps are 1 ½ hp, 208Volt, 3-phase.
- P16.** Building is served by four 3" roof drains with 4" roof leaders to below grade. Piping is insulated with glass fiber. There is no secondary roof drainage installed, which is a code issue. (International Plumbing Code 1108.1) Secondary drainage could have been added during the last re-roofing project.
- P17.** Utilities are fed from Jefferson Street. 4" water main to the building serves the domestic water and fire protection systems combined. 4" sanitary sewer. 4" and 6" storm sewers combined, route to a 6" storm main to the street. Parking lot has internal storm drainage with catch basin(s).



4" water service



Water piping

**Municipal Court
Police Department
Plumbing**



Water piping, Gate valve



Water piping



Sanitary piping (cast iron & PVC)



Storm piping - insulated



Storm piping, drain tile pump discharge



Water piping at water heater, pro-press piping

**Municipal Court
Police Department
Plumbing**



Water meter with by-pass



Electric water heater



Hot water recirculating pump



Water closet – 1st floor public men's



Lavatories – 1st floor public men's



Urinal – basement men's

**Municipal Court
Police Department
Plumbing**



Lavatories – basement women's



Water closet – basement men's



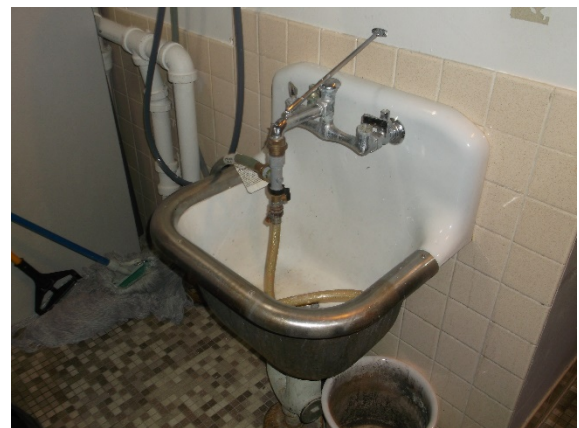
Water closet – judge's toilet room



Shower – judge's toilet room



Staff toilet room – 1st floor

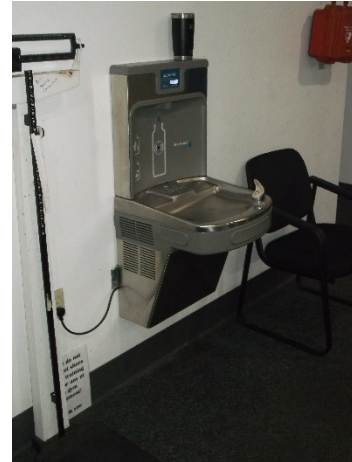


Janitor's sink

**Municipal Court
Police Department
Plumbing**



Electric water coolers – lobby



Electric water cooler – basement



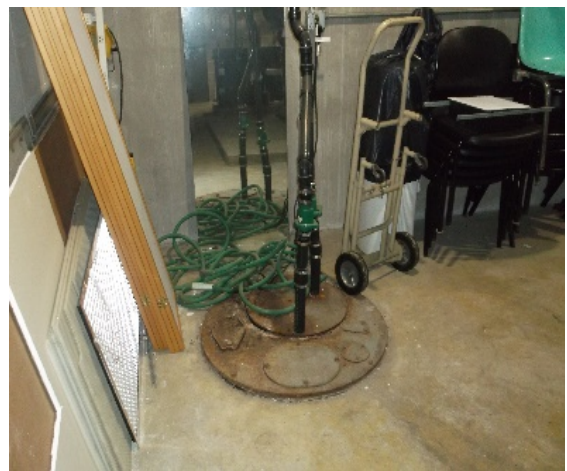
Basement sink



Elevator sump/pump



Elevator – high water alarm



Clearwater sump/pump

**Municipal Court
Police Department
Plumbing**



Drain tile sump/pump, alarm



Drain tile sump/pump



Sanitary ejector – duplex pumps



Breakroom sink -1st floor



Non-freeze sill faucet



Sanitary vent & roof drain

**Municipal Court
Police Department
Plumbing**



Roof & skylights



Sanitary vent & roof drain



Parking lot- catch basin

fire protection systems

summary

The Municipal Court building was constructed in approximately 1967 and remodeled in 2000. This building is partially sprinkled, with a fully sprinkled basement but no sprinkler system on the first floor main area.

The 4" water main comes into the basement through the east wall and supplies both the domestic water supply and the fire protection sprinkler system.

The sprinkler system piping, valves, sprinkler heads, and equipment appear to be in good condition and free of corrosion and leaks.

There are several minor deficiencies on the sprinkler system. They are not affecting the proper operation of the system but should be corrected. See note FP3.

legend

D	Deficient – Immediate Replacement	CP	Critical Priority – Replace in 1-2 years	HP	High Priority – Replace in 3-5 years	F	Fair – Replace in 6-10 years	C	Compliant/Adequate	N	New	N/A	Not Applicable
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fire protection	grade	budget cost	notes	Comments
Water service	C		FP1	4" water service
Backflow prevention	C		FP2	
Fire pump	NA			Not Required
Fire pump controller	NA			
Jockey pump	N/A			Not Required
Jockey pump controller	N/A			
wet pipe sprinkler system				
Valves	F		FP3	
Piping	F		FP3	
Sprinkler heads	F		FP3	
Percent of building unit sprinkled	50%		FP3	Basement is sprinkled, first floor is not.
Elevator machine rooms sprinkled	C		FP4	
Electrical Switchgear room sprinkled	C		FP4	
Elevator hoist way pits sprinkled	C		FP5	
other fire protection systems				
Pre-action system	NA		FP6	
Kitchen hood system	NA		FP6	

notes:

- FP1.** The 4" combined water service enters the building in the basement and splits 2" to the domestic water system and 4" to the fire protection system.
- FP2.** The backflow preventer is an Ames 2000 SS 4" double check valve backflow preventer with OS&Y gate valves. The backflow preventer and the gate valves are in good condition.
- FP3.** The basement level and the stairwells are fully sprinkled. The deficiencies on the fire sprinkler system include the following. The sprinkler flow indicator stickers installed on the piping to the fire department connection are pointing in the wrong direction. The automatic ball drip valve on the fire department connection check valve is capped. This drip valve is meant to allow water in the check valve to drip out to prevent freezing. A pendent sprinkler head was discovered that was not replaced with an upright head when the ceiling was removed. The inspector's test drain is piped to a sink. There are a few upright sprinkler heads that are not piped to within 6" of the bottom of the metal deck – minor deficiency. All valves, piping, and sprinkler heads appear to be in good condition. The piping shows no indication of corrosion and the valves appear to be in good condition.
- FP4.** The elevator equipment room and hoist-way pit are sprinkled which meets the requirements of NFPA 13.
- FP5.** The elevator is hydraulic which requires sprinkler heads both in the pit of the hoist-way shaft and in the elevator equipment room. Sprinkler heads are located in both locations.
- FP6.** There are no kitchens or server rooms requiring fire suppression systems in the building.



Fire department connection



Test connection

**Municipal Court
Police Department
Fire Protection**



Fire protection riser



4" double check backflow preventer



Flow direction points the wrong direction



Automatic ball drip capped



Pendent sprinkler head too far from ceiling



Sprinkler head with baffle in electrical room

**Municipal Court
Police Department
Fire Protection**



Inspector's test drain discharging in sink



Sprinkler head under duct



Sprinkler head – missing escutcheon



Sprinkler head in stairwell



Fire protection main

**HVAC systems
summary**

The building was constructed in 1967 and in 2000 was remodeled for the municipal court. The remodeling installed ductwork, VAV terminals and heating devices on first floor and minimally renovated the basement systems. The basement was renovated about ten years ago to create police department work-out spaces. The HVAC systems were minimally affected with the latest renovations. Minor grille and duct modifications have been made on the lower level since the last evaluation.

A modular air unit installed in a basement mechanical room serves the entire building. The system has filtration, heating coil, and a refrigerant cooling coil which serves an outdoor condensing unit. The condensing unit was replaced about eight years ago, according to maintenance staff. The air unit continues to underperform, leading to temperature and high humidity issues in the building. The building is under-ventilated and the unit does not have capacity to take on additional outside necessary to adequately serve the occupant design requirements. The air unit mechanical room is very cramped. The air unit is past its expected useful life. Components are being maintained and replaced as they fail but, due to the cramped conditions, maintenance is difficult and time consuming. Replacement of the unit will require an extended period of outage.

Due to the low structure clear height in the basement, the ductwork has been routed through the joist space and has been sized as medium pressure ductwork, which increases air velocity and noise. Grilles through the basement area are loud. The basement remodeling has left some ductwork in a semi-abandoned state. The main supply ducts are insulated with duct liner and the insulation has eroded slightly.

Exhaust ventilation for toilet rooms, janitor closets and other miscellaneous spaces is served by a variety of power roof ventilators and ceiling exhaust fans. The fans vary in age, size and condition, as they have been installed and replaced during the various remodeling projects.

A hot water boiler installed adjacent to the air unit serves the building heating requirements. The boiler system, piping, and venting was replaced in the last couple years. No operational issues were noted with this system. Piping and insulation is, in general, original to the building with some exceptions at the revised VAV terminals installed in 2000. Piping insulation is missing or in disrepair in a variety of locations and is missing in areas where maintenance staff has required access to the piping and system components and insulation was not replaced.

The controls are low voltage DDC. An operator terminal is located in the mechanical room.

legend

D	Deficient – Immediate Replacement	CP	Critical Priority – Replace in 1-2 years	HP	High Priority – Replace in 3-5 years	F	Fair – Replace in 6-10 years	C	Compliant/ Adequate	N	New	N/A	Not Applicable
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HVAC systems	grade	budget cost	notes	Comments
Air unit			H1	Trane modular unit. Unit’s exact age unknown but appears to be at least 30 years old.
Housing	CP	\$250,000	H1	Maintenance staff has kept unit operating, well past expected useful life.
Condensing unit	F			Carrier Unit model 38aks028, R-22
Air intake	C			Area way to six feet above grade.
Coils	CP	(incl)	H1	Hot water and refrigerant coils.
Fan	CP	(incl)	H1	15 HP, 11,000 CFM
Filters	CP	(incl)	H1	30%

**Municipal Court
Police Department
HVAC Systems**

HVAC systems	grade	budget cost	notes	Comments
Controls	CP	(incl)	H1	DDC, Valves have been replaced.
Ductwork	HP	\$40,000	H1	Original except where replaced during projects. Medium pressure. Loud and leaky. Sealing and/or replacement required.
Insulation	HP	\$4,000	H1	Duct liner is slightly eroded. Most piping insulation is in fair condition. Poor at AHU control valves.
Occupied space thermal comfort	HP	\$28,000	H1	Some VAV units do not have reheat coils, rooms can overcool.
exhaust fans			H2	
Toilet/locker room exhaust	F			Multiple fans. PRV, cabinet, centrifugal.
Exhaust ductwork	HP	\$16,000	H2	Mostly original. Minimal replacement during renovation projects. Lint/dust is coating the grilles and ductwork in the basement, less on first floor. Recommend cleaning, sealing, and rebalance.
boiler system			H3	
Boilers	C		H3	Apex commercial boiler
Pumps	C			Taco, in-line pumps
Piping	C			Mix of copper and steel.
Pipe insulation	HP	\$7,000	H3	Insulation missing at a variety of locations. Poor condition around unit coils.
Room terminal units	C			Convectors, VAV, cabinet heaters.
Mechanical room ventilation	D	\$13,000	H4	Elevator machinery room is not separate system.
controls			H5	
DDC	C			Upgrade front end with major equipment replacement project.

notes:

H1. The unit is an indoor modular unit with hot water heating coil, refrigerant cooling coil and VAV control. The unit appears to be at least 35 years old, which exceeds the units expected useful life. The condensing unit was replaced approximately 8 years ago as the old one had failed. Maintenance staff has replaced components on this unit as they have failed, which has allowed the unit to maintain operation to this point. Eventually, corrosion, tube erosion, and metal fatigue will cause major failure of the coils and/or fans. The mechanical room is extremely tight and a replacement will require an extended period of downtime. The unit is undersized to adequately ventilate the building and temperature and humidity issues require the use of supplemental systems and dehumidifiers to maintain comfort. A project to replace the air handling unit, possibly with an outdoor, on-grade unit, is recommended.

The supply ducts are lined. Duct liner erodes over time. This will lead to system inefficiency and condensation which will damage building material. It is recommended to seal the ductwork and install duct wrap insulation during renovation projects.

An older DDC control system controls the air unit and VAV controls. The system is operational but will require updating when the unit is replaced.

Municipal Court Police Department HVAC Systems

Some VAV terminals did not have reheat coils and temperature control is dependent on the room's load and terminal's ability to shut-down. These units are primarily located in the basement, which has been revised to work-out space. The HVAC was not modified during the room revisions and the spaces were quite cool when unoccupied. During the basement remodel, some ductwork was removed and left in a partially abandoned state. Some grilles were removed, and the ductwork is left open to blow into the space, while other grilles remain and are quite noisy. A project to add reheat coils and modify the basement ductwork is recommended to improve occupant comfort and reduce noise levels.

H2. The building exhaust system is served by multiple fans of various sizes and types. The ages and conditions vary greatly, as the units have been modified and replaced as necessary. Dust and lint build-up is prevalent at the lower-level grilles and ducts. Air flow within these spaces appears diminished and can be attributed to older leaking ductwork combined with the dirtying of the systems. Duct cleaning, taping, sealing, and air balancing are recommended.

H3. The boiler system has been replaced since the last evaluation. No operational issues were noted during the building walk-through.

Pipe insulation is missing or in disrepair in a variety of locations around the building. The insulation is especially poor around the air unit and boiler, where maintenance work has required the removal of the insulation and it was not repaired or replaced. It is recommended to insulate this piping and repair insulation during an air unit and/or boiler replacement project.

H4. The elevator machinery room is exhausted by a building general exhaust fan. Code requires independent systems to serve elevators. A fan dedicated to the elevator room is recommended to be installed.

H5. Controls are low voltage DDC controls. The system will require an upgrade when a major equipment replacement project occurs. Upgrades will allow this building to be monitored from a central location.



Air unit



Air unit

**Municipal Court
Police Department
HVAC Systems**



Duct (sealed)



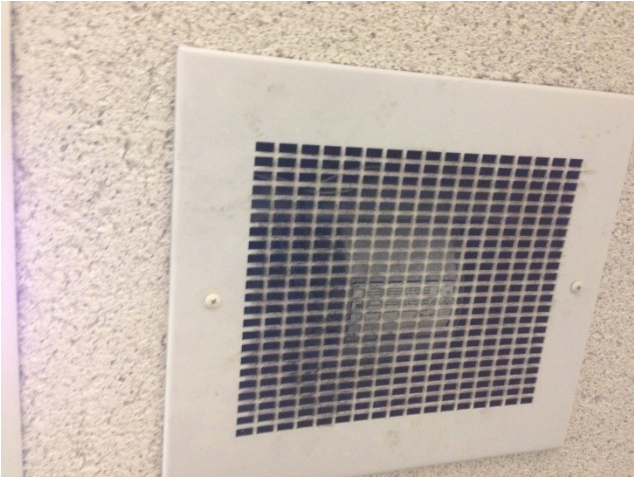
Circulation fan



VAV terminal (no reheat)



Older VAV terminal



Cabinet fan



Old grille (plugged)

Municipal Court
Police Department
HVAC Systems



Condensing unit



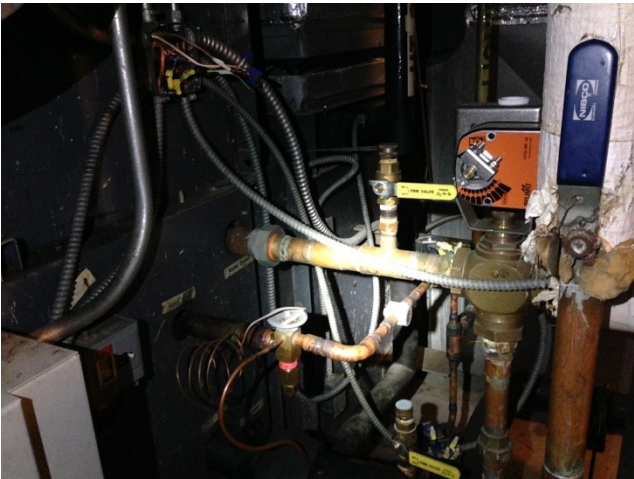
Refrigerant piping



Good insulation (typical)



Poor insulation (typical)



Air unit coils



Boiler

**Municipal Court
Police Department
HVAC Systems**



Hot water pumps



Gas meter



Area way



Variable frequency drive



Electric thermostat



Low voltage thermostat

**Municipal Court
Police Department
HVAC Systems**



Portable dehumidifier



Exhaust fan



Exhaust fan



Exhaust grille (degraded)

electrical systems

summary

The electric service is rated 600-Amps at 120/208-Volt, 3-Phase, and is fed underground from pole-mounted transformers located west of the building. The main distribution panel (MDP) is in the basement. It was installed during a renovation project in 2000. There is a spare 4" conduit routed from the MDP to the CT cabinet located on the building's west elevation. The MDP was manufactured by Square D, is in good condition, and has a total of 19.5-inches of unused space available for new circuit breakers. New and replacement circuit breakers are still available. There are three branch circuit panels. Two were added with the 2000 project and are manufactured by Square D (type NQOD); the other is manufactured by Westinghouse. The Square D panels are in good condition. New and replacement parts are available for the Square D panels; however, Westinghouse no longer manufactures electric panel boards or circuit breakers. All circuit breaker positions in all branch circuit panelboards are occupied.

Interior lighting fixtures predominantly use T8 fluorescent lamps with electronic ballasts. Generally, lighting fixtures appear to be in good condition. A few fixtures on the basement level are missing lenses or have sagging lenses. The majority of downlight/can fixtures utilize compact fluorescent lamps. The courtroom includes six incandescent downlight fixtures; there are approximately a dozen incandescent downlights in one of the fitness rooms in the basement. Some downlights have been retrofit with self-ballasted compact fluorescent lamps. Interior spaces are equipped with occupancy sensors or electronic timer switches that shut lighting OFF for energy conservation. Exterior lighting fixtures are soffit-mounted recessed HID (metal halide) controlled via a time clock.

Unit equipment or battery-packs are used for the emergency egress lighting; coverage does not comply with today's emergency egress illumination codes. Not all fixtures were operational.

The building has a zoned fire alarm system whose control panel was reportedly replaced in 2014. The panel has six spare zones. Coverage with audible and audible/visual alarm (A/V alarm) devices is not code compliant. The elevator lobby smoke detector outside the basement elevator doors is located too close to the sidewall and is not permanently fastened. This detector is mounted on a piece of 2x4 lumber spanning, but not fastened to the building's structural members. There is no evidence of a shunt-trip mechanism to automatically disconnect power to the elevator when sprinklers are activated in the elevator machine room and/or elevator shaft. A shunt-trip operation is required by code when the machine room and elevator shaft are protected by fire sprinklers.

In the basement, a few electrical boxes are missing covers and a couple of conduit runs are not supported properly. Code requires conduit be supported within 3-feet of a box and at intervals not exceeding 10 feet. Conduit penetrations through the east stairwell wall in the basement are not fire sealed.

legend

D	Deficient – Immediate Replacement	CP	Critical Priority – Replace in 1-2 years	HP	High Priority – Replace in 3-5 years	F	Fair – Replace in 6-10 years	C	Compliant/Adequate	N	New	N/A	Not Applicable
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electrical systems	grade	budget cost	notes	comments
electrical service				
Utility service entrance	C			600A, 120/208V, 3 phase 4-wire
normal power distribution equipment				
Main switchboard	C			Square D I-Line model is in good condition, and actively supported by the manufacturer.
Branch panels	F	\$9,000	E1	Replace the obsolete Westinghouse panel.

**Municipal Court
Police Department
Electrical**

electrical systems	grade	budget cost	notes	comments
emergency power distribution equipment				
Generator	N/A			There is no emergency power in the building.
lighting				
Atrium, office spaces, conference rooms and corridors	C			Mixture of parabolic and prismatic lensed fixtures using T8 fluorescent lamps and electronic ballasts; fixtures are generally in good condition.
Incandescent and fluorescent interior down lights	F	\$10,000	E2	Consider replacing the A19 incandescent lamped and self-ballasted compact fluorescent lamped downlights with LED fixtures.
Exterior soffit downlights	F	\$2,000	E2	Consider replacing HID lamped lighting fixtures in the exterior soffit with LED sourced fixtures
Mechanical spaces, storage rooms, utility areas	C			Ceramic lamp holders with screw-in compact fluorescent lamps, surface mounted wraps and industrial strips with T-8 lamps, in fair to good condition.
lighting controls				
Conference or meeting rooms	C			Existing occupancy sensors
Offices	C			Existing occupancy sensors
Toilet rooms/small storage	C			Occupancy sensors or electronic timer switches are used.
emergency egress lighting and exit signs				
Emergency battery packs and exit signs	D	\$5,000	E3	Add additional EM lights. Replace batteries; confirm lamps are good and fixtures work properly.
fire alarm devices				
Horns and horn/strobes	CP	\$10,000	E4	Install additional audible and audible/visual alarm devices.
Smoke detector at elevator, basement	CP	\$1,000	E4	Install per code.
Shunt-trip mechanism	D	\$8,000	E5	Install shunt-trip control on main power to elevator.
tele-data system				
Racks, cabinets, cabling, and jacks	C			Cat 5 and 6 cabling.

notes:

- E1.** Availability of new and replacement parts will eventually become an issue for the obsolete Westinghouse panels.
- E2.** Consideration should be given to replacing older non-LED fixtures with new LED ones.
- E3.** Keeping emergency egress lighting operational is important to limit liability exposure.
- E4.** When non-code required devices are voluntarily added to a fire alarm system, code requires the entire installation shall comply with code. There are several rooms without audible or audible/visual alarms. Smoke detector at elevator in basement requires attention.
- E5.** Code requires the power to the elevator be disconnected if fire sprinklers in the elevator machine room and/or elevator shaft are activated. Releasing water on energized electrical circuits could result in a passenger in the elevator being electrocuted.



MDP panel



Fire alarm panel



EM battery pack



Timer switch

**Municipal Court
Police Department
Electrical**



Detector not installed properly



Opening through wall common with stairway



Exit sign

FACILITY ASSESSMENT

Document prepared for:

City of Green Bay

Green Bay, WI

Police Station

Comm. No. 22CGB12.00

September 30, 2022

Facility Assessment

City of Green Bay | Green Bay, WI

Comm. No. 22CGB12.00

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report description

An assessment of the Police Station was conducted in 2015 by Berners Schober which reviewed the condition of the building's architectural, structural, mechanical, plumbing and electrical elements. This report, done in the summer of 2022, is an update to the previous assessment. Each building was re-surveyed by trade and the reports updated. Below are brief summaries of the changes to the building in the intervening 7 years.

architectural

The roof is scheduled for replacement and is not a part of this assessment. Exterior precast and brick have condition issues typical for weather exposure: brittle caulk, staining and cracking. Concrete canopy at the south has additional spalling. Door thresholds and weatherstripping are deteriorating. Metal framing and housings of shutters are faded and beginning to rust.

Most interior finishes exhibit additional wear and staining. Floor finishes show considerable wear.

code/accessibility

The Wisconsin building code has been updated since the last assessment to referencing the 2015 International Building Code (IBC). The 2015 IBC references the 2009 ICC A117.1 Accessible and Usable Buildings and Facilities code. The 2010 ADA Standards remain in effect since the previous assessment. Major building elements, such as the stair and elevator shafts, are unchanged.

Since the 2015 assessment there appear to have been no changes to accessible features.

structure

Structural elements have exhibited little change since the previous assessment.

plumbing

Shop air compressor was replaced. New unit is a Snap-On.

fire protection

There has been no change to the fire protection system since the last assessment.

mechanical

Gas fired unit heaters were installed in the garage since the previous assessment. The facility hot water boilers were replaced in 2022.

electrical

No major changes/updates to the electrical systems have been made since the last evaluation. Some additional exterior and interior lighting has been upgraded to LED.

Clearance around some panels was increased per recommendations. The server room has additional clearance space issues.

ITEM	DEFICIENT (d) Immediate Replacement	CRITICAL PRIORITY (cp) Replace in 1-2 years	HIGH PRIORITY (hp) Replace in 3-5 years	COST ESTIMATE
Police Station				
architectural		Precast panels		\$7,000 – \$8,000
architectural			Precast soffits	\$1,000 – \$2,000
architectural		Precast canopy		\$8,000 - \$12,000
architectural			Bollards at garage doors	\$6,000 – \$8,000
architectural			Weatherstripping at doors	\$500 – \$700
architectural			Exterior lintels	\$1,000 – \$2,000
architectural			Seal parking lot	\$27,000 – \$30,000
architectural			Carpet	\$45,000 – \$50,000
architectural			Vinyl Composite Tile	\$18,000 – \$22,000
architectural			Doors and Frames	\$8,000 - \$12,000
code			Showers	\$8,000 - \$10,000
code			Toilets/Urinals Men’s locker room	\$4,000 - \$6,000
code			Toilets/Urinals accessible 1 st floor	\$12,000 - \$15,000
plumbing			Domestic Water Heater	\$3,000
plumbing	Thermal Mixing Valve			\$8,000
plumbing	Backflow prevention			\$5,000
plumbing	Storm & roof drainage			\$8,000
HVAC		Air unit housing		\$435,000
HVAC			Insulation	\$8,000
HVAC			Occupied space thermal comfort	\$170,000
HVAC			Pumps	\$5,000
HVAC		Insulation		\$1,500
HVAC	Housing			\$2,500
HVAC			Housing	\$30,000
HVAC	Condensing units			\$2,500
HVAC			Exhaust ductwork	\$16,000
HVAC			Pumps	\$15,000
HVAC			Room terminal units	\$15,000
HVAC	Make-up air unit			\$140,000
HVAC	Exhaust			\$40,000
HVAC	Control			\$20,000

electrical			Transfer switch	\$25,000
electrical			Main distribution panel	\$10,000
electrical			Branch panels	\$25,000
electrical	Receptacles			\$1,500
electrical			Lighting controls; office areas	\$6,000
electrical			Lighting controls; toilet room areas	\$1,500
Police Station Total				\$1,139,000 – \$1,171,200

architecture

building description

This police station building was constructed in 1969 with a few renovations over the years. The exterior consists of brick and precast concrete panels. The building is in fair to good condition for a building of this age. Condition issues are itemized below. Parking lot is in fair condition.

building envelope

roof

The roof is fully adhered EPDM rubber roof membrane. It has been slated for replacement as part of another project and will not be part of this review.

exterior walls

Portions of the exterior walls are brick, which is in fair condition. There are a few spots where tuck-pointing would be recommended as part of a typical maintenance program. One area near an inside corner shows effervescence that starts approximately 6' up on an inside corner and extends diagonally down. The mortar is compromised, and the exposed portion of foundation wall is stained.

The remainder of the exterior walls are precast concrete panels. At the panel joints, there is dried and brittle caulking which should be replaced. There are also several locations where the panels are stained from the window frames or other wall-mounted equipment. Large gaps are present in the soffit areas of the precast panels. There is also some damage to the upper portion of the precast concrete wall panel at the southeast corner where a previous patch was made. There are some settlement cracks in the vertical concrete elements between the large west-facing windows.

Some damage to the jambs at the garage doors appears to be from vehicle contact. It is recommended that pipe bollards be installed both inside and outside of the garage doors to prevent additional damage to the jambs and door tracks.

The concrete canopy along the south side of the building has spalled and cracked concrete. This is allowing water to penetrate the canopy and could cause additional damage to the soffit if not addressed.

exterior windows and doors

Exterior public entry doors and windows on the west side are aluminum frame. They are in good condition, although the finish is faded.

The staff entry doors are insulated hollow metal in hollow metal frames in good condition. Like all buildings of this age, the weather stripping and thresholds are worn and deteriorated. Steel lintels across exterior wall openings are rusting. Coiling shutters at west side are also beginning to rust.

The windows appear to be thermally broken with insulated glass. The windows do not appear to have broken seals as no signs of moisture were noted during this review. The exterior window jambs and infill panels along the east side of the building are faded. The housing around the window covers need to be painted to prevent further damage from rusting on the west side of the building. There are a few empty conduits that could be removed.

parking lot

Asphalt surface is cracked and looks to have been maintained by sealing cracks for a number of years. Re-sealing is recommended to extend the surface's useful life. A concrete curb by parking/drive area is damaged.

**Police Station
Police Department
Architecture-Exterior**

legend

D	Deficient – Immediate Replacement	CP	Critical Priority – Replace in 1-2 years	HP	High Priority – Replace in 3-5 years	F	Fair – Replace in 6-10 years	C	Compliant/ Adequate	N	New	N/A	Not Applicable
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architectural elements	grade	budget cost	notes	comments
exterior elements				
Brick walls	F	\$3,000 – \$5,000	A1	
Precast panels	CP	\$7,000 – \$8,000	A2	
Precast soffits	HP	\$1,000 – \$2,000	A3	
Precast canopy	CP	\$8,000 – \$12,000	A4	Cost will depend on selected repair solution.
Window trim	F	\$3,000 – \$5,000	A5	
Coiling metal shutters	F	\$1,000 – \$3,000	A6	
Bollards at garage doors	HP	\$6,000 – \$8,000	A7	
Weatherstripping at doors	HP	\$500 - \$700	A8	
Exterior lintels	HP	\$1,000 – \$2,000	A9	
Seal parking lot	HP	\$27,000 – \$30,000	A10	

notes:

- A1. Tuckpoint approximately 10% of brick joints. Note especially triangular area in north corner at juncture of garage and office.
- A2. Remove dried and brittle caulk in precast joints. Re-seal with backer rod and sealant. Patch/repair cracks at vertical concrete between west windows. Power wash panels to remove stains under windows and wall-mounted equipment.
- A3. Infill gaps at precast soffits to prevent insect or animal infestation.
- A4. Repair canopy over staff entry. Design options include use of concrete repair products (such as Sika products and systems) or covering the canopy in metal cladding.
- A5. Paint break metal trim and panels at windows.
- A6. Paint exterior hood portion of coiling metal shutters.
- A7. Recommend adding 6” steel pipe bollards at garage doors
- A8. Replace weatherstripping at exterior metal doors as needed.
- A9. Repaint all exterior metal lintels and soffit elements.
- A10. Seal asphalt parking (85,600 SF) lot and restripe.

**Police Station
Police Department
Architecture-Exterior**



Caulking dried and brittle



Brick in good condition



Caulking dried and brittle



Efflorescence on brick



Damaged canopy

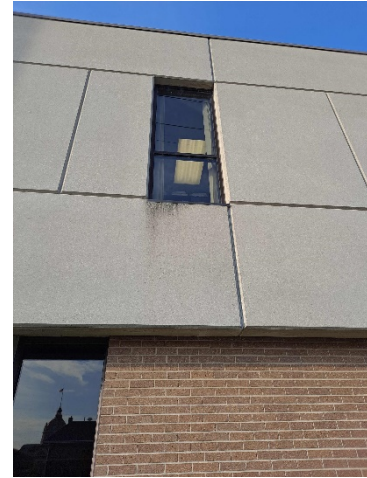


Faded window infill panels

**Police Station
Police Department
Architecture-Exterior**



Damaged door jamb and door track



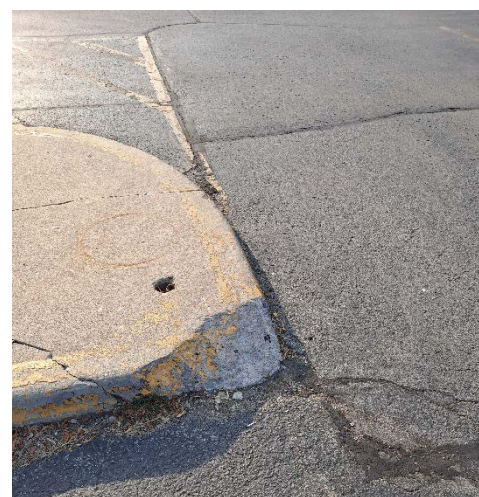
Streaking below windows



Window housing faded and rusting



Faded metal window trim



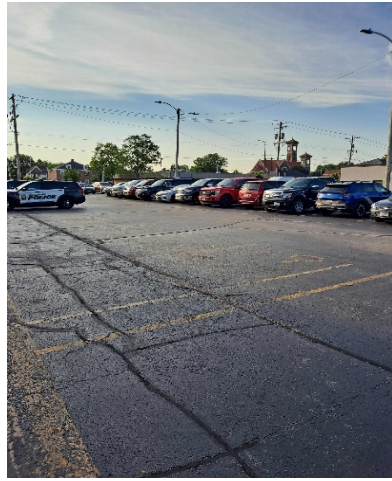
**Police Station
Police Department
Architecture-Exterior**

Cracked concrete between windows



Gaps under precast concrete panels

Damaged concrete curb



Previous sealing of asphalt cracks

architecture

building description

Original building was constructed in 1969, with the 2nd floor added in 1992. Power-operated coiling metal shutters were added to protect window openings.

interior conditions

floors

The condition of many of the floor finishes in the building is fair to poor.

Quarry tiles on the south stair are chipped, with some non-matching tiles used to patch.

Carpets are worn in many areas with some seams of broadloom carpets frayed. Carpets are stained in many areas. Cut pile carpet is not appropriate for a space used for offices, as it is difficult to move chairs over the surface. Plastic mats are used in some places.

Vinyl composite tile (VCT) in basement has stains, chips, and is worn in areas under chairs. The older adhesives used on these tiles may be what is causing the dirt to collect around the seams. VCT that was in the room used for high-density evidence storage was abated due to asbestos content in the adhesive.

Ceramic mosaic tiles are in generally good condition. Some patching is evident.

walls

Minor chipping of concrete block corners and glazed wall tiles. Bottom of walls in the high-density file storage room has deteriorated. Lack of flooring and wall base has contributed to this situation.

doors and frames

High-use doors show wear at locations of door push. This may be able to be cleaned and re-protected with clear finish. Paint is missing from many metal door light frames. Some wood doors have scratched veneers at lower portion (no kickplate). Door hardware missing includes latches in door, latch plate in frame and kickplates. Doors in the basement are generally in the worst condition.

See Code section of this report for comments on doorknobs.

casework

Original wood and plastic laminate casework is dated and showing its age. Minor chipping of laminate is visible on outer corners of countertops. Cabinet doors in plastic laminate casework are starting to sag. Wood casework dating from 1990s and newer is in good condition.

ceilings

Many ceiling tiles are stained or missing, especially on the basement level.

**Police Station
Police Department
Architectural-Interior**

legend

D	Deficient – Immediate Replacement	CP	Critical Priority – Replace in 1-2 years	HP	High Priority – Replace in 3-5 years	F	Fair – Replace in 6-10 years	C	Compliant/ Adequate	N	New	N/A	Not Applicable
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architectural elements	grade	budget cost	notes	comments	
interior conditions					
Floors: general	F		A1		
Carpet	HP	\$45,000 – \$50,000	A2	Approx. (minimum) areas of new carpet: Basement: 700 SF 1 st Floor: 3,100 SF Est. \$3/SF removal and \$9/SF replacement.	
Quarry tile	F		A3		
Vinyl composite tile (VCT)	HP	\$18,000 – \$22,000	A4	Approx.. area of basement corridors: 1,900 SF. Asbestos survey not included. Budget for removal and replacement only. Est. \$3/SF removal and \$7/SF replacement.	
Mosaic tile	F				
Walls	F		A5		
Doors and frames	C	HP	\$8,000 – \$12,000	A6, A7	Estimate replacement of four doors and hardware at \$2K-\$3K per door. Additional refinishing not estimated.
Hollow metal frames	F		A6		
Casework	F		A8		
Ceilings	F		A9		

notes:

- A1. General floor maintenance: scrape and re-paint areas where floor paint has worn off (entry to shooting gallery).
- A2. Recommend replacement of cut pile carpet in office areas (Photo Processing). Most existing low-pile carpet is also very worn. Plan for replacement. Floor finish for office use areas should be either a vinyl product or low pile carpet tiles for ease of maintenance and replacement. Short term: provide transition strip at edges of carpet in lieu of duct tape. Long term: replace all carpets with appropriate flooring for use of space.
- A3. Replace chipped tiles at south stair.

Police Station Police Department Architectural-Interior

- A4. Short term: Replace areas of missing VCT (Evidence Lost & Found, High Density File Storage room). Recommend thorough mechanical cleaning of high traffic areas. An asbestos survey of the building should be done since asbestos content was previously found in the adhesive for the high-density Evidence Storage room. Long term: plan for replacement of all VCT in basement.
- A5. Patch and paint chips in concrete masonry unit walls and gypsum board walls in basement.
- A6. Doors on 1st and 2nd floors are in generally good condition. Re-paint metal doors and metal lite frames. Hardware update addressed in Code section of this report.
- A7. Refinish or replace doors with scratched and damaged veneer finish. Install minimum of 12" high kick plates. Estimated 4 doors; those in worst condition are in basement. See Code section of this report for recommended update of door hardware.
- A8. Repair chips and delamination in plastic laminate countertops: Evidence Lost & Found, 2nd floor break area.
- A9. Replace missing and stained ceiling panels.



Chipped paint at shooting gallery entry



Chipped tiles at south stair

**Police Station
Police Department
Architectural-Interior**



Dirt at center of corridor and edges of tiles



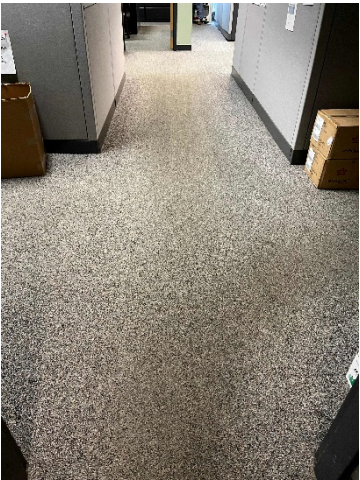
Worn, stained cut-pile carpet



Duct tape at transition from carpet to VCT

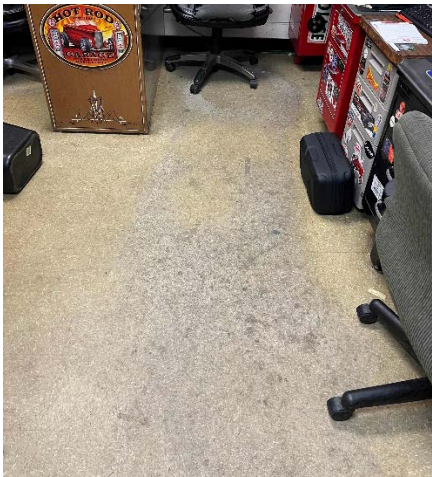


Missing VCT at basement

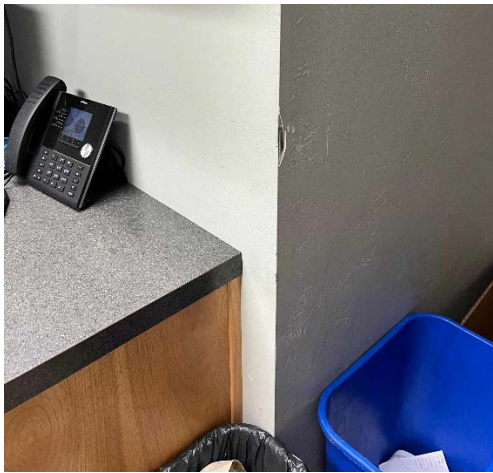


Worn carpet at office area

**Police Station
Police Department
Architectural-Interior**



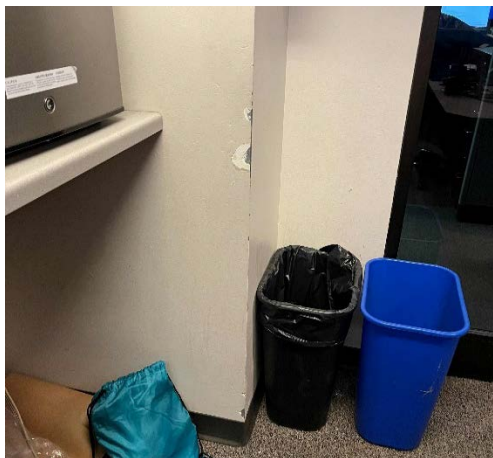
Worn VCT at shop office



Damaged corner – Range



Deteriorated base at high-density storage



Damaged corner – Shift Commander

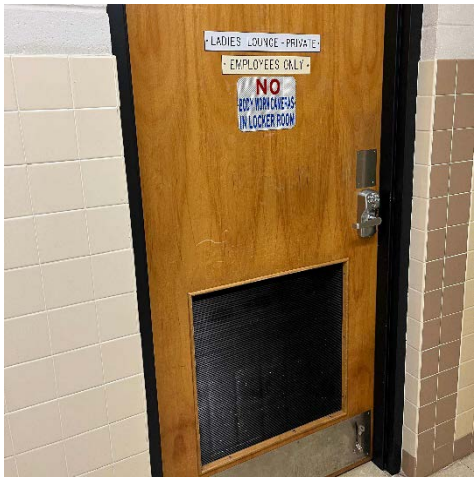


**Chipped paint at lite and damaged wood finish
Missing kick plate**



Chipped paint at lite and damaged wood finish

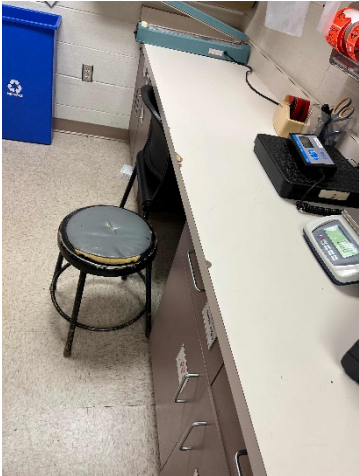
**Police Station
Police Department
Architectural-Interior**



Scratched wood veneer



Damaged wood veneer & missing kick plate



Plastic laminate casework condition



Chipped plastic laminate



Missing and misplaced ceiling tiles



Typical stained ceiling tile

**code compliance and accessibility
building data**

code references based on 2015 IBC

year(s) constructed	1968-9 (original documents not available)	gross area	Basement: 13,952 SF 1 st Floor: 14,592 SF 2 nd Floor: 13,952 SF Garage: 8,646 SF (includes garage office) Mezz of garage: 1,872 SF
occupancy classification (chapter 3 of IBC)	Separated occupancies: B - Business and S-1 Moderate-hazard Storage with an incidental use room of H-2 Hazardous (gas and oil storage) (See discussion below)		
construction type (chapter 6 IBC)	The class of construction in the code at the time would have been 5B, Exterior Masonry, Unprotected. The building materials and ratings of structural items in that classification would be equivalent to Type II-B in the 2015 IBC.		
fire sprinklers	Partial coverage		

summary of code compliance/life safety

The Police Station is presumed to have complied with the building code as adopted by Wisconsin at the time the original building was constructed. Furthermore, the 1992 addition of the 2nd floor would have been required to bring most elements up to code at that time (1992) as part of the renovation. Similarly, if a future modification or renovation is undertaken, any items/areas modified or updated would need to be brought into compliance with the current code. Additional modifications may be triggered, depending on the scope of work. **Careful review of code should be done prior to any renovation project to identify other mandated upgrades.**

egress and safety

The wall separating the office from garage occupancies was noted as a 4-hour wall on the 1992 drawings, however only one of the doors in that wall retains a UL label indicating a compliant (3-hour) rated door and frame. Current code requires a 3-hour separation between the garage occupancy of H-2 Hazardous and the Business or S-1 Storage occupancies of the remainder of the building. There is no requirement for separation between Business and Storage occupancies.

The generator is currently housed behind chain link fence within the repair garage. It is presumed to be compliant with the code at the time it was installed. If the generator were to be replaced, it would have to comply with current code, which required it to be housed in a separate, 2-hour rated room. If such an enclosure is provided in the current location, an egress study should be conducted to ensure legal egress is provided to both the generator room and the hazardous storage room.

Due to the location of the unenclosed generator in the repair garage, and its proximity to the hazardous storage room, it is recommended that the 4-hour separation between Business and S-1 Storage be maintained at this time.

Two legal means of egress are provided from all areas of the building except for SWAT team storage (see below). An elevator provides access to floors other than the entry level.

Some corridors are reduced in width by the placement of casework and boxes in the corridor for additional storage. These areas appear to all provide minimum width for an accessible route, but combustible boxes should be relocated. One room, a secure evidence storage room in the basement, had an access route from an adjacent room that did not meet accessible width requirements. That room was provided with an additional egress-only door, so presumably it could be opened for legal access if necessary.

Police Station Police Department Code & Accessibility

Several locations in the building have coded security systems to gain access. No situations were observed where an occupant would have to enter a security code to egress, thus these arrangements are code compliant.

Two IT rooms in the building, one in the basement and one on 2nd floor, were full of spare equipment and boxes in addition to the functioning equipment. The rooms should be cleaned to provide a clear path of egress for occupants of the room.

The mezzanine area of the SWAT Team's storage room is accessed via a ship's ladder from the lower storage area and a very narrow passage around HVAC equipment on the mezzanine level. Neither of these routes comply with current code, however it is assumed that the ship's ladder complied with code at the time of construction. A gate at the top of this stair is padlocked to prevent occupants from entering the space.

stairs, ramps and shafts

There are stair shafts at the north and south sides of the office area. The shaft at the south side has doors with closers and latching hardware. Some UL labels are present on frames and doors, indicating compliance with the required 1-hour rating. Not all doors and frames are labeled.

The stair at the north side of the office does not have latching hardware at the basement level, as would be required for a 1-hour rated shaft.

There is a stair from the garage up to the mezzanine and 2nd floor, through the 4-hour rated separation wall. The door is metal. Neither the door nor frame have the UL rating label to confirm that it is a 3-hour rated opening (the requirement in a 4-hour wall).

handrails and guardrails

Stair handrail heights are lower than current code minimums but are assumed to have complied with code at the time of construction. Handrail extensions at office areas comply with code. There are no handrail extensions beyond the bottom riser at the stairs from the garage to the mezzanine. This does not comply with current code, but is presumed to be compliant with the code at the time it was installed.

summary of accessibility/ADA compliance

ADA standards

The Americans with Disabilities Act establishes an additional level of requirements on public and commercial facilities in terms of accessibility. Unlike a building code, it is a federal law which requires continual compliance, regardless of when a building was built. Accessibility items noted in this report fall under this category and should thus be addressed in a timely manner.

accessible route

An accessible parking stall is provided in the lot to the south of the building, and entry is at-grade.

Travel within the building is generally accessible. An elevator serves all except the mezzanine, which is not required to be accessible.

The turning space in the route into the 2nd floor toilet rooms is too narrow to comply with clear floor space requirements for door access and route.

doors

The building has a combination of push/pull hardware and knob handles. The knobs require simultaneous grabbing and twisting to operate. Knobs are not accessible, and not as easy/fast to use as lever handles. Secure locking devices are located above the forward or side reach accessible height of 48".

The door to the men's locker room was previously identified as having a thumb-turn locking system mounted above accessible height. Both the thumb-turn and the height are non-accessible.

Two doors in basement locker rooms to the saunas were previously identified as too narrow for legal means of egress.

casework

Most casework appears to be at accessible height. Counters in break rooms are within forward or side reach ranges, and alternate height tables are available for staff use.

plumbing fixtures

Sinks in casework counters in breakrooms are at 36" above floor. Since there are no stoves/cooking ranges in the room, no forward-reach sink is required. Most lavatories in the building are at or below 34", and most provide adequate knee clearance as well. The lavatories in the women's locker room are at 34 ¾" rim height.

Most lavatories in the building are at or below the allowable accessible height of 34". Lavatory rims in the Women's locker room are at 34 ¾" rim height.

Men's locker room provides only gang shower area with lipped entry. No accessible shower is available. No toilets in the building have fully compliant clear floor space and grab bars.

Drinking fountain spout heights vary from 34 ½" to 39" height through the building. ADA calls for 36" maximum spout height (with required approach clearances) for seated persons, and 38" to 43" for standing persons. All of the drinking fountains will comply with one or the other of these standards.

grab bars

Typical grab bar configuration at toilet stalls in the building is a single connected bar that extends in an L-shape along the back and side walls of the toilet. Some of these provide the required extension length at both back and side. The Women's locker room provides an accessible shower stall, the men's does not. The following are some of the situations in which grab bars or fixtures are in non-compliance:

- Men's locker room does not provide an accessible toilet.
- Men's locker room does not provide an accessible shower.
- 1st floor staff toilet rooms do not provide grab bars.
- 1st floor men's staff toilet does not provide accessible turning radius in the room.
- Two of the 6 toilet rooms on 2nd floor do not provide grab bars.
- Other 2nd floor toilet rooms do not provide grab bars of adequate length at back or sides. Some rooms do not have adequate space to provide compliant grab bars.

The 2015 IBC references ICC/ANSI A117.1-2009, which calls for an additional vertical grab bar at the sides of toilets which the ADA guidelines do not include. As this is a code issue, not an ADA compliance issue, the toilet rooms would not be required to have the vertical grab bar if they were compliant at the time of their construction, however it is recommended.

**Police Station
Police Department
Code & Accessibility**

legend

D	Deficient – Immediate Replacement	CP	Critical Priority – Replace in 1-2 years	HP	High Priority – Replace in 3-5 years	F	Fair – Replace in 6-10 years	C	Compliant/Adequate	N	New	NA	Not Applicable
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architectural elements	grade	budget cost	notes	comments
Code compliance / Life safety				
Egress and safety	HP		CA1	No-cost options. See notes below.
Stairs, ramps and shafts	F		CA2	
Handrails/guardrails	F			Complied with code at time of installation.
accessibility / ADA compliance				
Accessible route	F			Routes to other 2 nd floor toilets are accessible.
Doors	F		CA3	New hardware could range from \$300 to \$1,500 per door.
Casework	C			
plumbing fixtures				
Showers	HP	\$8,000 – \$10,000	CA4	
Sinks/lavatories	C			
Toilets/urinals	HP	\$4,000 – \$6,000 \$12,000 – \$15,000	CA5	Toilet in Men’s Locker Room and Accessible 1 st floor toilet
Drinking fountains	C		CA6	
Grab bars	F		CA7	

notes:

- CA1.** Maintain separation between garage and office functions. Plan to place generator in a two-hour rated room in the future. Until it or the space is modified, it is presumed compliant with code when it was installed. Recommend removing padlock from SWAT Team mezzanine or eliminating all usage of the space.
- CA2.** Provide code-compliant latching hardware at basement north stair doors.
- CA3.** Recommend replacing knobs and other non-compliant hardware on an incremental basis. Lever handles would comply with accessibility codes and facilitate ease of use. Lever handles are code requirement for any new or renovated work.
- CA4.** Provide accessible shower in men’s locker room.
- CA5.** Provide accessible toilet in men’s locker room. Recommend providing one accessible, single-user toilet on the first-floor level to be used by either staff or other persons in need of accessibility.
- CA6.** Provide drinking cups at minimum one drinking water location (break room sinks or drinking fountains) per floor.
- CA7.** Recommend providing vertical grab bars to current toilet stalls and rooms for improved accessibility.

**Police Station
Police Department
Code & Accessibility**



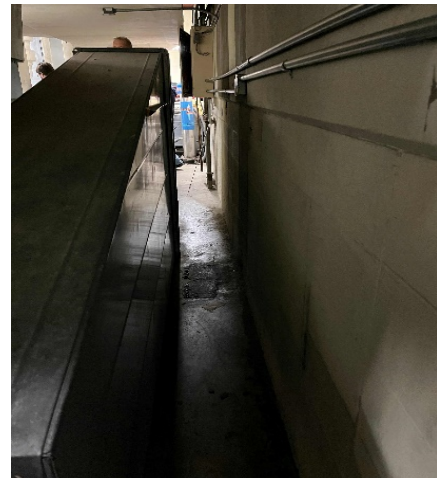
Basement IT room – needs egress route



2nd floor IT room – improve egress route



SWAT Team storage mezz – no legal egress



Non-legal access route to mezzanine storage area

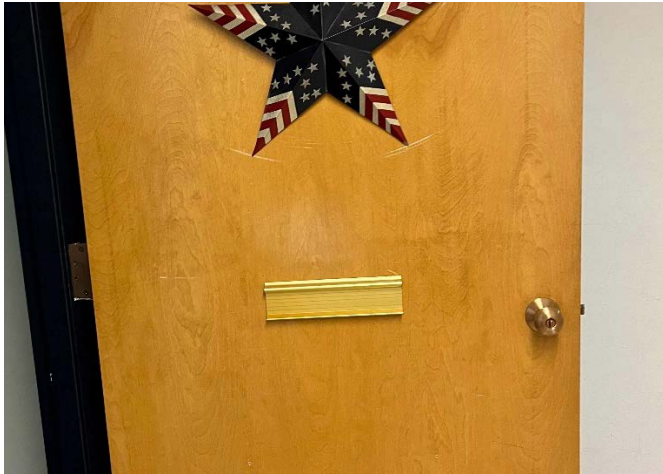


Lack of handrail extension



Missing latch at north stair door

**Police Station
Police Department
Code & Accessibility**



Knob hardware – not accessible



Accessible parking stall



Women's Locker Rm. Lav – above 34" height



Eliminate combustible storage in corridor



No accessible shower – men's



Accessible shower – women's

**Police Station
Police Department
Code & Accessibility**



1st Floor: not accessible toilet room



Route into 2nd floor toilets lacks clear floor space



Toilet with grab bars, but lacking clear floor space



**Toilet stall accessible, but room is not
(See photo above)**

structural system

summary

The structure consists of steel roof deck and open web steel joist/joist-girders supported by exterior load-bearing masonry walls and interior steel columns, all constructed over the original one-story cast-in-place concrete frame, slabs, beams, basement, load-bearing masonry walls, and shallow foundation system.

legend

D	Deficient – Immediate Replacement	CP	Critical Priority – Replace in 1-2 years	HP	High Priority – Replace in 3-5 years	F	Fair – Replace in 6-10 years	C	Compliant/Adequate	N	New	NA	Not Applicable
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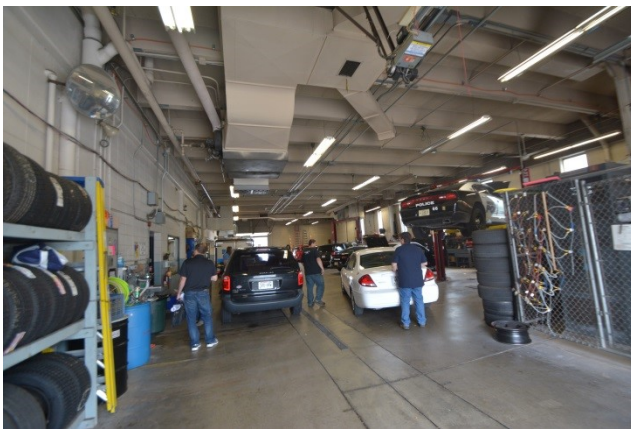
structural elements	grade	budget cost	notes	comments
year				1968 - Original Building (R.W. Surplice-Job 2564) 1992 - Addition (Somerville Assoc. Project 3072)
structure type				
Foundations	C			Cast-in-place concrete foundation/basement walls bearing on individual spread or continuous strip footings.
Basement	C			Concrete slab on grade with wire mesh reinforcing.
First floor	C			10" cast-in-place concrete two-way flat slab with capitals supported on concrete columns and basement walls typical. One bay of 16" +4" concrete joist-slab on west end and one bay of 10" concrete one-way solid slab to the east. Vehicle maintenance garage on the far east end is concrete slab on grade.
Second floor (original roof)	C			10" cast-in-place concrete two-way flat slab with capitals supported on concrete columns typical. One bay of 16"+4" concrete joist-slab on west end and a garage mezzanine of 10" concrete one-way solid slab to the east.
Roof	C			<ol style="list-style-type: none"> Office - 1 ½" 22-gauge steel roof deck and open web steel joists/joist girders supported by exterior load-bearing masonry walls and interior steel wide flange columns. Vehicle maintenance garage – Light-weight precast concrete decking/key-stone joist system supported on load-bearing masonry walls and concrete frame.
building risk category	NA			Risk Category: IV
construction type	NA			Construction Type II-B (2-hour beams, columns, floor slabs, 0-hour roof)

Police Station Police Department Structural

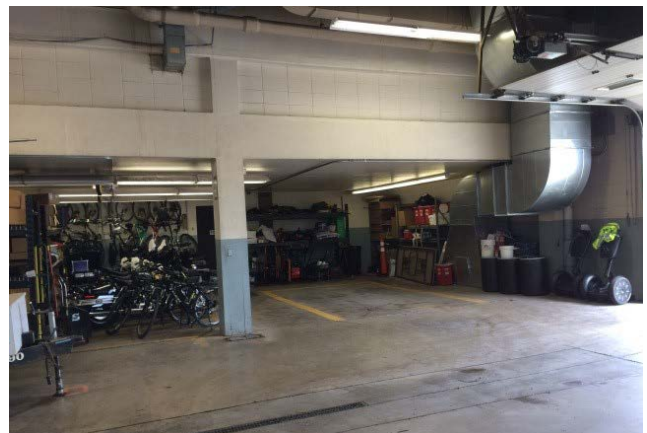
structural elements	grade	budget cost	notes	comments
vertical expandability	NA			None.
typical column spacing	NA			
overall structural condition	C			The existing building is structurally sound with no significant deficiencies noted.

notes:

- S1. There is minor shrinkage cracking in the slab on grade in the garage area. The cracking is not as cause for structural concern and no remedial action is recommended at this time.



Roof structure at garage bay



Concrete column, typical



Roof structure at garage bay



Roof bearing at office/garage supporting wall

**Police Station
Police Department
Structural**



2nd floor plan structure as seen from garage



Cracked slab at garage (Note S1)



Concrete roof purlins at garage



Lintels at garage door openings

**plumbing systems
summary**

Police Department building was constructed in approximately 1969 and remodeled in 1992. The original piping is in fair condition. Glass fiber insulation on the water piping helps to conserve energy, but the insulation is missing in several areas. Insulation from 1969 probably contains asbestos. The building is served by a water heater on second floor. A thermal mixing valve(s) (TMV) should be added to the hot water systems and hot water temperature adjusted to 110° Fahrenheit. Eyewash in the garage should have a TMV installed. Eyewash requires tempered water. These are code issues that should be corrected.

There is a sanitary pipe installed over the evidence dryers in the basement. It would be advisable to install a drain trough below the piping to protect the equipment from potential leaks.

The building has some accessible ADA toilet rooms. Some of the areas would need modifications to make the toilet rooms fully compliant (i.e., flush valve on the wrong side, install safety covers etc.).

Building is served by interior storm drainage – roof drains. No secondary roof drainage installed. Most of the roof has a spill-off roof edge. Roof over the entrance has a single roof drain, no secondary drainage. First and second floor plumbing fixtures discharge by gravity. Basement fixture(s) are pumped to grade. Basement has drain tile installed around the perimeter.

Parking lots are served by interior storm drainage (i.e., catch basins).

legend

D	Deficient – Immediate Replacement	CP	Critical Priority – Replace in 1-2 years	HP	High Priority – Replace in 3-5 years	F	Fair – Replace in 6-10 years	C	Compliant/ Adequate	N	New	N/A	Not Applicable
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plumbing systems	grade	budget cost	notes	comments
Water piping condition	F		P1	Copper piping
Sanitary piping condition	F		P2	Cast iron, no-hub connection
Storm/clearwater piping	F		P3	Pump discharge - galvanized
Valves	F		P4	Ball valve(s)
Domestic water service	C		P5	4" water service
Insulation	C		P6	Glass fiber, elastomeric insulation
Code issues	D	See TMV's	P7	Add TMV at water heater & eyewash
equipment				
Domestic water heater	HP	\$3,000	P8	AO Smith, gas-fired heater
Recirculation pump	F		P9	B&G pump
Water softener	NA			No water softener installed
Thermal mixing valve (TMV)	D	\$8,000	P10	Add TMV's (code issue)
Grease interceptor	NA			No grease interceptor required.

**Police Station
Police Department
Plumbing**

plumbing systems	grade	budget cost	notes	comments
Kitchen equipment	F		P11	
Plumbing fixtures	F	\$5,000	P12	
Oxygen storage	NA			
Backflow prevention	D	\$5,000	P13	Install RPZ backflow preventer
“Shop” air compressor	F		P14	Snap-On vertical tank
Laundry equipment	NA			
Drain tile sump/pump	F		P15	Duplex submersible, PVC piping
Sanitary sump/pumps	F		P16	Submersible, cast iron piping
Elevator sump/pump	F		P17	Simplex submersible
Maintenance garage	F		P18	Trench drain, garage catch basin
exterior				
Storm drainage, roof drainage	HP	\$8,000	P19	Roof drain(s)
Lawn irrigation	NA			
Utilities	F		P20	

notes:

- P1. Water piping is mainly copper, soldered joints. Fair condition. Some galvanized piping at the water meter. Some PEX piping also installed. Most of the piping is insulated.
- P2. Original sanitary waste/vent is cast iron hub & spigot. 1992 piping is cast iron, no-hub connections. Pump discharge is cast iron. Piping is in fair condition.
- P3. Building storm is picked up by interior roof drainage. Downspouts discharge underground to storm sewer. Pump discharge piping for the Clearwater pump(s) is black PVC, glue connections.
- P4. Ball valves on the water piping.
- P5. Building is served by a 4” water main – combined for fire protection and domestic water. Domestic water is a 2” main (verify) with 3-valve bypass around the meter set.
- P6. Water piping is insulated with glass fiber and elastomeric insulation. 1969 insulation probably contains asbestos and needs verification. No insulation on the storm piping is causing condensation on the piping and is resulting in ceiling tiles being stained.
- P7. Code issues: water temperature is set higher than the allowed 110-115° F per code, recorded at 132° F at the forensics faucet. No thermostatic mixing valve (TMV) at the heater. Add TMV per code and adjust temperature to 110-115° F maximum.
- P8. Water heater is a single gas fired, AO Smith model BTR-365 series 118, 365,000 BTU/HR, 85 gallon with atmospheric gas venting. No expansion tank installed.
Recommendation: add expansion tank at the water heater.
- P9. Hot water recirculating pump is installed at the water heater. Building is separated into a west and an east zone with HWR piping balanced at the pump.

**Police Station
Police Department
Plumbing**

- P10.** Add thermostatic mixing valve (TMV) to the water heater. Set hot water temperature to 110° F maximum temperature. No TMV is a code issue.
- P11.** Kitchen/Breakroom equipment: two compartment sink(s). No garbage disposal or dishwasher.
- P12.** Plumbing fixtures: Most of the fixtures are ADA-compliant. WCs are floor mounted or wall-hung with flush valves. Lavatories are vitreous china set in the countertop and wall-hung, lever handle faucets. No safety covers installed. Urinals are wall-hung with flush valves (regular and ADA height). The 1969 urinals are floor mounted with door activated flushing. Showers are built-up. One ADA shower in the women's toilet rooms. Group shower in the men's toilet room with one floor drain. Shower should technically have multiple floor drains, as water is not allowed to flow from one user to another. Single unit Elkay electric water cooler(s) installed throughout the building in varying heights. Kitchen/breakroom sink(s) are stainless steel double compartment – no garbage disposal. Garage has several cold-water service faucets with hose thread vacuum breaker connections. Non-freeze sill faucets installed on the perimeter of the building. Basement sink by the gun range is a recent installation. Waste is pumped overhead by a small pump basin unit on the floor.
- Recommendation: add safety covers to the p-trap and water supplies at ADA lavatories.*
- P13.** There is a Watts 9D inline backflow in the boiler room for the HVAC boilers. Boiler feed should be an RPZ backflow preventer. Faucets with hose connection ends have a threaded hose end vacuum breaker installed. There is a 3/4" RPZ backflow preventer installed in the garage wash bay at the power washer.
- P14.** Snap-On Vertical tank, "shop" air compressor installed in the garage.
- P15.** Drain tile/clear water pumps are duplex submersible 1 1/2" discharge. Pumps serve the building drain tile system around the basement. High water alarm could be installed.
- P16.** Sewage pumps are submersible 3" discharge. Pumps serve the basement toilet rooms and floor drains. High water alarm could be installed.
- P17.** Elevator pump is simplex, submersible. Located in closet adjacent to the elevator. High water alarm could be installed.
- P18.** Maintenance garage has trench drain(s) and catch basins installed. No evident oil separators installed. There is also a wash bay, overhead sprayer with a power washer.
- P19.** Building roof pitches to interior roof drain(s), served by 4" piping. "Secondary" roof drainage is the spill-off roof edge. Canopy roof over the entrance has one interior roof drain and no secondary scupper relief drainage. Parking lots are picked up by interior storm catch basins.
- Recommendation: add secondary drainage to the entrance canopy.*
- P20.** Utilities are routed from Adams Street and/or Stuart Street. Building is served from a 4" water main. Multiple 4" sanitary and storm sewers serve the building.

**Police Station
Police Department
Plumbing**



Pump discharge – sanitary piping



Sanitary vent piping



Sanitary piping



Storm piping



Water & sanitary piping



Storm piping

**Police Station
Police Department
Plumbing**



Sanitary piping over evidence dryers



Water meter



Water heater



HWR Recirculation pump



Breakroom sink



Breakroom coffee sink

**Police Station
Police Department
Plumbing**



Breakroom coffee sink



Men's toilet room



Lavatory – men's



Men's toilet room



Single toilet room



Single toilet room

**Police Station
Police Department
Plumbing**



Unisex toilet room



Unisex toilet room



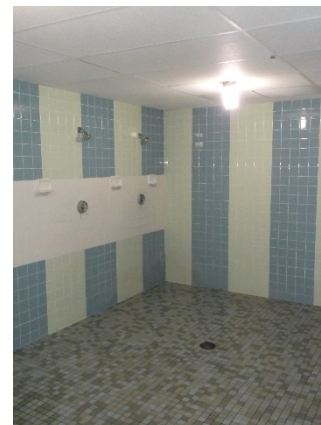
Men's toilet room – urinals



Men's toilet room lavatories



Women's ADA shower



Men's shower room

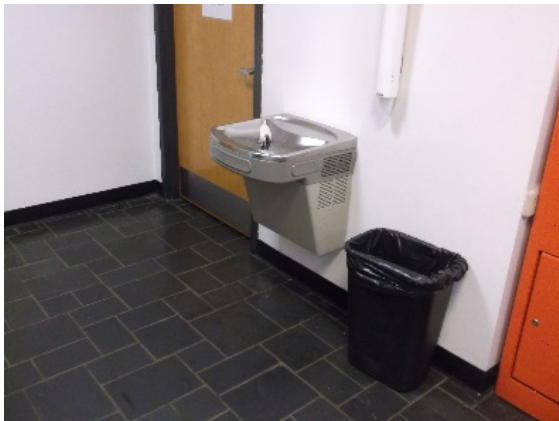
**Police Station
Police Department
Plumbing**



Sink in gun range



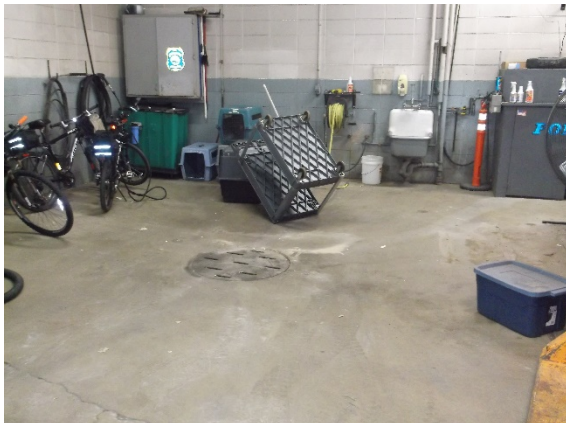
Electric water cooler



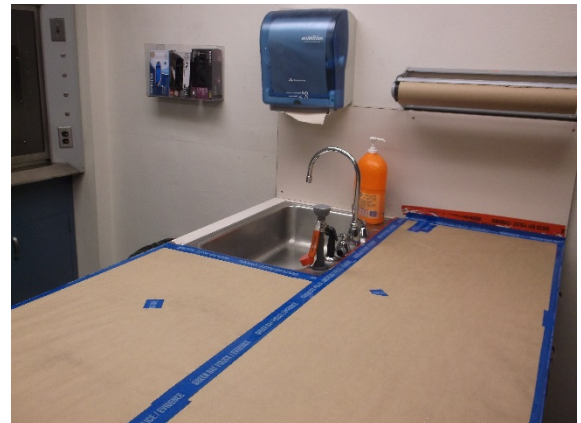
Electric water cooler – lobby



Electric water cooler



Janitor's sink at wash bay



Evidence sink

**Police Station
Police Department
Plumbing**



Sink, EWC & eyewash in garage



Shop air compressor



Sump, duplex pumps



Elevator sump/pump



Sanitary sump/pump



Sill faucet, roof drain

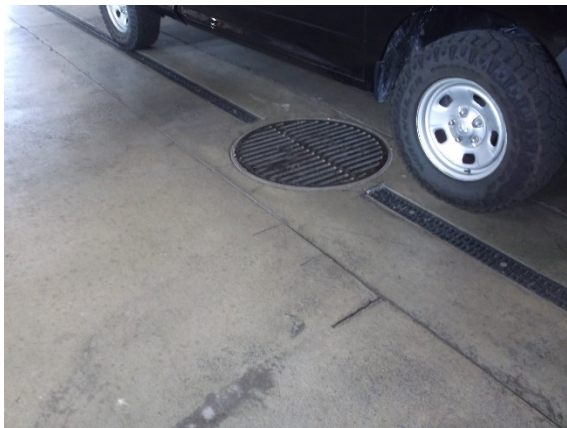
**Police Station
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Plumbing**



Non-freeze sill faucet



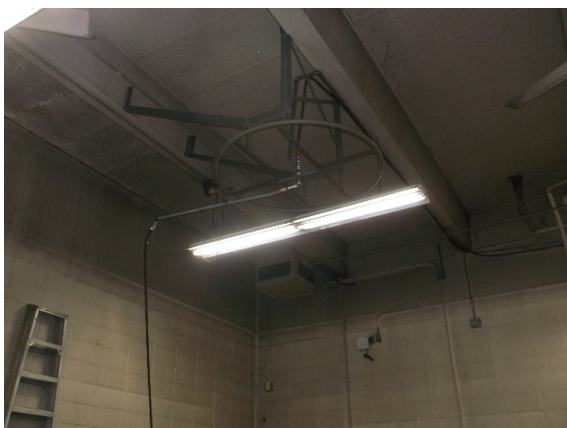
Garage trench drain



Garage catch basin



RPZ backflow preventer



Vehicle wash arm



Roof drain(s)

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Plumbing**



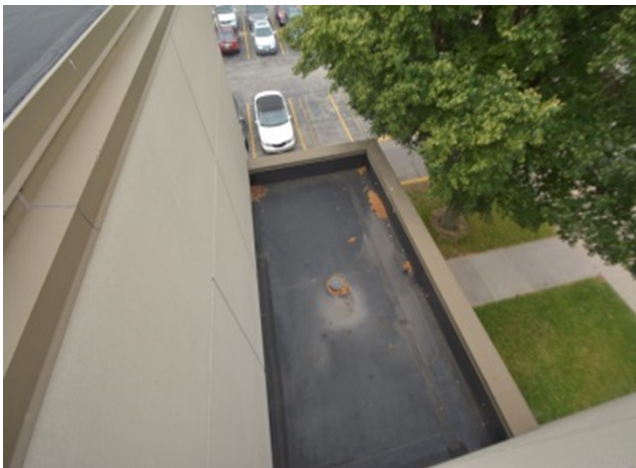
Roof drain(s)



Roof drain(s), sanitary vent



Roof Drain, Sanitary Vent



Entrance Roof (No secondary drainage)



Parking Lot – East



Parking Lot – South

**Police Station
Police Department
Plumbing**



Parking Lot – South



Garage catch basin vent

HVAC systems summary

The building was constructed in 1969 and underwent a major addition and remodeling project in 1992. Some minor office renovations and ventilation upgrade projects have been completed in the last 10 years.

The office area is served by three modular air units, installed during the 1992 project. The units are located in a second-floor mechanical mezzanine above the garage. One air unit is dedicated to each floor of the building. A fourth unit located in the mechanical mezzanine originally served the firing range and is abandoned, replaced in 2010 with a packaged roof top air unit. A fifth air unit, a roof top air unit, is dedicated to the training room area.

The three main air units are variable air volume type, with hot water and chilled water coils. The building, in general, utilizes plenum return air spaces above the ceiling. There are a few areas where the returns are ducted. The ceilings are discolored near the air unit return openings due to dust build-up which indicates air movement through the ceiling tile. The chiller system serving the air units was replaced in 2011.

Exhaust ventilation for toilet rooms, janitor closets and other miscellaneous spaces is served by a variety of power roof ventilators and ceiling exhaust fans. The fans vary in age, size, and condition as they have been installed and replaced during the various remodeling projects.

The garage ventilation consists of two gas-fired make-up air units and multiple exhaust fans. One make-up air unit does not function and the other is not capable of providing adequate heat or ventilation. Gas fired heaters have been installed to attempt to maintain space temperature through winter, but the space is still described as “cold” in the winter months. The units are time clock operated and there is no gas detection system.

A hot water boiler system in the second-floor mechanical room was replaced in 2022. Hot water is distributed to fin tube radiation, reheat coils, and cabinet heaters throughout the office building.

The controls are primarily pneumatic with a few newer (within 5 years) components utilizing low voltage DDC controls. An air compressor is in the second-floor mechanical room.

legend

D	Deficient – Immediate Replacement	CP	Critical Priority – Replace in 1-2 years	HP	High Priority – Replace in 3-5 years	F	Fair – Replace in 6-10 years	C	Compliant/ Adequate	N	New	N/A	Not Applicable
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hvac systems	grade	budget cost	notes	comments
Air Units – office area, three total			H1	Installed 1992.
Housing	CP	\$435,000	H1	Showing signs of 30 years of operation. Minor rust.
Air intake	C			Roof hood
Coils	HP			Hot water, chilled water.
Fan	HP			(2) 10,000 CFM-10HP, (1) 8,000 CFM-7.5HP
Filters	F			
Controls	HP			

**Police Station
Police Department
HVAC Systems**

hvac systems	grade	budget cost	notes	comments
Ductwork	F			Original except where replaced during projects.
Insulation	HP	\$8,000	H1	
Occupied space thermal comfort	HP	\$170,000	H1	AHU discharge temperature set at 60° F. Some VAV zones do not have reheat coils. VAV units are up to 30 years old-poor modulation. Boiler off in summer months. Lots of complaints.
chiller			H2	Installed 2010
Housing	C			100-ton air cooled scroll with R-410A
Pumps	HP	\$5,000	H2	Appear original to 1992 addition. 252GPM@50FT, 5HP-Lead/Lag
Insulation	CP	\$1,500	H2	Insulation has failed at one pump (or pump is leaking). Condensation on pump and across floor.
Air Unit-training room			H3	Installed 2011
Housing	D	\$2,500	H3	Not positioned as designed. It is too close to roof edge. Provide rail.
Air Intake	C			
Condensing unit	C			
Fan	C			2,400 CFM, 2HP
Filters	C			30%
Controls	C			Low voltage
Ductwork	C			
Insulation	C			Duct liner
Occupied space thermal comfort	C			Staff did not report issues like other areas but did indicate that when room is fully occupied, it can overheat.
Air Unit-firing range			H4	Installed 2010
Housing	C			
Air intake	C			
Heat	C			Gas-fired heat
Fan	C			100% outside air
Filters	C			30%
Controls	C			Low voltage
Ductwork	C			
Insulation	C			

**Police Station
Police Department
HVAC Systems**

hvac systems	grade	budget cost	notes	comments
Occupied space thermal comfort	C			No cooling. No complaints indicated.
data room cooling units			H5	
Housing	HP	\$30,000		Leibert units-DX and water cooled. Humidifier on basement unit. Ages vary. Budget is a single unit starting point.
Condensing units	D	\$2,500	H5	One unit too close to roof edge. Provide rail.
exhaust fans			H6	
Toilet/locker room exhaust	F			Multiple power roof ventilators. Ages and condition vary. Ceiling fan in single fixture toilet rooms – light switch operated.
Exhaust ductwork	HP	\$16,000	H6	Mostly original. Minimal replacement during renovation projects. Lint/dust is coating the grilles and ductwork. Recommend cleaning and rebalance.
boiler system			H7	
Boilers	N		H7	Replaced 2022
Pumps	HP	\$15,000	H7	B&G .5 HP primary B&G 5 HP lead/lag secondary pumps 175GPM@70 feet
Piping	C			Mostly original to the 1992 project. Revised during renovation projects. Mix of copper and steel.
Pipe insulation	C			
Room terminal units	HP	\$15,000	H7	Convectors, VAV, cabinet heaters. Some fin tube radiation installed at floor, restricting air movement through devices.
Mechanical room ventilation	F		H8	Hot room, limited/no ventilation
controls				
Air compressor	C			Duplex, 3HP
Room control	F		H9	Original pneumatics. Replace with low voltage DDC during mechanical projects
garage ventilation				
Make-up air unit	D	\$140,000	H10	One unit has failed. The other does not keep up. Supplemental heaters installed.
Exhaust	D	\$40,000	H10	Some fans have failed. Exhaust openings not positioned correctly.
Control	D	\$20,000	H10	Time clocks. No gas detection.

notes:

H1. These units are original to the 1992 project. Units are 30 years old with an expected useful life of 25 years depending on maintenance and operation of the unit. Overall, the units have been maintained well but are showing signs of age and continuing to rust. The coils appear to be in fair condition, however most deterioration occurs from the inside out and won't be visible until leaks occur. The unit grade is mainly based on the unit's age and expected useful life. The estimated replacement cost assumes many factors, including ability for extended unit outage during construction, and combining of multiple units into one. The actual cost could widely vary depending on the project specifics.

The units are indoor modular units with hot water heating coil, chilled water-cooling coil and VAV control. The supply ducts are lined. Duct liner erodes over time, and this will lead to system inefficiency and condensation which will damage building material. It is recommended to seal the ductwork and install duct wrap insulation during renovation projects.

Low voltage DDC actuation/controls is being phased in as budgets allow. When the units are replaced, it is recommended to provide all new DDC controls as this will allow for more in-depth monitoring and remote monitoring.

The occupants had many thermal complaints. The 1992 project installed reheat coils on the perimeter rooms only, along with fin tube radiation. The interior rooms only allowed for VAV modulation. As the VAV devices have set minimum air flows, this leads to overcooling of some interior spaces. To compensate for the overcooling the air unit discharge temperature has been set at 60° F. Supply air temperature was not verified on this evaluation visit, but the building operation seemed consistent with past facility visits. The original design was 55° F. The increased discharge temperature has less ability to dehumidify which is why the building feels "clammy or sticky". The boilers are turned off in the summer, which does not allow for the VAV system to utilize their reheat ability to maintain individual thermal control. It is recommended to install reheat coils on all VAV terminals serving occupied spaces, replace poorly functioning VAV terminals, lower the discharge temperature to 55° F and operate the boilers year-round.

H2. The chiller was replaced in 2010. No system complaints relayed by staff. Insulation is damaged at the chilled water pump. Recommend repair to the insulation to prevent condensation and further deterioration of the insulation and piping. The insulation prevented inspection of the pump seals to determine if the water was condensation from the damaged insulation or if the pump itself was starting to leak and causing the insulation damage.

H3. Air unit was replaced in 2011 and is dedicated to the training room area. Staff indicated that when the training room is fully occupied with "70 people" the room can overheat. The high occupancy rate is not the normal occupancy. The unit is located too close to the roof edge. It was designed to be at least 10 feet away. Recommend guard rail for protection of maintenance staff. No changes are believed to have been made since the last evaluation.

H4. The firing range air unit and exhaust fan were replaced in 2010. The exhaust air is filtered at the roof exhaust fan. The make-up air unit is a gas fired roof top unit. The unit is 100% outside air.

H5. Multiple Leibert cooling units dedicated to multiple data rooms. The units vary in age but, in general have a fair physical condition. However, seven years have passed since the original evaluation and some of the units will soon reach the end of their expected useful life. Budgeting \$25,000 to \$30,000 per unit is recommended. The units appear to be keeping up with the cooling load. The basement data room was not sealed well during the last building evaluation. Sealing of the room will improve the unit's ability to maintain temperature and humidity as more data equipment is added to the room. One of the roof mounted condensing units is located too close to the edge of the building. A guard rail for maintenance staff protection is recommended.

H6. The office building exhaust system is served by multiple roof mounted fans and ceiling mounted fans. The ages and conditions vary greatly as the units have been installed during various projects. One fan near the mail room is extremely noisy for 15 years. Dust and lint build-up is prevalent at many of the locker and toilet

Police Station Police Department HVAC Systems

room grilles. Air flow within these spaces appears diminished and can be attributed to older ductwork combined with the dirtying of the systems. Duct cleaning, taping and sealing, and air balancing are recommended.

- H7.** The boilers were replaced in 2022 as one unit failed last year (near the end of the expected useful life). The primary circulation pumps were replaced. The secondary (building) pumps appear to be original to the 1992 construction project. A motor on the left pump has been replaced.

Some of the fin tube radiation units are located too close to the floor which will restrict their ability to provide heat. To improve the units heating ability it is recommended to raise the radiation devices at least 4" above the floor.

- H8.** The boiler replacement project installed sealed combustion boilers which has removed the deficient location of the air intake. When the boilers operated previously the room would be warm/hot. This will not change and likely the room will be hotter than before. A ventilation fan project is recommended to aid in maintaining a lower room temperature as high room temperatures will shorten the life span of electronic equipment installed in the space.

- H9.** The air compressor serving the buildings pneumatic controls appears to operate sufficiently. As systems are replaced, low voltage DDC controls are recommended for installation as this will allow greater monitoring of the system.

- H10.** The garage is currently served by two gas fired make-up air units and multiple exhaust fans and these were off during the site evaluation. One make-up air unit has failed and the other cannot ventilate and heat the space properly. Gas heaters were installed to attempt to maintain space comfort. The garage is described as hot in the summer and cold in the winter. A failed exhaust fan was due to be replaced but it is unknown if the work is completed. The system operates on a timeclock to provide ventilation when the space is occupied. There is no gas detection system. The exhaust locations are at the floor which allows them to be easily blocked with stored items. Raising the exhaust slightly will allow removal of contaminants without restricting the air flow.

The space is used for auto repair and storage, so it does not neatly fall into one code category. Based on actual space use, the recommendation is to define the space as an enclosed garage. An enclosed garage has specific exhaust code requirements, and the garage is required to have a negative pressure in relation to the occupied space. A garage exhaust system may operate continuously, operating at a minimum level when the garage is unoccupied and operating at a maximum level when the garage is occupied, or a vehicle is started. Alternately a garage exhaust system may operate intermittently if it meets four specific code provisions including the installation of a gas detection system. The current system does not meet the ventilation requirements for an enclosed garage. A garage ventilation upgrade project to install radiant heaters, make-up air units, exhaust fans, and control system with gas detection, is necessary to improve garage ventilation and occupant safety. The recommendation is to operate the system continuously with increased ventilation during the occupied period.

**Police Station
Police Department
HVAC Systems**



Air unit (typical)



Air unit (typical)



Firing range air unit



Training room air unit



Power roof ventilators (typical)



Interior exhaust fans (noisy)

**Police Station
Police Department
HVAC Systems**



Firing range exhaust



Chiller



Leibert unit (floor mounted example)



Makeshift room ventilation unit



Typical ceiling exhaust fan



Boilers

**Police Station
Police Department
HVAC Systems**



Hot water pumps



Chilled water pumps



Gas meter



Temperature control air compressor



Firearm cleaning exhaust hood



Firing range control panel

**Police Station
Police Department
HVAC Systems**



Electric heat at stairs and toilets



Fin tube (installed at floor)



Air unit VFD's (boiler units similar)



Garage control panel



Garage exhaust (near ceiling)



Generator louver

**Police Station
Police Department
HVAC Systems**



Garage make-up air unit



Garage exhaust vent (behind storage)



Garage exhaust vent (typical)



Fuel tank vents



Hazardous storage room (vented tanks)



Garage storage exhaust fan (old)

electrical systems

summary

The building is served by a 1600 Amp, 120/208 Volt, three-phase electrical service. The original panels are in fair condition; the panels added in the 1992 renovation are in good condition. The newer panels have capacity for future load. The emergency generator serving the building is in fair condition. The emergency electrical system is fed from a single transfer switch which serves a main distribution panel to feed emergency panels throughout the building. The equipment is in fair condition and has some future capacity. An additional transfer switch and panel board is recommended to separate the non-life safety loads from the life safety loads. Storage is currently blocking the code required 3-feet for electrical clearance for panels located in the main server room.

There are numerous outlets around the building that need to be GFCI protected. Lighting fixtures are in fair to good condition and utilize T8 lamps and ballasts, incandescent and compact fluorescent lamps. There are several fixtures with broken, miscolored or missing lenses. These should be replaced or repaired. There are a few occupancy sensors located in office areas, but the facility should install occupancy sensors in all offices, meeting rooms, break room, storage rooms and janitor's closets. HID building mounted fixtures are in fair condition; consideration should be given to replacing the HID fixtures with more efficient and lower maintenance LED fixtures in the future. The parking lot lighting and flagpole lighting have been upgraded to LED.

The server equipment is in good condition and the facility is pulling Cat 5 and Cat 6 data and voice cabling from data racks on each floor and coax for CATV. The fire alarm system is a zoned system with smoke detectors, pull stations, and notification devices located around the building. Coverage does not comply with current code; a new addressable fire alarm system upgrade is recommended with additional devices provided to meet code.

legend

D	Deficient – Immediate Replacement	CP	Critical Priority – Replace in 1-2 years	HP	High Priority – Replace in 3-5 years	F	Fair – Replace in 6-10 years	C	Compliant/Adequate	N	New	N/A	Not Applicable
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electrical systems	grade	budget cost	notes	comments
normal power distribution equipment				
Utility service entrance	C			Pad mounted utility transformer serves 1600 Amp underground electrical utility service and feeds main service equipment in the 2 nd floor mezzanine.
normal power distribution equipment				
Main distribution panel	C			600 Amp GE Power Panel in good condition with some future capacity.
Branch panels	F		E1	Original GE NLTG panels in fair condition and 1992 renovation GE A-Series panels in good condition. Panels have future capacity.
emergency power distribution equipment				
Generator	F		E2	200 KW Onan natural gas generator located in the vehicle garage, in fair condition.
Transfer switch	HP	\$25,000	E3	Onan 800 Amp ATS in fair condition.
Main distribution panel	HP	\$10,000	E3	800 Amp GE Power Panel in good condition with some future capacity.

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electrical systems	grade	budget cost	notes	comments
Branch panels	HP	\$25,000	E3	Original GE NLTG panels in fair condition and 1992 renovation GE A-Series panels in good condition. Panels have future capacity.
power				
Receptacles	D	\$1,500	E4	Garage outlets and outlets within 6' of sinks, and outlet in elevator equipment room needs to be GFCI. Plug strips are being used in locker rooms for charging devices.
lighting				
Garage	C			Industrial fixtures and surface mounted wraps with T-8 lamps in good condition.
Office spaces, conference rooms, gun range, and corridors	C			Recessed acrylic lens and parabolic louver troffers, surface wraps with T-8 lamps, and incandescent downlights and track heads. Fixtures are in good to fair condition.
Toilet rooms	F	\$1,000	E5, E6	Recessed troffers and surface mounted wraps in good condition. Men's shower and sauna have incandescent lamps (sauna fixture is missing lens).
Mechanical spaces, storage rooms, utility areas	F	\$3,000	E5, E6	Industrial strips and surface mounted wraps with T-8 lamps, (some fixtures have broken lenses) and ceramic sockets with incandescent and compact fluorescent lamps.
Exterior lighting	C	\$3,000	E7	Building lights are HID, poles are LED.
lighting controls				
Offices, conference rooms, break room	HP	\$6,000	E8	Add occupancy sensors.
Toilet rooms/small storage rooms	HP	\$1,500	E8	Add occupancy sensors.
emergency egress lighting and exit signs				
Corridors	C			Fixtures connected to emergency panels.
Exit signs	C			LED type in good to fair condition.
fire alarm				
Zoned system	F	\$50,000	E9	Simplex 4002 zoned system in fair condition, coverage does not meet code. Some pull stations are not ADA compliant for mounting height.
telecommunications				
Data/voice/CATV	C			UPS's protecting the telecom equipment. Cat 5, Cat 6 and coax cabling.

notes:

- E1.** Code required 3-feet for electrical clearance and clear space above the equipment is not being maintained in server room.
- E2.** When the generator is replaced in the future, it will need to be located within a dedicated electrical room with appropriate floor, ceiling, and wall fire-rated construction.
- E3.** Recommend providing an additional automatic transfer switch and a new distribution panel to separate the non-life safety loads from the life safety loads. Additional branch panels would be needed to transfer circuits from existing panels that have mixed loads.
- E4.** Replace all outlets located in the garage area with GFCI type device. Replace existing outlets within 6-ft of sinks with GFCI type device unless they are currently protected from a nearby GFCI outlet. If this is the case, the outlet should be labeled per NEC requirements. The elevator equipment room receptacle needs to be GFCI.
- E5.** Replace incandescent lamps with compact fluorescent or LED type for energy savings.
- E6.** Consideration should be given to replacing older fixtures with new. Replacement or repair should be done on fixtures with broken or missing lenses.
- E7.** Consider replacing all HID fixtures with more efficient LED in the future.
- E8.** Occupancy sensors should be installed in the meeting room, conference rooms, offices, storage rooms, and janitor's closets, etc. to provide additional energy savings. If areas are renovated, controls will be required to be updated to meet current energy code.
- E9.** Recommend upgrading the fire alarm system to an addressable system with device locations that meet current code requirements.



Main electrical service meter



Utility transformer

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Main electrical equipment



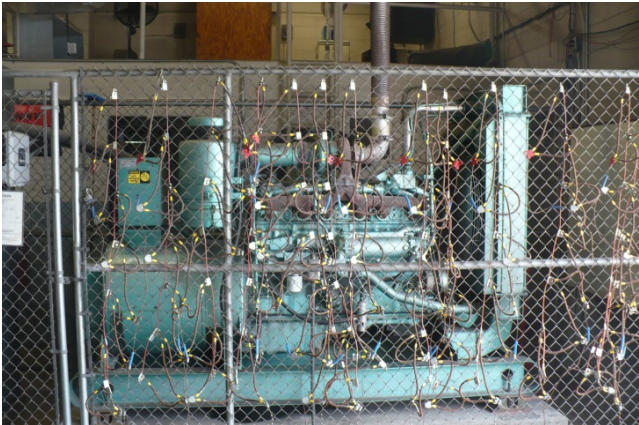
Main fused switchboard



Surge suppressor



Normal main distribution panel



Generator



Automatic transfer switch

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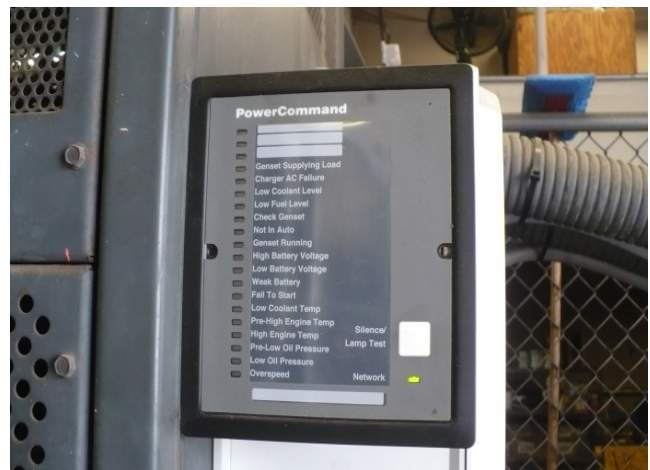
EM main distribution panel



1992 renovation panel



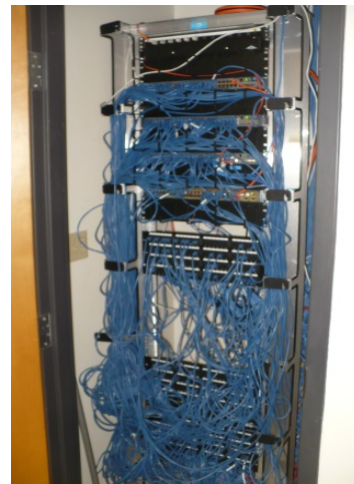
Original panel



Generator annunciator panel

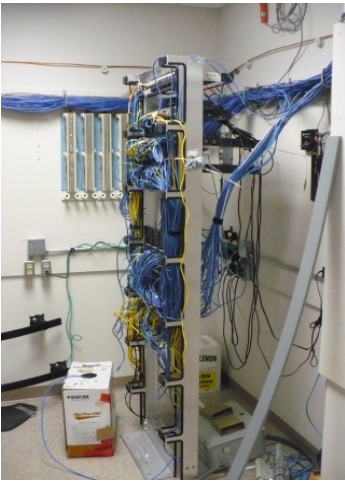


Basement data rack



1st floor data rack

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2nd floor data rack



UPS



Exit sign



1st floor corridor lighting



Office lighting



Office lighting

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Basement Lighting



Garage lighting



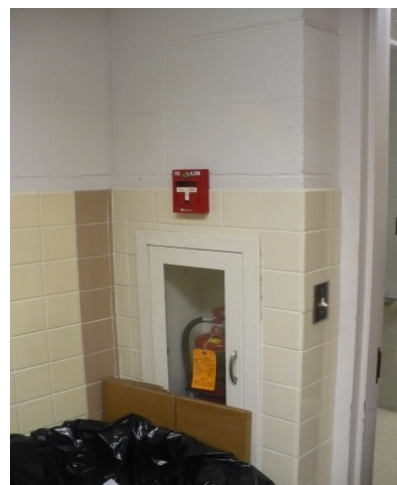
Stairwell lighting



Sauna light missing lens



Fire alarm horn/strobe



Non-ADA height of pull station

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HID wall pack light



LED pole light