

VARIANCE FEES

MGO \$50.00
COMM \$490.00
Priority – Double above

PETITION FOR VARIANCE APPLICATION

City of Madison
Building Inspection
Division
126 S. Hamilton St.
Madison, WI 53703
(608) 266-4568

Amount Paid 490.00

Name of Owner Mr. Paul D. Muench	Project Description Lots 4 and 5 University Research Park University of Wisconsin Madison	Agent, architect, or engineering firm Affiliated Engineers, Inc.
Company (if applies) University Research Park		No. & Street 5802 Research Park Blvd.
No. & Street 510 Charmany Dr. Suite 250	Tenant name (if any)	City, State, Zip Code Madison, WI 53719
City, State, Zip Code Madison, WI 53719	Building Address 465 Science Drive Madison, WI 53711	Phone 608-236-1278
Phone 608-441-8010		Name of Contact Person Kevin Seton
e-mail pdmuench@wisc.edu		e-mail kseton@aeieng.com

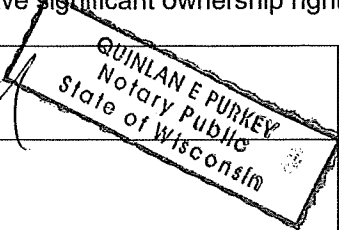
- The rule being petitioned reads as follows: (Cite the specific rule number and language. Also, indicate the nonconforming conditions for your project.)
The variance requested is to take exception to local lighting control as required by Wisconsin Chapter SPS 363 in cGMP contractor development and manufacturing (CDMO) laboratory spaces. The specific section being petitioned is 9.4.1 (a) in ASHRAE 90.1 2013 for local control requirement in Laboratory and Corridor space types as defined in Table 9.6.1.
- The rule being petitioned cannot be entirely satisfied because:
Local control devices and faceplates will wear down and deteriorate rapidly in cGMP production labs and adjacent corridors when exposed to the harsh cleaning agents (peracetic acid) and cause frequent and costly downtime in these areas.
- The following alternatives and supporting information are proposed as a means of providing an equivalent degree of health, safety, and welfare as addressed by the rule:
Lighting control in the cGMP production labs and adjacent corridors will be accomplished through a central time-schedule relay control system. Lights will turn on and remain on throughout regular business. Outside of business hours, non-emergency lights in the areas will shut off. Occupants of cGMP laboratory and corridor spaces will have the ability to manually override the scheduled shut off through a personal tablet interface with the building automation system (BAS). Laboratory workers will have this personal tablet on their persons as they navigate and occupy these spaces. The proposed lighting control removes the vulnerable devices and faceplates from the spaces while providing energy use reduction through scheduled shutoff outside of business hours, and it allows local control and override of scheduled shutoff as necessary.

Note: Please attach any pictures, plans, or required position statements.

VERIFICATION BY OWNER – PETITION IS VALID ONLY IF NOTARIZED AND ACCOMPANIED BY A REVIEW FEE AND ANY REQUIRED POSITION STATEMENTS.

Note: Petitioner must be the owner of the building. Tenants, agents, contractors, attorneys, etc. may not sign the petition unless a Power of Attorney is submitted with the Petition for Variance Application.

Paul D. Muench, being duly sworn, I state as petitioner that I have read the foregoing petition, that I believe it to be true, and I have significant ownership rights in the subject building or project.

Signature of owner <i>Paul D. Muench</i>		Subscribed and sworn to before me this date: <u>11/26/18</u>
Notary public <i>Quinlan E. Purkey</i>		My commission expires: <u>1/2 permanent</u>

NOTE: ONLY VARIANCES FOR COMMERCIAL CODES ARE REQUIRED TO BE NOTARIZED.

APPLICATION INSTRUCTIONS

1. Fill in the owner's information section. It is important to have a complete address and phone number for communication between the applicant and the department.
2. Fill in the project description box. Explain what the building project is. (Basement alteration, second floor alteration, two-story addition, etc.)
3. If there is an agent working for the owner and the agent is a better contact for information regarding the variance, fill in the agent information area.
4. Answer the three questions.
 1. State the code and section number with a summary of what the code says. Also, indicate what the nonconforming conditions for the project are. (example: COMM 21.04 minimum stair width is 36 inches. We will have 34 inches of stair width.)
 2. State why the rule cannot be satisfied. (example: not structurally feasible)
 3. State what will be done to provide an equivalency to the code. These items should be things that relate to the item the variance is being sought for and exceed code requirements.
5. Print the Owner's name on the line indicating to do so.
6. The owner of the property is required to sign where indicated. If the project is for a one or two family home the form is not required to be notarized. If the project is for a commercial building the form is required to be notarized.

Variance Procedure

1. Fill out the variance form.
2. If the variance is for a commercial building and is not for an accessibility code contact the fire department so they can fill out a fire department position statement.
3. Submit the application and fee to the building inspection department. Also, where applicable, submit the fire department position statement.
4. A field inspector may visit the site to verify existing conditions and the completeness of the application.
5. If there have previously been at least 5 variances for the same item approved, the variance may be approved on precedence. In this case the applicant will not have to attend a meeting of the building board and will be notified by letter that the variance is approved. The letter will be sent within 7 days after the scheduled meeting.
6. In all other cases the variance will be presented to the building board at a monthly meeting. 7 days before the meeting the supervisor will review the variance for approval to be put on the agenda. 5 days before the meeting the secretary will mail out the agenda to the Appeals Board members and to the applicants.
7. When a variance is heard by the board the applicant or agent must attend the meeting to answer questions.
8. The meeting minutes will be mailed within 7 days after the meeting.

Badger Project
AEI Project # 18463-00
November 12, 2018

Petition for Variance – Electrical
ASHRAE 90.1 9.4.1.1[a]

Attachment 1: Variance Summary

Summary

The project for Fujifilm Cellular Dynamics, Inc. (FCDI) includes repurposing and renovation of an existing two-story pharmaceutical manufacturing building. The new FCDI purpose for the project will be to “provide cell processing clean rooms, quality control laboratories, raw materials and equipment storage and processing rooms, contractor development and manufacturing labs (CDMO), offices, conference rooms, and common amenities” to support FCDI’s short term and future Therapeutics Business Unit program. It has been proposed by AEI and FCDI to remove lighting control devices in all CDMO laboratory spaces and adjacent corridors to avoid replacement of these devices from degradation caused by cleaning agents.

ASHRAE 90.1 Table 9.6.1 states that local control is required in all Laboratory and Corridor space types. Local control is defined by section 9.4.1.1[a]

“Local control: There shall be one or more manual lighting controls in the space that controls all of the lighting in the space. Each control device shall control an area (1) no larger than 2500 ft² if the space is ≤10,000 ft² and (2) no larger than 10,000 ft² otherwise. The device installed to comply with this provision shall be readily accessible and located so that the occupants can see the controlled lighting when using the control device.”

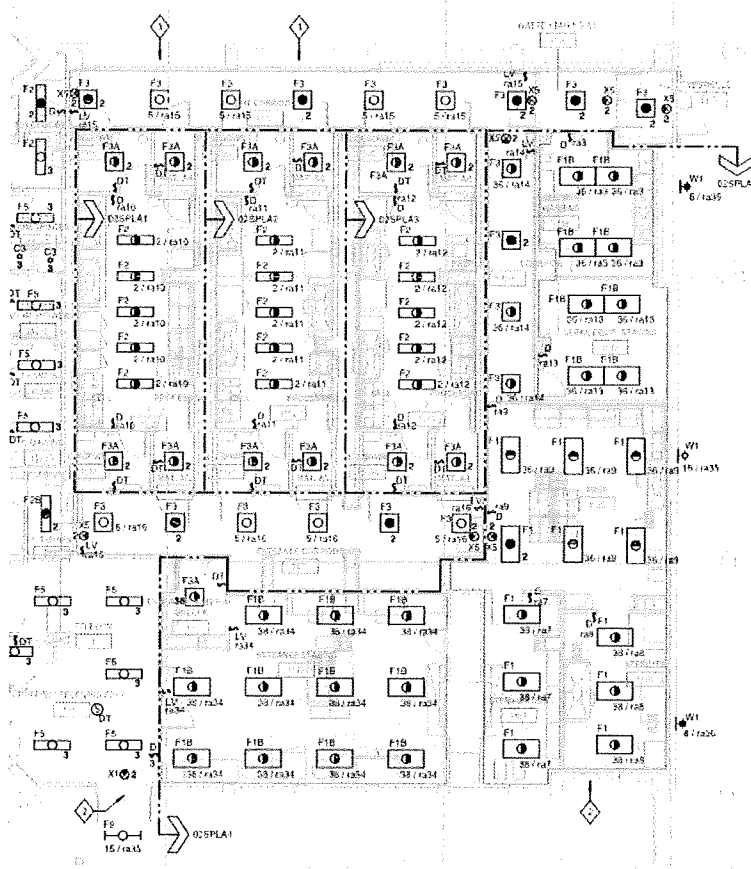
While the proposed design does not meet these requirements, we feel that removing lighting control devices will prevent unnecessary and costly shutdown of CDMO laboratories from the replacement of degraded faceplates and devices. In addition, local control will be given to laboratory and corridor occupants through personal tablet interface for lighting control and override via the building automation system (BAS).

Reason for Variance



The cleaning protocols of the CDMO laboratories and adjacent serving corridors in accordance with Current Good Manufacturing Practice (cGMP) regulations offer a challenge to maintaining the integrity of electrical devices in the spaces. Peracetic acid that has been identified by FCDI to be used to disinfect and sterilize the spaces has an adverse effect on the stainless-steel faceplates and thermoplastic in the switches. The required local control devices and faceplates will wear down and deteriorate rapidly in CDMO production labs and adjacent corridors when exposed to the harsh cleaning agents (peracetic acid) and cause frequent and costly downtime in these areas.

Design Condition

Lighting control in the cGMP production labs and adjacent corridors will be accomplished through a central time-schedule relay control system. See the sheet E-101 graphic for identified CDMO laboratory spaces and adjacent corridors. Lights will turn on and remain on throughout regular business. Outside of business hours, non-emergency lights in the areas will shut off. Occupants of cGMP laboratory and corridor spaces will have the ability to manually override the scheduled shutoff through a personal tablet interface with the building automation system (BAS). Laboratory workers will have this personal tablet with them as they navigate and occupy these spaces. The proposed lighting control design removes the vulnerable devices and faceplates from the spaces while providing energy use reduction through scheduled shutoff outside of business hours, and it allows local control and override of scheduled shutoff as necessary.



1 ELECTRICAL LIGHTING PLAN - LEVEL 1
SCALE: 1/8" = 1'-0"

-  CDMO Laboratory Space
-  Corridor

Conclusion

Both FCDI and AEI feels that instead of installing local lighting controls in the spaces, using a scheduled automatic shutoff of the non-emergency lights with personal tablet override control in the CDMO laboratory and corridor spaces is an effective lighting control design that avoids unnecessary shutdown of the space. The proposed design maintains energy savings outside of business hours while not requiring FCDI to undergo costly downtime for replacement of degraded lighting controls, therefore, local lighting controls in these spaces, as required by ASHRAE, should be considered to be removed from the design.



PLAN EXAMINATION LETTER

PROJECT #: BLDNCC-2018-10672

Building Inspection Division

126 S. Hamilton St.
Madison, Wisconsin 53703
608 266-4551

RE: Occupancy: Business Group B and Storage Group S1
Tenant: Fujifilm Cellular Dynamics, Inc.
Owner: University Research Park
Supervising Professional: Jeffrey C. Zutz
Square Feet: 28,533

Date: August 8, 2018

JEFFREY C ZUTZ
FLAD & ASSOCIATES
644 SCIENCE DR
MADISON WI 53711

Project Location 465 SCIENCE DRIVE
--

These plans have been reviewed for compliance with the important code requirements in Chapters SPS 361 through 366 of the Wisconsin Administrative Code.

The **INTERIOR BUILDING ALTERATION** plans are **CONDITIONALLY APPROVED**.

The plans have been reviewed for compliance with the code requirements set forth in Chapters SPS 361-366 of the rules of the Department of Safety and Professional Services. Construction may proceed subject to local regulations, but all items that are required to be changed by this letter must be corrected before commencing that part of the work. This plan has not been reviewed for compliance with Chapters SPS 382-386, the plumbing rules of the Department of Safety and Professional Services. You are hereby advised that the owner as defined in Chapter 101.01(2)(e) of Wisconsin State Statutes is responsible for all code requirements not specifically cited herein. The building will be inspected during and after construction.

SPS 361.33 Evidence of Approval. The architect, professional engineer, designer, builder or owner shall keep, at the building, one set of plans bearing the stamp of approval.

THIS BUILDING HAS BEEN CLASSIFIED AS TYPE **IIIB** CONSTRUCTION. Sprinklered
This is a level 3 alteration.

SCOPE OF APPROVAL:

This approval is for interior alterations only and does not include any work shown on the plans that was covered by the shell and core permit BLDNCC-2018-07778.

PLANS FOR THE FOLLOWING SHALL BE SUBMITTED TO THIS OFFICE AND APPROVED PRIOR TO THE CONSTRUCTION OF THAT COMPONENT.

HVAC

Inspector: **Steve Rewey** Phone: (608)266-4598

Reviewed By: **Alan Harper, Plan Examiner** Phone: (608)266-4558
aharper@cityofmadison.com