VILLAGE OF LAKE BLUFF
ARCHITECTURAL BOARD OF REVIEW

Tuesday, June 6, 2023 – 7:00 P.M.

This meeting will take place in-person at Village Hall and is open to the public. Members of the public also have the option to view and participate in the meeting remotely via:

- Online: www.lakebluff.org/VirtualABR
- Dial-in: (312) 626-6799. Enter meeting ID 883 8475 2019. Press # when prompted for a Participant ID.
- The meeting will be live-streamed at lakebluff.org/Channel19

Village Hall Boardroom
40 E Center Avenue, Lake Bluff, Illinois

AGENDA

1. Call to Order and Roll Call

2. Consideration of the May 2, 2023 Architectural Board of Review Meeting Minutes

3. Non-Agenda Items and Visitors (Public Comment Time)
   The Architectural Board of Review Chair and Board Members allocate fifteen (15) minutes during this item for those individuals who would like the opportunity to address the Board on any matter not listed on the agenda. Each person addressing the Architectural Board of Review is asked to limit their comments to a maximum of three (3) minutes.

4. Design Review for Exterior Changes at the Central Lake County Joint Action Water Agency Pumping Station at 700 E Blodgett Avenue

5. Consideration of a Sign Permit for Forest North Dental at 101 Waukegan Road

6. Staff Report: Letter and Sketches from Paul Witt

7. Adjournment

The Village of Lake Bluff is subject to the requirements of the Americans with Disabilities Act of 1990. Individuals with disabilities who plan to attend this meeting and who require certain accommodations in order to allow them to observe and/or participate in this meeting, or who have questions regarding the accessibility of the meeting or the facilities, are requested to contact R. Drew Irvin at 234-0774 or TDD number 234-2153 promptly to allow the Village of Lake Bluff to make reasonable accommodations.
1. Call to Order and Roll Call
The meeting of the Architectural Board of Review (ABR) of the Village of Lake Bluff was called to order on May 2, 2023 at 7:00 p.m. in the Village Hall Board Room (40 E. Center Avenue). The following individuals were present.

Present:  Arthur Cottrell  
           Neil Dahlmann  
           Scott Streightiff  
           Bob Hunter, Chair  

Absent:  Ed Deegan  
         Matthew Kerouac  

Also Present:  Building Codes Supervisor, Mike Croak (BCS)  
               Village Administrator, R. Drew Irvin (VA)  
               Village Engineer, Jeff Hansen (VE)  

2. Consideration of the April 4, 2023 Meeting Minutes
Member Dahlmann made a motion to approve the minutes of the April 4, 2023 ABR meetings as amended. Member Streightiff seconded the motion. The motion passed on a unanimous voice vote.

3. Non-Agenda Items and Visitors (Public Comment Time)
Chair Hunter asked if anyone would like to address the ABR on any matter not on the agenda. There were no requests to address the ABR.

4. Design Review for Parking Lot Lighting at the Lake Bluff Middle School at 31 East Sheridan Place
Following an introduction from Chair Hunter, Shawn Benson with Wight and Company, said included in the packet were revised electrical plans, photometrics and his response to previous comments. The goal this evening is to respond to additional feedback received as of today.

Mr. Benson said the current parking lot has three light poles, two 20’ poles on the northern portion of the lot and one 25’ double fixture pole near the main entrance. The previous lighting submittal requested six 20’ poles; however, the School District has submitted a revised plan that reduces the number to five poles and height of the three new poles to 18.5’. The plan also includes an existing 25’ pole and a relocated existing 20’ pole, both near the northeast corner of the parking lot. Mr. Benson said the existing parking lot configuration does not provide enough lighting for safety reasons and the updated design will provide adequate lighting and complies with the Village Code requirements.
In response to the comment regarding color temperature, Mr. Benson said the existing lights are 4000K and best practice is not to mix light colors, as such the School District has elected to replace all light fixtures within the parking lot to 3000K. The proposed light fixtures are full cut off with backlight controls, external glare shields and, pursuant to the updated photometric, the lights provide no more than 0.1 FC at the north and west property lines and 0FC at the south property line.

In response to the comment regarding use of motion detectors, Mr. Benson said the new parking lot lights will be connected to the existing lighting control system which consists of a photocell programmed with a combination of seven-day timers. The photocell shall detect the presence or absence of light and trigger lights to turn on and off, as needed, and could be customize based on school operations and preference. Mr. Benson commented that the School District is seeking to add dimers with occupancy sensors and fully intends to comply with the Village’s Code requirements.

Jay Kahn, Director of Finance Lake Bluff School District 65 said parking lot lights are needed for safety and security purposes especially during nighttime hours when the cleaning crew exits the building. The plan is to add lighting controls with dimmers and occupancy sensors and in the absence of building activities the lights will be completely turned off (from midnight to 6:00 a.m.). Mr. Kahn said the School District has considered and incorporated all the previous feedback into the revised design and he is hopeful that the proposed changes will be sufficient.

Chair Hunter opened the floor for public comments.

Todd Pfizer came forward and said he lives next to the school and that a lot of good improvements have been mentioned. He stated there are no lights in the east parking and he assumes it is out of courtesy for the neighbors. He emphasized the important of limiting the lighting impact on all the adjacent neighbors. He said he thinks light pollution goes well with the “eco and energy” theme of the proposed improvements which includes permeable pavers, EV charging stations, etc. Mr. Pfizer said he would appreciate lower poles which will have a friendlier appearance as opposed to an industrial appearance. He expressed his opinion that lights are not need during the night because there is very limited activity. Lastly, Mr. Pfizer said he would like continued cooperation from the School District, after the lights are installed, because he does not fully understand the design components.

BCS Croak introduced the queued caller.

The queued caller, Anne Sorenson, stated she appreciate the efforts to minimize the lighting impact and she hopes the School District will continue dialoguing with the surrounding neighbors once the project is complete. The caller also expressed her concern regarding glare from the building and direct lighting. As a direct neighbor she is consciously aware of the lighting issues and has been diligently paying attention to the request for additional lighting as she often breathes a sign of relief when the building lights are finally turned off. She said she would like to see best
efforts to shorten the pole height, potential landscaping, build a more sustainable project and consider the impact to neighboring properties.

Chair Hunter opened the floor to comments from the ABR.

Member Streightiff said he thinks the proposed plan is a huge improvement to the existing parking lot; however, he is concern about the proposed pole height. He commented on why he thinks it would be beneficial to do a precedent study of the Lake Forest High School parking lot which has a similar environment and 12’ poles.

Member Dahlmann commented on why he is concerned with the proposed number of foot candles, pole height, color temperature and why he does not agree with the recommendation to replace all light fixtures within the parking lot to 3000K, as 4000K is normally used in nonresidential areas. He expressed his belief that if the poles were shorter there would be less glare on the southern neighbors.

Member Cottrell agreed with the comments regarding the proposed pole height which to him seems out of scale, then he asked if the cleaning crew could use the parking lot on the east side of the building. Mr. Kahn commented on the comparison between the east and west parking lots and why he thinks the focus regarding the pole height is misplaced. The north parking lot has one light pole which illuminates the sidewalk; whereas, the proposed light poles are need to illuminate the entire parking lot. Mr. Kahn said he does not think lower poles would accomplish the intended purpose, they could incur additional cost because additional lights would be needed, and if the proposed occupancy sensors are installed the fixtures and lights would have to be replaced. Lastly, he stated he is amendable to whatever color temperature the ABR desires.

Chair Hunter expressed his opinion that lower poles could narrow the light spread; therefore, he is inclined to go along with the lighting engineers’ recommendations and 3000K color temperature. He said in regards to the photographs received it seems the glare is coming from the building and the alternative could be to turn the lights off if not in use. Mr. Kahn said he was unaware that lighting was an issue and he would be happy to work to reduce any kind of light pollution. A discussion followed.

In response to the comment regarding one-foot candles and appearance, Mr. Benson said the revised photometric indicates the lights would provide no more than 0.1 FC at the property lines. He commented on how shorter poles could possibly create “hotspots” and require additional lighting to illuminate the parking lot. A discussion followed.

Member Cottrell said he would rather see shorter fixtures because lesser bulb wattage can be used then he inquired of the cost to install additional poles. A discussion followed.

In response to a comment from Member Dahlmann, Mr. Kahn commented on the proposed light fixtures noting that the bottom will be exposed with metal shielding around the sides. A discussion followed.
In response to a question from the audience, Mr. Benson commented on the existing pole configuration and said the plan is to reuse one of the 20’ pole and the 25’ pole and install three new poles (18.5’) then he commented on the proposed relocation/location of the poles.

Following a discussion, an audience member said she is not sure if the proposed changes are being considered to improve the impact on the neighbors or just to make changes. BCS Croak said Staff memorandum, which was included in the packet, mentioned reuse of the existing poles. A discussion followed.

Mr. Kahn said the School District is trying to design a safe parking lot that fits with the neighborhood. In response to a comment from the audience, Mr. Kahn said the west parking lot is the main parking lot then he commented on the east parking lot features noting its used mainly during the day as an auxiliary overflow lot.

Member Dahlmann said he believes public street lights are located on both sides of the building. BCS Croak said ComEd fixtures are not cut off and radiate light horizontally. Member Dahlmann said he thinks smaller candles are acceptable with the except of the main entrance which would require more lighting. Chair Hunter said safety should be our first priority then consider how to accommodate safety with the needs of the neighborhood. A discussion followed.

In response to a question from Member Cottrell, A discussion regarding the aesthetic of the different pole height followed.

In response to a question from the audience, Mr. Kahn commented on the existing light control system and noted the School District is considering a different lighting control system with motion sensors and dimmers. A discussion followed.

In response to a question from the audience, BCS Croak said the Village Board has not adopted any formal requirement regarding “Bird City.” He mentioned that the intent is to be “dark sky” friendly by turning off lights when not in use.

In response to a comment from Member Cottrell, Mr. Benson said the poles would be the same color and brand as the existing poles and a double fixture on the tallest pole. Member Cottrell said he would be inclined to go along with the request based on the assurance that the School District will take steps to shut off lights whenever possible and consider changes to the building to accommodate light pollution as well. Chair Hunter said if shorter poles are used it could worsen the situation.

Member Dahlmann asked if shorter poles (10’ or 15’), without additional fixtures, could be considered. Mr. Kahn said that would required another model to be done and he noted that the School District is coming up on its summer recess and any delays would be problematic. Member Streightiff reiterated that the poles in the north parking lot at the Lake Forest High School are 12’ and he thinks it would be worthwhile to look at the configuration. A discussion followed.
In response to a comment from an audience member, Member Dahlmann said the current lights are not shielded and he suspects the surrounding neighbors are not seeing light but glare from the light fixture.

In response to questions from Chair Hunter, Mr. Kahn said there are no ground lights near the front door just a few spotlights underneath the overhang. Mr. Benson commented on additional options such as removal of the 25’ pole with double fixtures, reuse both the 20’ poles with single fixtures which he thinks will have a major effect on the lighting at the front entrance. Mr. Kahn asked if a double fixture would be installed on the 20’ pole because it is important to illuminate the main entrance.

An audience member said it seems like the School District does not know how the plan will impact the neighbors, and she would feel better if they presented a plan that would minimize the light and provide safety for both the neighbors and cleaning crew. A discussion followed.

In response to an audience member, Mr. Kahn said their proposing to reduce the intensity of the light by change the fixtures. Mr. Benson said if lower poles with single fixtures would provide sufficient lighting that would be fine; however, the preferred option would be to reuse the existing poles because additional foundation would be expensive.

An audience member said he agrees with the proposed removal of the 25’ double fixture pole, turning the lights off when not in use and the School District continued dialogue with the neighbors after the improvements are done because he would be disappointed if potential future issues are not addressed.

Mr. Kahn stated publicly for the record that the School District intends to be a good neighbor. He expressed his opinion that once the project is done, the source of lighting impacting the neighbor would be from the building which he pledges to address as well. A discussion followed.

Member Streightiff said he thinks it would be a mistake to allow 18’ poles and he strongly suggest the School District consider using 15’ poles.

In response to a question from Member Dahlmann, Mr. Kahn said he is not proposing to change the color temperature in the other parking lot and he would evaluate the building lights which he believes is 3000K pursuant to the recommendation at that time. A discussion followed.

Following a discussion regarding lighting, Member Cottrell made a motion to approved the light plan subject to the stipulations that both of the existing 20’ poles will be reused and the 25’ pole removed. Member Dahlmann seconded the motion. The motion failed on the following roll call vote:

**Ayes:** Cottrell, Chair Hunter

**Nays:** Streightiff, Dahlmann

**Absent:** Deegan, Kerouac
A discussion ensued. In response to a comment from Chair Hunter, Mr. Kahn said he thinks 15’ is an arbitrary number and he reiterated that lowering the poles would add considerable cost and could jeopardize the timing of the project. Mr. Kahn said he is relying on the recommendation of the lighting engineers and experts that designed the plan and he does not agree with choosing an arbitrary number for the sake of compromise.

Following an extensive discussion regarding lighting, Member Cottrell made a motion to amend the motion to approved the light plan with the condition that the 25’ double light fixture will not be reused, use updated lighting controls, and that the school district will undertake a good faith effort to see if they can use lower light poles and presented Staff review a revised photometric lighting plan. Member Dahlmann seconded the motion. The amended motion passed on the following roll call vote:

Ayes: Streightiff, Cottrell, Dahlmann, Chair Hunter
Nays: None
Absent: Deegan, Kerouac

5. **Discussion of the Glen Avenue Footbridge and Related Landscaping**

Following an introduction from Chair Hunter, VA Irvin and VE Hansen provided an updated on the revised Bridge Brothers bridge design and landscape plan.

In response to questions from Chair Hunter, VE Hansen said the drawing presented has the outriggers dimension labeled as 2’ and the top of the mesh complies with rail requirements (3’6”). Chair Hunter expressed his understanding that every 10 feet should have an upright vertical piece or nothing on the rail at all. A discussion followed.

In response to a question from Chair Hunter, VE Hansen said the project was budgeted for $500,000 and the Village received an anonymous donation in the sum of $400,000. The removal of the existing bridge, required site work to accommodate the new bridge and landscape enhancements bring the estimated total project cost $600,000. If funds are available Ipe wood decking and trim will be installed, if not, a treated hardwood deck similar to the Gurnee bridge will be installed.

Member Cottrell inquired of the material underneath what appears to be channels supporting the deck, VE Hansen said that is a 5’ steel tube. A discussion followed. Member Cottrell asked if the verticals on each side were truss (4 x 7), VE Hansen replied yes.

Member Dahlmann expressed his concern with details specifically the fasteners used on the existing bridge near the Metra Train Station. VE Hansen said the proposed bridge would be welded mostly and some hardware used for the connections. A discussion regarding details followed.
In response to a question from Chair Hunter, VE Hansen said the previous drawings and revised plans will be provided and if needed, he would request close-up photographs of the connections/hardware. A discussion followed.

VA Irvin summarized the discussion and commented on the proposed revision to the Teska Concept Plan. He said the plan mimicked the existing bridge and the neighbors were complimentary to the changes. He said if possible, the plan is to minimize the impact on landscaping and trees during construction and install a rock border along the existing path.

Following a discussion, Member Dahlmann made a motion to recommend the Village Board approve the bridge and approach design as presented. Member Streightiff seconded the motion. The motion passed on the following roll call vote:

Ayes: Cottrell, Dahlmann, Streightiff, Chair Hunter
Nays: None
Absent: Deegan, Kerouac

6. **Staff Report**

   BCS Croak reported that the Village Board approved first reading of the ordinance amending the Lake Bluff Municipal Code to adopt new editions of the International Code Council and National Fire Protection Association codes and local amendments with the ABR’s recommendations of the proposed codes and local amendments without any change to the existing exemption for churches.

7. **Adjournment**

   As there were no further business to consider, a motion was duly made and passed to adjourn the meeting at 8:47 PM.

   Respectfully submitted,

   Mike Croak, CBO, CBCO
   Building Codes Supervisor
Memorandum

TO: Chairman Hunter and Members of the Architectural Board of Review
FROM: Mike Croak, Building Codes Supervisor
DATE: June 6, 2023
SUBJECT: Agenda Item #4 – Design Review for Exterior Changes at the Central Lake County Joint Action Water Agency Pumping Station at 700 E Blodgett Avenue

The Central Lake County Joint Action Water Agency (CLCJAWA) has begun some interior changes in their pumping station at 700 E Blodgett Avenue and are proposing some related exterior changes, which included extending the driveway to the north to allow for deliveries of liquid sodium permanganate into the new fill pipe and the placement of a new exhaust fan near the northeast corner of the building. The exhaust fan has a silencer built into the exhaust stack in order to comply with the State of Illinois noise regulations which prescribe different decibel limits for different frequencies of sound. The air conditioners which had been included in the plans previously are no longer included.

Recommendation:
It is recommended the ABR consider the proposed design, appropriately question the Petitioner as needed, entertain public comments and questions and make one of the following recommendations regarding the design:

- Approve the design;
- Deny approval to the design; or
- Request the petitioner to provide additional information for the ABR’s consideration.

Grant Wollert, Director of Operations for JAWA, and Village Staff will be in attendance at the meeting to respond to questions from the ABR. If you should have any questions regarding this matter, please feel free to contact me at 847-283-6885.

Documents Attached:
- Powerpoint Presentation
- Noise Study
Meeting Agenda

- Key Objectives
  - Project Summary
  - Review Proposed Exterior Improvements
  - Architectural Board of Review Q&A
Project Summary
Project Locations

PROJECT LOCATION 2
BOOSTER PUMP STATION
MALLORY DRIVE
LIBERTYVILLE, IL 60048

PROJECT LOCATION 1
RAW WATER PUMP STATION
BLODGETT AVE
LAKE BLUFF, IL 60044

KENOSHA COUNTY (WISCONSIN)

LAKE MICHIGAN

KANE COUNTY

COOK COUNTY

MCHENRY COUNTY

Lake County, Illinois
Project Improvements

- **Raw Water Pump Station**
  - Converting Potassium Permanganate System to liquid Sodium Permanganate System
  - New Chemical Room with feed line, bulk storage, and emergency eyewash/shower
  - New Raw Water Pump installation and associated electrical improvements
  - New Exhaust Fan serving chemical room
Exterior Improvements - RWPS
Site Map
Site Plan

- New Chemical Fill Station
- New Exhaust Fan
- Extended Driveway Pavement
Chemical Fill Station

- Stainless steel fill station with drip containment
- Not visible from street
Exhaust Fan

- Silencer included on exhaust stack. No additional sound attenuation necessary. *See sound study*
- Not visible from street
View from Blodgett
Questions?
May 22, 2023

Mr. Grant Wollert
Director of Operations
Central Lake County Joint Action Water Agency
200 Rockland Road
Lake Bluff, IL 60044

Re: CLCJAWA Raw Water Pump Station Noise Study
Wave #2643

Dear Grant,

We have completed our analysis of noise radiated from the Central Lake County Joint Action Water Agency (CLCJAWA) Raw Water Facility. We evaluated noise from existing equipment and from the exhaust fan you intend to add. *We have revised this report with updated calculations since you no longer plan to add two split-system outdoor units. The previously planned sound wall is no longer needed.* This report summarizes our findings and recommendations.

Wave Engineering staff visited the site in November of 2017 to observe existing conditions at the time. We completed a previous study and report (dated December 22, 2017) describing the existing noise and future noise from a fifth additional pump. The assessment in this report includes the fifth pump in the existing equipment.

The intent of the study in this report is to determine the impact to outdoor levels of adding one exhaust fan and make recommendations if necessary to ensure compliance with the limits set forth by the Illinois Pollution Control Board (IPCB).

**State of Illinois Title 35: Environmental Protection Subtitle J: Noise Chapter Illinois Pollution Control Board Parts 900, 901, and 910**

Illinois Title 35 regulates noise emitted to adjacent properties.

Part 901 sets allowable sound level limits based on the types of land use of adjacent properties. The surrounding residential properties are Class A and the CLCJAWA facility is considered Class C. Section 901.102 sets allowable octave band sound pressure levels for sound emitted to Class A land. The octave band sound level limits are equivalent (\(L_{\text{EQ}}\)) sound levels per State of
Illinois Title 35: Environmental Protection Subtitle H: Chapter I: Part 910 Measurement Procedures for the Enforcement of 35 Ill. Adm. Code 900 & 901. “Equivalent” sound pressure levels are similar to average sound levels.

Part 900 General Provisions Section 900.103, b) 1) states that compliance sound measurements shall be based on \( L_{\text{EQ}} \) averaging. For steady sounds which vary by no more than \( \pm 3 \) dB using the “slow” measurement response on the sound level meter, the averaging period shall be at least 10 minutes long. For other sounds, the averaging period shall be at least one hour. The Raw Water equipment and proposed equipment produce steady noise. A one-hour measurement is necessary to determine background noise levels.

The allowable sound pressure levels that can be emitted from the CLCJAWA facility (Class C) to a residential property (Class A) are shown in Table 1.

Table 1: State of Illinois IPCB Allowable Sound Pressure Levels

<table>
<thead>
<tr>
<th>Octave Band (Hz)</th>
<th>Class C to Class A</th>
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<th></th>
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<tbody>
<tr>
<td></td>
<td>Daytime dB</td>
<td>Nighttime dB</td>
<td></td>
</tr>
<tr>
<td>31.5</td>
<td>75</td>
<td>69</td>
<td></td>
</tr>
<tr>
<td>63</td>
<td>74</td>
<td>67</td>
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<td>125</td>
<td>69</td>
<td>62</td>
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<td>250</td>
<td>64</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>500</td>
<td>58</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>1,000</td>
<td>52</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>2,000</td>
<td>47</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>4,000</td>
<td>43</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>8,000</td>
<td>40</td>
<td>32</td>
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</tbody>
</table>

The sound levels are measured at the property line for enforcement per Part 910.105.a.2. Again, the statute states that an average sound level is measured to determine compliance.

Nighttime hours are defined in Part 900 as 10 p.m. to 7 a.m. The Raw Water facility operates 24/7, so the nighttime limits were used in our analysis.
**Existing and New Equipment**

The following equipment was analyzed.

5 existing vertical turbine pumps  
Air handling units ventilating the pump room and generator room  
Ventilation Fan for Electrical Room (propeller fan behind exterior louver)  
1 new/proposed exhaust fan with silencer

A sound wall that was proposed previously to mitigate noise from the two split-system outdoor units is no longer necessary and is not included in the latest analysis and results.

Calculations were run with the existing outdoor emergency generator and emergency generator radiator off since they do not run continuously and are only used in emergency situations.

**Exhaust Fan Silencer**

A silencing device (silencer) will be provided on the exhaust fan outlet. This device will lower the sound levels from the exhaust fan significantly.

**Prediction of Future Noise Levels**

Future noise levels were predicted with Datakustik CadnaA noise prediction software. It was also used to evaluate the effectiveness of options for noise mitigation. The software takes into account sound that radiates from all of the noise sources on site, the local terrain and topography, buildings, sound wall, and atmospheric conditions. The predictions are done according to the methodology of ISO Standard 9613-2: Acoustics – attenuation of sound during propagation outdoors, Part 2: General Method of Calculation. This is an international standard for predicting noise transmission outdoors.

The predicted sound levels are from the existing and future CLCJAWA Raw Water facility equipment only and do not include background sound from traffic or other sources. The IPCB allowable sound levels do not include background sound. Background sound must be accounted for, and where possible, subtracted from the equipment noise levels when measured. The statutes provide procedures on how to account for background sound.

The predicted noise level contours are intended to represent a one-hour average. Each figure shows the predicted noise level in a different octave band. Again, the color contours shown in the figures represent calculated levels of how the sound radiates as it travels away from the sources. The calculated sound levels without any new equipment were verified using the past actual field measurements of existing equipment and the previous study’s model. The new equipment was then added to the verified model. The contours are determined from calculations made on an
8’x8’ grid of points. While the predicted noise levels should be reasonably close to the contours, they are based in part on interpolation between the calculation points.

Each figure shows contours of sound levels in a single octave-band as well as sound levels at two discrete points. The sound levels can be compared to the state limits in that band. The nighttime limit for each band is shown in each figure. The property line (shown in aqua) and predicted level at certain points at the property line are called out on each figure.

The legend on each figure shows the range of sound level for each contour color. The contours are plotted in 1 decibel (dB) increments. For example, the first orange contour as you move away from the building is the 60 dB contour. The next orange contour is 59 dB, the next is 58 dB, and so on until you get to the brown contour at 55 dB.

Some of the contours are rather jagged lines. This results from small changes in sound level and numerical rounding. For example, if a sound level of 45.6 dB is calculated at one point and a sound level of 45.4 dB is calculated at the next point, the first point will be on the 46 dB contour and the next on the 45 dB contour. This can sometimes cause the contours to appear more abrupt than the sound levels will occur in reality.

**Predicted Noise Levels from the Exiting Equipment and Mitigation and New Equipment and Mitigation without the Generator Running**

Figures 1-9 show the predicted sound levels in each octave band from the equipment listed in under “Existing and New Equipment” above. The contours in these figures do not include Generator and Radiator noise since they only run during emergencies.

The predictions show that the facility noise levels will comply with the IPCB limits in all octave bands with the sound wall and new equipment in place when the generator and radiator are not running.
Figure 1: Predicted Sound Levels in the 31.5 Hz Octave Band with New Equipment

Figure 2: Predicted Sound Levels in the 63 Hz Octave Band with New Equipment
Figure 3: Predicted Sound Levels in the 125 Hz Octave Band with New Equipment

Figure 4: Predicted Sound Levels in the 250 Hz Octave Band with New Equipment
Figure 5: Predicted Sound Levels in the 500 Hz Octave Band with New Equipment

Figure 6: Predicted Sound Levels in the 1,000 Hz Octave Band with New Equipment
Figure 7: Predicted Sound Levels in the 2,000 Hz Octave Band with New Equipment

Figure 8: Predicted Sound Levels in the 4,000 Hz Octave Band with New Equipment
Figure 9: Predicted Sound Levels in the 8,000 Hz Octave Band with New Equipment

Conclusions

Figures 1-9 show that the CLCJAWA Raw Water noise levels (excluding noise from the Generator and Radiator) will meet the IPCB nighttime limits with the proposed new equipment.

Please feel free to contact us if you have any questions or want to discuss this further.

Sincerely,

Iliana Schad
Staff Acoustical Consultant

Reviewed By:

Jeff Kwolkoski, P.E. (CO), INCE Bd. Cert.
President
Memorandum

TO: Chairman Hunter and Members of the Architectural Board of Review

FROM: Mike Croak, Building Codes Supervisor

DATE: June 6, 2023

SUBJECT: Agenda Item #5 – Consideration of a Sign Permit for Forest North Dental at 101 Waukegan Road

Forest North Dental is moving into Suite 1200 in the southeast corner of the 101 Waukegan Road building. They are proposing to install a 4’ x 8’ metal sign with vinyl graphics over the main entrance to their suite on the south side of the building. The maximum sign area allowed is 1.75 sq ft per linear foot of the tenant space’s façade. The south façade of the tenant space is 98’-5”, so the maximum sign area is 172 sq ft. The location of the sign will be near the middle of the south façade, in the location labeled “Type 5/Type 6” in the attached site plan. The other signs on the site plan are existing.

<table>
<thead>
<tr>
<th>Sign Code L-1</th>
<th>Proposed Signage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.) Max area 172 sq ft</td>
<td>Complies, 32 sq ft proposed</td>
</tr>
<tr>
<td>2.) Max # of wall signs is one per tenant</td>
<td>Complies, one wall sign proposed</td>
</tr>
</tbody>
</table>

The ABR has the authority to:
- Approve the sign permit; or
- Deny the sign permit; or
- Request that the petitioner submit additional information.

A representative of All-American Sign and Village Staff will be in attendance at the meeting to respond to questions from the ABR. If you should have any questions regarding this matter, please feel free to contact me at 847-283-6885.

Documents Attached:
1. Proposed Sign
2. Site Plan
(1) NEW 4' x 8' x 2" (D) PAN-FORMED ALUM (NON-ILLUM.)
- PAINT WHITE w/ DIGITAL PRINT (CONTOUR-CUT) VINYL LOGO
- EXTERIOR FLUSH WALL MOUNT

NOTE: THIS IS AN ORIGINAL UNPUBLISHED DRAWING, CREATED BY ASC, INC. IT IS SUBMITTED FOR YOUR PERSONAL USE IN CONNECTION WITH A PROJECT BEING PLANNED FOR YOU BY ASC, INC. IT IT NOT TO BE SHOWN TO ANYONE OUTSIDE YOUR ORGANIZATION, NOR IS IT TO BE REPRODUCED, COPIED, OR EXHIBITED IN ANY FASHION.
Lake Bluff Architectural Board of Review

From Paul Witt

Dear Members,

Thank you for your presentation in April and taking comments from the community about the coming pedestrian bridge replacement over the ravines at Glen Avenue.

The contentions regarding the bench proposal set in the center of the village road right of way at the north of the bridge was unfortunate.

Over the years, I have seen classes of students from our local schools use the ravine as a teaching tool and reality examples for various natural elements. Perhaps the bench could be replaced by a panorama of the sights in front of the viewer, a “teaching station”.

Likewise, the concrete bridge bases proposed to remain in place could become a bench with table and perhaps with the metal standards, create a base for a shelter roof or a bulletin board used as a teaching station.

Just a thought. Thank you for your work and I’m inclosing a couple of sketches of that April meeting for your use as needed.

Regards,

Paul Witt