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Project Information
Indiana State University Hulman Center
200 North Eighth Street
Terre Haute IN 47809
County VIGO
Project Type New Addition Y Alteration Y 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: 912244002 Fmail: daniel hall@tarrahauta in gay
Phone: 8122444903 Email: daniel.bell@terrehaute.in.gov Local Fire Official
Phone: 8122444903 Email: Chief@terrehaute.in.gov

### Variance Details

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

1009.10, 2014 IBC

#### Conditions:

The reconstructed stairs within the seating bowl will have a vertical distance between landings of 12'6" - code permits a maximum of 12' between landings in new construction. The project will include construction of a Level 3 lobby expansion on the south side of the facility, and expansion of existing Level 3 concourse created by squaring off the north, east, and west sides of the structure - additional area will be approximately 23,373 sq ft. The project will also update existing mechanical, electrical, plumbing and technology systems, as well as completely renovate existing rest rooms and concessions. Additional scope includes a new exterior skin on the building, improved vertical circulation, and installation of new fire protection systems. The building includes A-2, A-3, A-4, and B Occupancy uses. The building is Type IA Construction.

# 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 w

1 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 replacement stairs will comply with current code for rise and run and handrails. The existing stairs generally comply with the 1969 code of record, except for variation of riser heights and tread depth - which vary as much as 3/4 inches within the same flight.
- 2. Based upon the significant life and general safety accomplished by reconstructing the stairs, the additional 6 inches of vertical distance between landings will not be adverse to safety.

## 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.
Υ	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 additional 6 inches between landings is needed in order to construct the new stairs within existing structural bays. The additional cost to demolish and reconstruct concrete

Variance Details

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

1028.11, 2014 IBC

Conditions:

The short flights of aisle stairs leading from the lower seating section onto the arena floor will be replaced with portable stairs that can be removed for floor events. The code does not contain provisions for removable stairs in the means of egress. The stairs consist of 4 treads and 4 risers each.

floors and beams to gain additional landings is excessive compared to the little or no benefit to safety realized. The benefit to safety gained by upgrading to current-code riser height and tread depth far outweighs any detriment caused by the additional 6 inches between landings.

The project will include construction of a Level 3 lobby expansion on the south side of the facility, and expansion of existing Level 3 concourse created by squaring off the north, east, and west sides of the structure - additional area will be approximately 23,373 sq ft. The broiect will also update existing mechanical, electrical, plumbing and technology systems.

as well as completely renovate existing rest rooms and concessions. Additional scope includes a new exterior skin on the building, improved vertical circulation, and installation of new fire protection systems. The building includes A-2, A-3, A-4, and B Occupancy uses. The building is Type IA Construction.

DEMO	NSTRATION THAT PUBLIC HEALTH, SAFETY, AND WELFARE ARE PROTECTED:
	1=Non-compliance with the rule will not be adverse to the public health, safety or w
1	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:	<ol> <li>The bowl seating will be unoccupied during the time that the aisle stair sections are removed. The stairs will be in place for any event involving public occupancy of the associated bowl seating. The stairs in question are not a required means of egress for events on the arena floor.</li> <li>2.</li> </ol>
DEMON:	STRATION 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.
Υ	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

Removal of the stairs during floor events will improve the efficiency of seating layouts, as well

as improve pedestrian and service personnel flow during floor events.

Facts:

### Variance Details

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

903.2.1, 2014 IBC

#### Conditions:

Automatic sprinkler protection will not be provided at the ceiling of the seating bowl. Based upon an increase in the fire area of the building as an A Occupancy, automatic sprinkler protection is required throughout the building.

The project will include construction of a Level 3 lobby expansion on the south side of the facility, and expansion of existing Level 3 concourse created by squaring off the north, east, and west sides of the structure - additional area will be approximately 23,373 sq ft. The project will also update existing mechanical, electrical, plumbing and technology systems, as well as completely renovate existing rest rooms and concessions. Additional scope includes a new exterior skin on the building, improved vertical circulation, and installation of new fire protection systems. The building includes A-2, A-3, A-4, and B Occupancy uses. The building is Type IA Construction.

## 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 w

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 existing building and additions will be protected throughout with a sprinkler system per NFPA 13 as part of this project (with exception of over the seating bowl) the existing building is currently sprinklered on a portion of the lower level.
- 2. A new voice-alarm system will be provided throughout the building.
- 3. A smoke purge system will be provided for the seating bowl consisting of rooftop pressure-relief ventilators, and a fire alarm actuated smoke purge mode for new air handlers. Upon alarm initiation, the air handlers will go 100% outside air and pressure-relief ventilators will evacuate air from the bowl volume.
- 4. The project will involve a net reduction of seating capacity, due to removal of seats in a number of locations to accommodate the renovation.
- 5. The project will result in a significant net gain in the level of safety in the building.

### 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.
Υ	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:	Automatic sprinkler protection is generally understood to be ineffective in large spaces with very tall ceilings. Sec. 404.3, exception 2, IBC, permits omission of sprinklers over atriums with a ceiling height of more than 55 feet. Similar variances have been granted for other large assembly buildings, including Lucas Oil Stadium and Bankers Life Fieldhouse.