

Owner / Applicant Information

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Project Information

New Castle Middle School Addition and Renovation
601 Parkview Drive

New Castle IN 47362

County HENRY

Project Type New Addition Alteration Existing Change of Occupancy

Project Status U F=Filed U or Null=Unfiled

IDHS Issued Correction order? No Has Violation been Issued? No

Violation Issued by: NA

Local Building Official

Phone: Email:

Local Fire Official

Phone: Email:

Variance Details

Code Name: Other Code (Not in the list provided)

InBC - 2014 1018.1, Table 1018

Conditions: A existing (1969c) middle school is undergoing extensive renovations, including new corridors, and a new automatic fire suppression system. All newly constructed corridors will be non-rated, although the building will not have an automatic fire suppression system throughout. By Fall of 2022, 85% of the school will be provide with new sprinklers, and 100% of the area three (3) story portion. The three (3) story portion is separated by existing area separation walls (pre-1998), thus the building is not sprinklered throughout. Code requires the entire building to be sprinklered throughout in order to take the exception for non-rated corridors.

DEMONSTRATION THAT PUBLIC HEALTH, SAFETY, AND WELFARE ARE PROTECTED:

- 1=Non-compliance with the rule will not be adverse to the public health, safety or welfare.
- 2= Applicant will undertake alternative actions in lieu of compliance with the rule to ensure that granting of the variance will not be adverse to public health, safety, or welfare. Explain why alternative actions would be adequate (be specific).

Facts:

1. By Fall of 2022, except for the gym/natatorium portion, 85% of the entire school will have a new automatic fire suppression system per NFPA 13. The three story portion of this school will be 100% by Fall of 2020.
2. The three story portion of this school is separated from the adjacent single story portions by existing two (2) hour area separation walls (pre-1998).
4. Many similar variances have been approved for this common remodeling challenge. Harrison HS Science Wing (19-12-43), Alexandria Intermediate (19-03-40), Alexandria Jr/Sr High (19-03-36), Plainfield MS (19-01-27), Connersville HS 18-11-35, IVY Tech - Kokomo (18-05-57), Ladoga Elementary (18-03-28), Lewis Cass HS (17-12-38), Northview HS (16-08), Clay City Jr. Sr HS (16-08), Batesville HS (16-08)

DEMONSTRATION OF UNDUE HARDSHIP OR HISTORICALLY SIGNIFICANT STRUCTURE:

- Imposition of the rule would result in an undue hardship (unusual difficulty) because of physical limitations of the construction site or its utility services.
- Imposition of the rule would result in an undue hardship (unusual difficulty) because of major operational problems in the use of the building or structure.
- Imposition of the rule would result in an undue hardship (unusual difficulty) because of excessive costs of additional or altered construction elements.
- Imposition of the rule would prevent the preservation of an architecturally or a historically significant part of the building or structure.

Facts: The owner's undue hardship is the cost to install the new sprinkler system in areas of the building not scheduled for remodeling, and the existing area separation walls that do not meet today's fire wall requirements.

Variance Details

Code Name: Other Code (Not in the list provided)

InFC 2014 1016.2 Table 1016.2

Conditions: A existing (1969c) three story middle school, with existing non compliant travel distances, even after modifications (four existing enclosures stair, enclosing one existing stair, etc.) will have travel distances from some small portions of the third floor approximately 310 ft, and the second floor approx. 260 ft. The building will not be completely sprinklered throughout, and

travel distance exceeds 250 ft allowed for a sprinklered building Code requires the entire building to be sprinklered throughout in order to take the exception for increased travel distance in a sprinklered E use group to 250 ft.

DEMONSTRATION THAT PUBLIC HEALTH, SAFETY, AND WELFARE ARE PROTECTED:

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- 1=Non-compliance with the rule will not be adverse to the public health, safety or welfare.
- 2= Applicant will undertake alternative actions in lieu of compliance with the rule to ensure that granting of the variance will not be adverse to public health, safety, or welfare. Explain why alternative actions would be adequate (be specific).

Facts:

1. By Fall of 2022, 85% of the entire school will have a new automatic fire suppression system per NFPA 13, except for the existing gym/natorium portion. The three story portion of this school will be 100% by Fall of 2020.
2. The three story portion of this school is separated from the adjacent single story portions by existing two (2) hour area separation wall (pre-1998 fire walls), which also are being used as horizontal egress. Egress from through horizontal egress wall are into sprinklered portions of the building.
3. Previous Building Codes allowed up to a 100 ft increase in the travel distance (325 ft total) in sprinklered schools, when the increased distance was within a corridor.
5. Similar variances for high schools have been approved: Center Grove HS Natatorium (19-12-99), Westfield Middle School (18-07-43) (280 ft), Brownsburg HS 2017 Renovations and Additions (320 ft) (17-03-71), Center Grove HS Activity Center (300 ft) [16-07-51], Zionsville HS (335 ft) [14-02-32(b)], Center Grove HS Renovations (14-01-64) (325 ft), Columbus North High School (310 ft) [09-09-20(b)], Brownsburg HS Classroom Addition & Performing Arts (280 ft) [07-09-10]

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- Y Imposition of the rule would result in an undue hardship (unusual difficulty) because of major operational problems in the use of the building or structure.
- Y Imposition of the rule would result in an undue hardship (unusual difficulty) because of excessive costs of additional or altered construction elements.
- Imposition of the rule would prevent the preservation of an architecturally or a historically significant part of the building or structure.

Facts:

The owner's undue hardship involves the cost and difficulty to either reduce the size of each floor or to add another stairway to reduce the travel distance.

Variance Details

Code Name: 12-4-12 Existing Buildings; Additions or Alterations

12-4-12 (f)

Conditions: A new auxiliary gym/vestible addition (7800 sq ft) of Type II-B construction will be placing an existing (1969c) single story gym/natatorium portion of a larger middle school, into non-compliance by blocking an existing open side yard used for area increase. The existing gym/natatorium alone is approximately 34,000 sq ft and is currently over allowable area (21,750 sq ft) by approximately 10,500 sq ft, given a 50% yard increase. GAR requires buildings to meet current height and area limitations.

DEMONSTRATION THAT PUBLIC HEALTH, SAFETY, AND WELFARE ARE PROTECTED:

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2= Applicant will undertake alternative actions in lieu of compliance with the rule to ensure that granting of the variance will not be adverse to public health, safety, or welfare. Explain why alternative actions would be adequate (be specific).

Facts:

1. The new auxiliary gym/vestibule, and existing adjacent main corridor will be protected with a new automatic fire suppression system per NFPA 13. Additionally, except for the gym/natatorium portion, the remaining non sprinklered school (85%) will be completely protected by Fall of 2022 with a new automatic fire suppression system per NFPA 13.
2. The addition is approximately 7800 sq ft will be separated from two (2) 2 hour fire walls (existing masonry gym wall, a new 2 hour precast fire wall) creating a structurally independent fire wall.
3. An existing two (2) hour area separation walls (pre-1998) will be maintained between the three (3) story main building and this single story portion.
4. Non rated vestibule doors, and side lights, will be protected by close spaced sprinklers no more than six (6) feet on center and not more than 12" from the laminated or tempered glazing.
5. Many similar variances, have been approved for school additions that create similar challenges. (Southlake YMCA 19-05-53, Plainfield MS, 19-01-27, Southwick Elementary School 17-08-42, Sycamore Elementary 17-05-55, Pleasant Grove 16-12-03, Sugar Grove 16-12-11, Caston Education Center 16-11-41, Bell East Middle School 16-08-51,16-03-47, 16-03-50, 16-01-22,16-01-37)

DEMONSTRATION OF UNDUE HARDSHIP OR HISTORICALLY SIGNIFICANT STRUCTURE:

Imposition of the rule would result in an undue hardship (unusual difficulty) because of physical limitations of the construction site or its utility services.

Y

Imposition of the rule would result in an undue hardship (unusual difficulty) because of major operational problems in the use of the building or structure.

Y

Imposition of the rule would result in an undue hardship (unusual difficulty) because of excessive costs of additional or altered construction elements.

Imposition of the rule would prevent the preservation of an architecturally or a historically significant part of the building or structure.

Facts:

The owner's undue hardship is the fact they have an existing school that will be placed into non compliance by blocking the open side yard with the new addition. The cost to install a four (4) hour wall or sprinklering the remaining space is not in the budget at this time.

Variance Details

Code Name: Other Code (Not in the list provided)

InBC- 2014 1022.4

Conditions: A new two hour enclosed exit stair will have two (2) windows that open into one art room to provide natural light. These openings will not be rated. In lieu of rated openings, close spaced sprinklers will be used. Code would require the windows to be rated 90 minute for this 2 hour rated stair enclosure.

DEMONSTRATION THAT PUBLIC HEALTH, SAFETY, AND WELFARE ARE PROTECTED:

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- 2= Applicant will undertake alternative actions in lieu of compliance with the rule to ensure that granting of the variance will not be adverse to public health, safety, or welfare. Explain why alternative actions would be adequate (be specific).

Facts:

1. By Fall of 2022, except for the existing gym/natatorium portion, 85% of the entire school will have a new automatic fire suppression system per NFPA 13. The three story portion of this school will be 100% by the Fall of 2022.
2. The three story portion of this school is separated from the adjacent single story portions by existing two (2) hour area separation walls (pre-1998).
2. The window openings will be laminated or tempered glazing in metal frames, provided with close spaced sprinkler heads, no more than 12" away from the glazing, and no more than 6 ft on center, on the classroom side.
3. Similar variance have been approved in the past for various non-rated openings in rated fire walls, fire barriers, horizontal exits, etc. similar to: Center Grove HS (19-12-99), Southlake YMCA (19-05-53 d)

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- Y Imposition of the rule would result in an undue hardship (unusual difficulty) because of excessive costs of additional or altered construction elements.
- Imposition of the rule would prevent the preservation of an architecturally or a historically significant part of the building or structure.

Facts: The owner's undue hardship is the desire to provide natural light into an art room, that was developed from existing space. The new stair is being provided to relieve existing travel distance egress issues from the second and third floors. Additionally, the fact that the building is protected throughout by an automatic sprinkler system is more beneficial than a passive rated assembly or rated construction.

Variance Details

Code Name: Other Code (Not in the list provided)

InBC - 2014602.2 and Table 602

Conditions: A existing (1969c) three (3) story middle school cast in place concrete of Type II-A construction is undergoing extensive renovations, including two (2) new shafts (elevator and opening for a new stair). The new supporting columns for the shafts will be unprotected steel. Code requires that new construction rating match the construction rating of the building, thus 1 hour rated.

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- 2= Applicant will undertake alternative actions in lieu of compliance with the rule to ensure that granting of the variance will not be adverse to public health, safety, or welfare. Explain why alternative actions would be adequate (be specific).

Facts: 1. By Fall of 2022, except for the existing gym/natorium, 85% of the entire school will have a new automatic fire suppression system per NFPA 13. The three story portion of this school will be 100% by Fall of 2022.
2. There are only eight (8) new column locations this affects, in an elevator shaft, and a stair shaft.

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- Y Imposition of the rule would result in an undue hardship (unusual difficulty) because of major operational problems in the use of the building or structure.
- Y Imposition of the rule would result in an undue hardship (unusual difficulty) because of excessive costs of additional or altered construction elements.
- Imposition of the rule would prevent the preservation of an architecturally or a historically significant part of the building or structure.

Facts: The owner's undue hardship is the cost to rate the new steel columns that will be exposed. The new sprinkler system through out the existing area provide more protection, with less challenges of fire proofing the steel.

Variance Details

Code Name: Other Code (Not in the list provided)

InBC - 2014 907.2.3, exopt 3

Conditions: A existing (1969c) middle school is undergoing extensive renovations, with a new automatic fire suppression system. The fire alarm is being upgraded and installed new, those existing pull station that are present will be removed. New installation will follow current code by initiation of the fire alarm from the sprinkler water flow, and installing a pull station at a normally occupied location. The building will not have an automatic fire suppression system throughout. By Fall of 2022, 85% of the school will be provide new sprinklers. The three (3) story portion is separated by existing area separation walls (pre-1998), not fire walls required by today's code. Code requires the entire building to be sprinklered throughout in order to take the exception for only initiating the fire alarm from the sprinkler water flow, and one pull station.

DEMONSTRATION THAT PUBLIC HEALTH, SAFETY, AND WELFARE ARE PROTECTED:

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Facts:

1. By Fall of 2022, except for the gym/natorium portion, 85% of the entire school will have a new automatic fire suppression system per NFPA 13. The three story portion of this school will be 100% by Fall of 2022. 2. The three story portion of this school is separated from the adjacent single story portions by existing two (2) hour area separation walls (pre-1998). 4. Additional one (1) pull station will be installed new in the administration suite, cafeteria, in the Stage Manager's area and Sound/Lighting Booth of the Auditorium, Existing Gym/Natorium, with smoke detection in the non sprinklered locker rooms.

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Y Imposition of the rule would result in an undue hardship (unusual difficulty) because of excessive costs of additional or altered construction elements.

Imposition of the rule would prevent the preservation of an architecturally or a historically significant part of the building or structure.

Facts:

The owner's undue hardship is the cost to install the new sprinkler system in areas of the building not scheduled for remodeling, and the existing area separation walls that do not meet today's fire wall requirements.

Variance Details

Code Name: Other Code (Not in the list provided)

InBC - 2014 Sec 1007.8

Conditions: An existing three (3) story middle school is having a new elevator installed between all three (3) floors, and the elevator landings will not have a two-way communication system. Code requires that buildings 2 or more stories in height to have two-way communications in the elevator lobbies.

DEMONSTRATION THAT PUBLIC HEALTH, SAFETY, AND WELFARE ARE PROTECTED:

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2= Applicant will undertake alternative actions in lieu of compliance with the rule to ensure that granting of the variance will not be adverse to public health, safety, or welfare. Explain why alternative actions would be adequate (be specific).

Facts:

1. By Fall of 2022, except for the gym/natatorium portion, 85% of the entire school will have a new automatic fire suppression system per NFPA 13. The three story portion of this school will be 100% by the Fall 2022.
2. Requirement is not based on a sprinklered building.
3. Most persons have cell phones.
4. This system is not required by ADA / ADAAG
5. Variances have been approved Harrison HS Science Wing [19-12-43], Butler University Lacy School of Business [17-01-44], Wabash Landings [16-09-71(a)], 306 Riverfront [16-05-73(i)], Annex 41 [16-06-73(f)], Annex on 10th [16-06-34(a)], Block 20 [16-07-52(f)], Liberty Square [15-12-32(m)], River North Apartments [15-03-15], PRF Aerospace [16-12-12],

DEMONSTRATION OF UNDUE HARDSHIP OR HISTORICALLY SIGNIFICANT STRUCTURE:

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Y

Imposition of the rule would result in an undue hardship (unusual difficulty) because of major operational problems in the use of the building or structure.

Y

Imposition of the rule would result in an undue hardship (unusual difficulty) because of excessive costs of additional or altered construction elements.

Imposition of the rule would prevent the preservation of an architecturally or a historically significant part of the building or structure.

Facts:

Such a system in a school will present a nuisance and potential for damage, on-going maintenance, the cost of providing the communications system, and on-going monthly line fee.

