

CHAPTER 11 - CONSTRUCTION AND SPECIAL CODES

ARTICLE 1 - BUILDING CODE

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Section 11-1-101 Adoption of International Building Code.

An ordinance of the City of Pierre adopting the *International Building Code*, 2021 Edition, Chapters 1-12, 14-28, 30-35 and Appendices C, E, G and J, regulating and governing the conditions and maintenance of all property, buildings and structures; by providing the standards for supplied utilities and facilities and other physical things and conditions essential to ensure that structures are safe, sanitary and fit for occupation and use; and the condemnation of buildings and structures unfit for human occupancy and use and the demolition of such structures in the City of Pierre; providing for the issuance of permits and collection of fees therefore; repealing parts of Ordinance No. 1820 of the City of Pierre and all other ordinances and parts of ordinances in conflict therewith.

The City Commission of the City of Pierre does ordain as follows:

Section 1. That a certain document, a copy of which is on file in the office of the Finance Officer of the City of Pierre, being marked and designated as the *International Building Code*, 2021 Edition, as published by the International Code Council, be and is hereby adopted as the Building Code of the City of Pierre, in the State of South Dakota for regulating and governing the conditions and maintenance of all property, buildings and structures; by providing the standards for supplied utilities and facilities and other physical things and conditions essential to ensure that structures are safe, sanitary and fit for occupation and use; and the condemnation of buildings and structures unfit for human occupancy and use and the demolition of such structures as herein provided; providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, penalties, conditions and

terms of said Building Code on file in the office of the City of Pierre are hereby referred to, adopted, and made a part hereof, as if fully set out in this ordinance, with the additions, insertions, deletions and changes, if any, prescribed in Section 2 of this ordinance.

Section 2. The following sections are hereby revised:

The following sections, subsections, and appendices of the 2021 *International Building Code* adopted in this article shall be amended, added, or not adopted by the city as follows. All other sections or subsections of the 2021 *International Building Code* as published shall remain the same.

[A] 101.1 Title. These regulations shall be known as the *Building Code* of the City of Pierre, hereinafter referred to as “this code.”

[A] 101.4 Referenced codes. The other codes specified in Sections 101.4.1 through 101.4.7 and referenced elsewhere in this code shall be considered to be part of the requirements of this code to the prescribed extent of each such reference.

[A] 101.4.1 Gas. The provisions of the 2021 *International Fuel Gas Code* or the Plumbing shall apply to the installation of gas piping from the point of delivery, gas appliances and related accessories as covered in this code. These requirements apply to gas piping systems extending from the point of delivery to the inlet connections of appliances and the installation and operation of residential and commercial gas appliances and related accessories.

[A] 101.4.2 Mechanical. The provisions of the 2021 *International Mechanical Code* shall apply to the installation, *alterations, repairs* and replacement of mechanical systems, including equipment, appliances, fixtures, fittings and appurtenances, including ventilating, heating, cooling, air-conditioning and refrigeration systems, incinerators and other energy-related systems.

[A] 101.4.3 Plumbing. The provisions of the *Uniform Plumbing Code* as adopted and administered by the State of South Dakota Department of Labor shall apply to the installation, *alteration, repair* and replacement of plumbing systems, including equipment, appliances, fixtures, fittings and appurtenances, and where connected to a water or sewage system and all aspects of a medical gas system. The provisions of the *South Dakota Department of Agriculture and Natural Resources* shall apply to *Individual and Small on-site Wastewater Systems* (ARSD 74:53:01). All references to the *International Plumbing Code* shall refer to the *Uniform Plumbing Code*.

[A] 101.4.4 Property maintenance. The provisions of the 2021 *International Property Maintenance Code* shall apply to *existing structures* and premises; equipment and facilities; light, *ventilation*, space heating, sanitation, life and fire safety hazards; responsibilities of *owners*, operators and occupants; and occupancy of existing premises and structures.

[A] 101.4.5 Fire prevention. The provisions of the 2021 *International Fire Code* shall apply to matters affecting or relating to structures, processes and premises from the hazard of fire and *explosion* arising from the storage, handling or use of structures, materials or devices; from conditions hazardous to life, property or public welfare in the occupancy of structures or premises; and from the construction, extension, *repair, alteration* or removal of fire suppression, *automatic sprinkler systems* and alarm systems or fire hazards in the structure or on the premises from occupancy or operation.

[A] **101.4.6 Energy.** Not adopted by the City of Pierre

[A] **101.4.7 Existing buildings.** The provisions of the 2021 *International Existing Building Code* shall apply to matters governing the *repair, alteration, change of occupancy, addition to and relocation of existing buildings.*

[A] **103.1 Creation of enforcement agency.** The Building Department is hereby created and the official in charge thereof shall be known as the *building official* who shall work under the direct supervision of the City Engineer. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

[A] **103.2 Appointment.** Not adopted by the City of Pierre.

[A] **103.3 Deputies.** In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the City Engineer, the *building official* shall have the authority to supervise other related technical officers, inspectors, plans examiners and other employees. Such employees shall have powers as delegated by the City Engineer.

[A] **104.8 Liability.** The *building official*, member of the building code board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be civilly or criminally rendered liable personally and is hereby relieved from personal liability for any damage accruing to persons or property as a result of any act or by reason of an act or omission in the discharge of official duties.

This code shall not be construed to relieve or lessen the responsibility of any person owning, operating, or controlling any building or structure for any damages to persons or property caused by defects, nor shall the city, or its officers and employees, be held as assuming any such liability by reason of the inspections authorized by this code or any permits or certificates issued under this code.

[A] **104.8.1 Legal defense.** Any suit or criminal complaint instituted against an officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be afforded all the protection provided by the city's insurance pool and any immunities and defenses provided by other applicable state and federal law and defended by legal representatives of the jurisdiction until the final termination of the proceedings. The *building official* or any subordinate shall not be liable for cost in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

[A] **104.10.1 Flood hazard areas.** The floodplain administrator shall not grant modifications to any provision required in *flood hazard areas* as established by Section 1612.3 unless a determination has been made that:

1. A showing of good and sufficient cause that the unique characteristics of the size, configuration or topography of the site render the elevation standards of Section 1612 inappropriate.
2. A determination that failure to grant the variance would result in exceptional hardship by rendering the lot undevelopable.

3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, cause fraud on or victimization of the public, or conflict with existing laws or ordinances.
4. A determination that the variance is the minimum necessary to afford relief, considering the *flood* hazard.
5. Submission to the applicant of written notice specifying the difference between the *design flood elevation* and the elevation to which the building is to be built, stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation, and stating that construction below the *design flood elevation* increases risks to life and property.

[A] 105.1 Required. Any *owner* or owner's authorized agent who intends to construct, enlarge, alter, *repair*, move, demolish or change the occupancy of a building or structure, or to erect, install, enlarge, alter, *repair*, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be performed, shall first make application to the *building official* and obtain the required *permit*. The *building official* may exempt permits for minor work.

[A] 105.1.1 Annual permit. Not adopted by the City of Pierre.

[A] 105.1.2 Annual permit records. Not adopted by the City of Pierre.

[A] 105.2 Work exempt from permit. Exemptions from *permit* requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. *Permits* shall not be required for the following:

Building:

1. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided that the floor area is not greater than 120 square feet (11 m²).
2. Oil derricks.
3. Retaining walls that are not over 4 feet (1219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II or IIIA liquids.
4. Water tanks supported directly on grade if the capacity is not greater than 5,000 gallons (18 925 L) and the ratio of height to diameter or width is not greater than 2:1.
5. Outside of public rights-of-way, sidewalks and driveways not more than 30 inches (762 mm) above adjacent grade, and not over any *basement* or *story* below and are not part of an *accessible route*.

6. Painting, papering, tiling, carpeting, cabinets, countertops and similar finish work.
7. Temporary motion picture, television and theater stage sets and scenery.
8. Prefabricated *swimming pools* accessory to a Group R-3 occupancy that are less than 24 inches (610 mm) deep, are not greater than 5,000 gallons (18 925 L) and are installed entirely above ground.
9. Temporary plastic or shade cloth structures constructed for nursery or agricultural purposes, not including service systems.
10. Swings and other playground equipment accessory to detached one- and two-family *dwellings*.
11. Window awnings in Group R-3 and U occupancies, supported by an *exterior wall* that do not project more than 54 inches (1372 mm) from the *exterior wall* and do not require additional support.
12. Nonfixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1753 mm) in height.
13. Structures or work performed on lands owned by the government of the United States or the State of South Dakota
14. Decks not more than 30 inches above adjacent grade without a railing and do not serve the exit door required by Section R311.3 of the *International Residential Code*.

Electrical: Not adopted by the City of Pierre.

Gas:

1. Portable heating appliance.
2. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.

Mechanical:

1. Portable heating appliance.
2. Portable ventilation equipment.
3. Portable cooling unit.
4. Steam, hot or chilled water piping within any heating or cooling equipment regulated by this code.
5. Replacement of any part that does not alter its approval or make it unsafe.
6. Portable evaporative cooler.

7. Self-contained refrigeration system containing 10 pounds (4.54 kg) or less of refrigerant and actuated by motors of 1 horsepower (0.75 kW) or less.

Plumbing: Not adopted by the City of Pierre.

Unless otherwise exempted, separate plumbing, electrical and mechanical permits from the City of Pierre or other enforcing agency may be required for the above exempted items.

[A] 105.3 Application for permit. To obtain a *permit*, the applicant shall first file an application therefor in writing on a form furnished by the building department for that purpose. Such application shall:

1. Identify and describe the work to be covered by the *permit* for which application is made.
2. Describe the land on which the proposed work is to be done by legal description, street address or similar description that will readily identify and definitely locate the proposed building or work.
3. Indicate the use and occupancy for which the proposed work is intended.
4. Be accompanied by *construction documents* and other information as required in Section 107.
5. State the valuation of the proposed work.
6. Be signed by the applicant, or the applicant's authorized agent.
7. Give such other data and information as required by the *building official*.

[A] 107.3.3 Phased approval. The *building official* is authorized to issue a *permit* for the construction of foundations or any other part of a building or structure before the *construction documents* for the whole building or structure have been submitted, provided that adequate information and detailed statements have been filed complying with pertinent requirements of this code, including the requirements of IBC Section 107.2.6, Site Plan, and along with any requirements under Chapter 4, Article 6, Section 401 through 409, Grading And Other Construction Activities, of the City of Pierre Ordinances. The holder of such *permit* for the foundation or other parts of a building or structure shall proceed at the holder's own risk with the building operation and without assurance that a *permit* for the entire structure will be granted.

[A] 108.1 General. The *building official* is authorized to issue a *permit* for temporary structures and temporary uses. Such *permits* shall be limited as to time of service, but shall not be permitted for more than two (2) years. The *building official* is authorized to grant extensions for demonstrated cause.

[A] 108.3 Temporary power. Temporary electrical permits are required prior to a temporary electrical connection being provided.

[A] 109.2 Schedule of permit fees. On buildings and structures or alterations requiring a permit, a fee for each *permit* shall be paid as required, in accordance with the schedule as established by the City of

Pierre. The fee for each building permit shall be as set forth in Table 1-A and Table 1-B and other inspections and fees shall be in accordance with Table 1-C of the City of Pierre Fee Schedule.

109.7 Delinquent accounts. The city may refuse to issue permits or conduct inspections for any person or business whose account is delinquent.

[A] 111.2 Certificate issued. After the *building official* inspects the building or structure and does not find violations of the provisions of this code or other laws that are enforced by the department, the *building official* shall issue a certificate of occupancy that contains the following:

1. The *permit* number.
2. The address of the structure.
3. A statement that the described portion of the structure has been inspected for compliance with the requirements of this code.
4. The name of the *building official*.
5. The edition of the code under which the *permit* was issued.
6. The use and occupancy, in accordance with the provisions of Chapter 3.
7. The type of construction as defined in Chapter 6.
8. The design *occupant load*.
9. Where an *automatic sprinkler system is provided*, whether the sprinkler system is required.
10. Any special stipulations and conditions of the building *permit*.

[A] 113.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the *building official* relative to the application and interpretation of this code, there shall be and is hereby created a building code board of appeals. The building code board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the *building official*.

113.5 Building code board of appeals application. Application to the building code board of appeals shall be made in writing to the building official within thirty (30) days after the decision of the building official was served.

[A] 114.3 Prosecution of violation. If the notice of violation is not complied with promptly, the *building official* is authorized to request the legal counsel of the jurisdiction to deem the violation as a strict liability offense and institute the appropriate proceeding at law or in equity to restrain, correct or abate such violation, or to require the removal or termination of the unlawful occupancy of the building or structure in violation of the provisions of this code or of the order or direction made pursuant thereto.

201.1 Scope. Unless otherwise expressly stated, the following words and terms shall, for the purposes of this code, have the meanings shown in this chapter. In addition, the following words and terms are

being added and/or modified to the defined terms already incorporated by reference in Section 11-1-101 of this code.

FIRE AREA. The aggregate floor area enclosed and bounded by *fire walls, fire barriers, exterior walls or horizontal assemblies* of a building.

STRICT LIABILITY OFFENSE. An offense in which the prosecution in a legal proceeding is not required to prove criminal intent as a part of its case. It is enough to prove that the defendant either did an act which was prohibited or failed to do an act which the defendant was legally required to do.

305.2 Group E, day care facilities. This group includes buildings and structures or portions thereof occupied by more than twelve children older than 2¹/₂ years of age who receive educational, supervision or *personal care services* for fewer than 24 hours per day.

305.2.2 Twelve or fewer children. A facility having twelve or fewer children receiving such day care shall be classified as part of the primary occupancy.

305.2.3 Twelve or fewer children in a dwelling unit. A facility such as the above within a *dwelling unit* and having twelve or fewer children receiving such day care shall be classified as a Group R-3 occupancy or shall comply with the *International Residential Code*.

308.5 Institutional Group I-4, day care facilities. Institutional Group I-4 occupancy shall include buildings and structures occupied by more than-twelve persons of any age who receive *custodial care* for fewer than 24 hours per day by persons other than parents or guardians; relatives by blood, marriage or adoption; and in a place other than the home of the person cared for. This group shall include, but not be limited to, the following:

- Adult day care
- Child day care

308.5.1 Classification as Group E. A child day care facility that provides care for more than twelve but not more than 100 children 2¹/₂ years or less of age, where the rooms in which the children are cared for are located on a *level of exit discharge* serving such rooms and each of these child care rooms has an *exit* door directly to the exterior, shall be classified as Group E.

308.5.3 Twelve or fewer persons receiving care. A facility having twelve or fewer persons receiving *custodial care* shall be classified as part of the primary occupancy.

308.5.4 Twelve or fewer persons receiving care in a dwelling unit. A facility such as the above within a *dwelling unit* and having twelve or fewer persons receiving *custodial care* shall be classified as a Group R-3 occupancy or shall comply with the *International Residential Code*.

310.5 Residential Group R-4. Residential Group R-4 occupancy shall include buildings, structures or portions thereof for more than five but not more than 16 persons, excluding staff, who reside on a *24-hour basis* in a supervised residential environment and receive *custodial care*. Buildings of Group R-4 shall be classified as one of the occupancy conditions specified in Section 310.5.1 or 310.5.2. This group shall include, but not be limited to, the following:

Alcohol and drug centers
Assisted living facilities
Congregate care facilities
Group homes
Halfway houses
Residential board and care facilities
Social rehabilitation facilities

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code or shall comply with the *International Residential Code* provided the entire building is protected by an *automatic sprinkler system* installed in accordance with Section 903.2.8.

402.6.2 Kiosks. Kiosks and similar structures (temporary or permanent) located within the *mall* of a *covered mall building* or within the perimeter line of an *open mall building* shall meet the following requirements:

1. Combustible kiosks or other structures shall not be located within a *covered* or *open mall* unless constructed of any of the following materials:
 - 1.1. *Fire-retardant-treated* wood complying with Section 2303.2.
 - 1.2. Foam plastics having a maximum heat release rate not greater than 100 kW (105 Btu/h) when tested in accordance with the exhibit booth protocol in UL 1975 or when tested in accordance with NFPA 289 using the 20 kW ignition source.
 - 1.3. Aluminum composite material (ACM) meeting the requirements of Class A *interior finish* in accordance with Chapter 8 when tested as an assembly in the maximum thickness intended.
2. Kiosks or similar structures located within the *mall* shall be provided with *approved fire suppression* and detection devices or the top of the kiosk shall be open and accessible to the *mall* sprinkler system.

Exception: Temporary kiosks

3. The horizontal separation between kiosks or groupings thereof and other structures within the *mall* shall be not less than 10 feet (3048 mm).
4. Each kiosk or similar structure or groupings thereof shall have an area not greater than 300 square feet (28 m²).
5. The mall way shall be sufficient to accommodate the occupant load immediately tributary thereto.
6. The total number of kiosks shall not exceed more than one for each 1,700 square feet of mall way area.

406.3.2.1 Dwelling unit separation. The *private garage* shall be separated from the *dwelling unit* and its *attic* area by means of *gypsum board*, not less than 5/8-inch (15.9 mm) in thickness, applied to the

garage side. Garages beneath habitable rooms shall be separated from all habitable rooms above by not less than a 5/8-inch (15.9 mm) Type X *gypsum board* or equivalent and 1/2-inch (12.7 mm) *gypsum board* applied to structures supporting the separation from habitable rooms above the garage. Door openings between a *private garage* and the *dwelling unit* shall be equipped with either solid wood doors or solid or honeycomb core steel doors not less than 1-3/8 inches (34.9 mm) in thickness, or doors in compliance with Section 716.2.2.1 with a *fire protection rating* of not less than 20 minutes. Doors shall be *self-closing* and self-latching.

412.3.1 Exterior walls. Required separation between buildings shall be a minimum of ten (10) feet for aircraft hangars. Where exterior walls do not face a taxiway or a roadway, such walls shall have fire resistance rated construction as follows:

1. For hangars separated at a distance of fifty (50) feet or more, fire rated walls are not required.
2. Walls shall be of not less than one-hour fire rated construction for hangars separated between fifteen (15) and fifty (50) feet.
3. Walls shall be of not less than two-hour fire rated construction for hangars separated between ten (10) and fifteen (15) feet.

507.2.2 Property lines. Portions of an unlimited area building may be divided by platted property lines without requiring the construction of party walls if the whole building has:

1. Permanent open space on all sides as required by Sections 507.3, 5.7.4, 5.7.5 and
2. Proper legal agreements are submitted and approved by the *building official* and are recorded with the deed for each of the separate properties. These recorded *agreements* shall require that the buildings, as divided by property lines, be in conformance with the applicable provisions of the building and fire codes, as if the buildings were a single building on a single piece of property. In addition, the agreement must state that no individual building or property owner may modify any portion of the building in any way that would not be in compliance with the building and fire codes.

508.5 Live/work units. Not adopted by the City of Pierre.

705.3 Buildings on the same lot and buildings containing courts. For the purposes of determining the required wall and opening protection, projections and *roof-covering* requirements, buildings on the same lot, and court walls of buildings, shall be assumed to have an imaginary line between them.

Exceptions: In court walls where opening protection is required, such protection is not required provided:

1. Not more than two levels open into the court
2. The aggregate area of the building, including the court is within the allowable area

3. The building is not classified as Group I

Where a new building is to be erected on the same lot as an *existing building*, the location of the assumed property line with relation to the existing building shall be such that the *exterior wall* and opening protection of the *existing building* meet the criteria as set forth in Sections 705.5 and 705.8.

Exceptions:

1. Two or more buildings on the same lot shall be either regulated as separate buildings or shall be considered as portions of one building if the aggregate area of such buildings is within the limits specified in Chapter 5 for a single building. Where the buildings contain different occupancy groups or are of different types of construction, the area shall be that allowed for the most restrictive occupancy or construction.
2. Where an S-2 parking garage of Construction Type I or IIA is erected on the same lot as a Group R-2 building, and there is no *fire separation distance* between these buildings, then the adjoining *exterior walls* between the buildings are permitted to have occupant use openings in accordance with Section 706.8. However, opening protectives in such openings shall only be required in the *exterior wall* of the S-2 parking garage, not in the *exterior wall* openings in the R-2 building, and these opening protectives in the *exterior wall* of the S-2 parking garage shall be not less than 1¹/₂-hour *fire protection rating*.
3. A detached garage of a Group U occupancy, which is located on the same property as Group R Division 3 occupancy may be considered the same as an attached garage for the purpose of requiring wall and opening protection.

706.6.2 Buildings with sloped roofs. Where a *fire wall* serves as an interior wall for a building, and the roof on one side or both sides of the *fire wall* slopes toward the *fire wall* at a slope greater than 2 units vertical in 12 units horizontal (2:12), the *fire wall* shall extend to a height equal to the height of the roof located 4 feet (1219 mm) from the *fire wall* plus 30 inches (762 mm). The extension of the *fire wall* shall be not less than 30 inches (762 mm).

Exception: The *fire wall* may terminate at the underside of the roof sheathing, deck or slab of the lower roof, provided:

1. The roof assemblies within 10 feet (3048 mm) of the wall has not less than a 1-hour *fire resistance rating* and the entire length and span of supporting elements for the rated roof assembly has a *fire-resistance rating* of not less than 1 hour.
2. Openings in the roof on each side of the fire wall shall not be located within 10 feet (3048 mm) of the *fire wall*.

716.2.6.1 Door closing. *Fire doors* shall be latching and self- or automatic-closing in accordance with this section.

Exceptions:

1. *Fire doors* located in common walls separating *sleeping units* in Group R-1 shall be permitted without automatic- or *self-closing* devices.
2. The elevator car doors and the associated hoistway enclosure doors at the floor level designated for recall in accordance with Section 3003.2 shall be permitted to remain open during Phase I emergency recall operation.
3. Interior doors located in exit enclosures, smoke proof enclosures, and exit passageways in Group R and I-1 occupancies shall be automatic self-closing fire door assemblies in accordance with NFPA 80 and controlled in accordance with NFPA 72.

717.5.2 Fire barriers. Ducts and air transfer openings of *fire barriers* shall be protected with *listed fire dampers* installed in accordance with their listing. Ducts and air transfer openings shall not penetrate enclosures for *interior exit stairways* and *ramps* and *exit passageways*, except as permitted by Sections 1023.5 and 1024.6, respectively.

Exceptions: *Fire dampers* are not required at penetrations of *fire barriers* where any of the following apply:

1. Penetrations are tested in accordance with ASTM E119 or UL 263 as part of the fire-resistance-rated assembly.
2. Ducts are used as part of an *approved* smoke control system in accordance with Section 909 and where the use of a *fire damper* would interfere with the operation of a smoke control system.
3. Such walls are penetrated by fully ducted HVAC systems, have a required *fire-resistance rating* of 1 hour or less, are in areas of other than Group H and are in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2. For the purposes of this exception, a fully ducted HVAC system shall be a duct system for conveying supply, return or exhaust air as part of the structure's HVAC system. Such a duct system shall be constructed of sheet steel not less than No. 26 gage thickness and shall be continuous from the air-handling appliance or equipment to the air outlet and inlet terminals. Nonmetal flexible air ducts shall be permitted in the following locations:
 - 3.1. At the duct connection to the air handling unit or equipment located within the mechanical room in accordance with Section 603.9 of the *International Mechanical Code*.
 - 3.2. From an overhead metal duct to a ceiling diffuser within the same room in accordance with Section 603.6.2 of the *International Mechanical Code*.

[F] 903.2.6 Group I. An *automatic sprinkler system* shall be provided throughout buildings with a Group I *fire area*.

Exceptions:

1. An *automatic sprinkler system* installed in accordance with Section 903.3.1.2 is required in Group I-1, Condition 1 or 2 facilities.
2. An *automatic sprinkler system* is not required where Group I-4 day care facilities are at the *level of exit discharge* and where every room where care is provided has not fewer than one exterior exit door.
3. In buildings where Group I-4 day care is provided on levels other than the *level of exit discharge*, an *automatic sprinkler system* in accordance with Section 903.3.1.1 shall be installed on the entire floor where care is provided, all floors between the level of care and the *level of exit discharge*, and all floors below the *level of exit discharge* other than areas classified as an open parking garage.

[F] 903.2.8 Group R. An *automatic sprinkler system* installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R *fire area*.

Exception: Group R-3, one- and two-family dwellings.

[F] 903.3.1.1.1 Exempt locations. Automatic sprinklers shall not be required in the following rooms or areas where such rooms or areas are protected with an *approved* automatic fire detection system in accordance with Section 907.2 that will respond to visible or invisible particles of combustion. Sprinklers shall not be omitted from a room merely because it is damp, of fire-resistance-rated construction or contains electrical equipment.

1. A room where the application of water, or flame and water, constitutes a serious life or fire hazard.
2. A room or space where sprinklers are considered undesirable because of the nature of the contents, where *approved* by the fire code official. Such rooms shall be separated from the remainder of the building by fire barrier walls and horizontal assemblies having a fire-resistance rating of not less than two hours.
3. Generator and transformer rooms separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a *fire-resistance rating* of not less than 2 hours.
4. Rooms or areas that are of noncombustible construction with wholly noncombustible contents.
5. Fire service access elevator machine rooms and machinery spaces.
6. Machine rooms, machinery spaces, control rooms and control spaces associated with occupant evacuation elevators designed in accordance with Section 3008.

[F] 904.13.2 System interconnection. The actuation of the fire suppression system shall automatically shut down the fuel and electrical power supply to the cooking equipment and all electrical receptacles located beneath the hood. The fuel and electrical supply reset shall be manual.

[F] 907.2.2 Group B. A manual fire alarm system, which activates the occupant notification system in accordance with Section 907.5, shall be installed in Group B occupancies where one of the following conditions exists:

1. The combined Group B *occupant load* of all floors is 500 or more.
2. The Group B *occupant load* is more than 100 persons above or below the lowest *level of exit discharge*.
3. The *fire area* contains an *ambulatory care facility*.
4. The Group B has more than two occupied levels.

Exception: Manual fire alarm boxes are not required where the building is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 and the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.

[F] 907.2.3 Group E. A manual fire alarm system that initiates the occupant notification signal utilizing an emergency voice/alarm communication system meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall be installed in Group E occupancies. Where *automatic sprinkler systems* or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system.

Exceptions:

1. A manual fire alarm system shall not be required in Group E occupancies with an *occupant load* of 50 or less.
2. Emergency voice/alarm communication systems meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall not be required in Group E occupancies with *occupant loads* of 100 or less, provided that activation of the manual fire alarm system initiates an *approved* occupant notification signal in accordance with Section 907.5.
3. Manual fire alarm boxes shall not be required in Group E occupancies where all of the following apply:
 - 3.1 Interior *corridors* are protected by smoke detector
 - 3.2 Auditoriums, cafeterias, gymnasiums and similar areas are protected by *heat detectors* or other *approved* detection devices.
 - 3.3 Shops and laboratories involving dusts or vapors are protected by *heat detectors* or other *approved* detection devices.
 - 3.4 Manual activation is provided from a normally occupied location.
4. Manual fire alarm boxes shall not be required in Group E occupancies where all of the following apply:
 - 4.1 The building is equipped throughout with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1.
 - 4.3 The emergency voice/alarm communication system will activate on sprinkler waterflow.

4.3 Manual activation is provided from a normally occupied location.

Rooms used for sleeping or napping purposes within a day care use of a Group E occupancy shall be provided with smoke alarms that comply with Section 907.2.11.2.

[F] 907.2.6.2 Group I-2. An automatic smoke detection system shall be installed in *corridors* in Group I-2, Condition 1 facilities and spaces permitted to be open to the corridors by Section 407.2. The system shall be activated in accordance with Section 907.4. Group I-2, Condition 2 occupancies shall be equipped with an automatic smoke detection system as required in Section 407.

Exceptions:

1. Corridor smoke detection is not required in *smoke compartments* that contain sleeping units where such units are provided with smoke detectors that comply with UL 268. Such detectors shall provide a visual display on the corridor side of each sleeping unit and shall provide an audible and visual alarm at the care providers' station attending each unit. Smoke detectors installed as part of an intelligent or addressable fire alarm system capable of annunciation of room origin at a constantly attended location shall be acceptable.
2. Corridor smoke detection is not required in *smoke compartments* that contain sleeping units where sleeping unit doors are equipped with automatic door-closing devices with integral smoke detectors on the unit sides installed in accordance with their listing, provided that the integral detectors perform the required alerting function.

[F] 907.2.8.2 Automatic smoke detection system. An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 shall be installed throughout all interior *corridors* serving *sleeping units* and at the top of each stairwell.

Exception: An automatic smoke detection system is not required in buildings that do not have interior *corridors* serving *sleeping units* and where each *sleeping unit* has a *means of egress* door opening directly to an *exit* or to an exterior *exit access* that leads directly to an *exit*.

[F] 907.2.9 Group R-2. Fire alarm systems and smoke alarms shall be installed in Group R-2 occupancies as required in Sections 907.2.9.1 through 907.2.9.34.

907.2.9.4 Smoke detectors. In R-2 occupancies, system smoke detection shall be provided in each enclosed stairway and all exit corridors.

[F] 907.2.13.1.2 Duct smoke detection. Duct smoke detectors complying with Section 907.3.1 shall be located as follows:

1. In the main return air and exhaust air plenum of each air-conditioning system having a capacity greater than 2,000 cubic feet per minute (cfm) (0.94 m³/s). Such detectors shall be located in a serviceable area downstream of the last duct inlet.

2. At each connection to a vertical duct or riser serving two or more stories from a return air duct or plenum of an air-conditioning system. In Group R-1 and R-2 occupancies, a smoke detector is allowed to be used in each return air riser carrying not more than 5,000 cfm (2.4 m³/s) and serving not more than 10 air-inlet openings.
3. Duct smoke detectors installed more than 10 feet above a finished floor, above a ceiling, or on a rooftop shall be installed with remote test/indicators in an approved location below and in proximity to the unit served.

[F] 907.5 Occupant Notification. Occupant notification by fire alarms shall be in accordance with Sections 907.5.1 through 907.5.2.3.3. Occupant notification by smoke alarms in Group R-1 occupancies shall comply with Section 907.5.2.1.3.2.

[F] 907.5.2.1.3 Audible signal frequency in Group R-1 sleeping rooms. Audible signal frequency in Group R-1 occupancies shall be in accordance with Sections 907.5.2.1.3.1 and 907.5.2.1.3.2.

[F] 907.5.2.1.3.1 Fire alarm system signal. In sleeping rooms of Group R-1 occupancies, the audible alarm activated by a fire alarm system shall be a 520-Hz low-frequency signal complying with NFPA 72.

[F] 907.5.2.1.3.2 Smoke alarm signal in sleeping rooms. In sleeping rooms of Group R-1 occupancies that are required by Section 907.2.8 or 907.2.9 to have a fire alarm system, the audible alarm signal activated by single- or multiple-station smoke alarms in the dwelling unit or sleeping unit shall be a 520-Hz signal complying with NFPA 72. Where a sleeping room smoke alarm is unable to produce a 520-Hz signal, the 520-Hz alarm signal shall be provided by a listed notification appliance or a smoke detector with an integral 520-Hz sounder.

[F] 912.2.1 Visible location. Fire department connections shall be located on the street side of buildings or facing approved fire apparatus access roads, fully visible and recognizable from the street, fire apparatus access road or nearest point of fire department vehicle access or as otherwise *approved* by the *fire code official*. A weather-rated horn/strobe connected to the fire detection or sprinkler system shall be located not lower than 8 feet above the fire department connection and within 10 feet horizontally of the connection. The weather-rated horn/strobe must be visible from the fire lane or street.

915.2.1 Dwelling units. Carbon monoxide detection shall be installed in dwelling units outside each separate sleeping area in the immediate vicinity of bedrooms. Where a fuel-burning appliance is located within a bedroom or its attached bathroom, carbon monoxide detection shall be installed within the bedroom. At least one carbon monoxide detector or alarm shall be installed on each floor level.

1010.1.6 Thresholds. Thresholds at doorways shall not exceed $\frac{3}{4}$ inch (19.1 mm) in height above the finished floor or landing for sliding doors serving *dwelling units* or $\frac{1}{2}$ inch (12.7 mm) above the finished floor or landing for other doors. Raised thresholds and floor level changes greater than $\frac{1}{4}$ inch (6.4 mm) at doorways shall be beveled with a slope not greater than one unit vertical in two units horizontal (50-percent slope).

Exceptions:

1. In occupancy Group R-2 or R-3, threshold heights for sliding and side-hinged exterior doors shall be permitted to be up to 8 inches (203 mm) in height if all of the following apply:
 - 1.1 The door is not part of the required *means of egress*.
 - 1.2 The door is not part of an *accessible route* as required by Chapter 11.
 - 1.3 The door is not part of an *Accessible unit, Type A unit* or *Type B unit*.
2. In *Type B units*, where Exception 5 to Section 1010.1.4 permits a 4-inch (102 mm) elevation change at the door, the threshold height on the exterior side of the door shall not exceed 4³/₄ inches (120 mm) in height above the exterior deck, patio or balcony for sliding doors or 4¹/₂ inches (114 mm) above the exterior deck, patio or balcony for other doors.

1011.5.2 Riser height and tread depth. *Stair* riser heights shall be 7 inches (178 mm) maximum and 4 inches (102 mm) minimum. The riser height shall be measured vertically between the *nosings* of adjacent treads or between the *stairway* landing and the adjacent tread. Rectangular tread depths shall be 11 inches (279 mm) minimum measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's *nosing*. *Winder* treads shall have a minimum tread depth of 11 inches (279 mm) between the vertical planes of the foremost projection of adjacent treads at the intersections with the walkline and a minimum tread depth of 10 inches (254 mm) within the clear width of the stair.

Exceptions:

1. *Spiral stairways* in accordance with Section 1011.10.
2. *Stairways* connecting stepped *aisles* to cross *aisles* or concourses shall be permitted to use the riser/tread dimension in Section 1030.14.2.
3. In Group R-3 occupancies; within *dwelling units* in Group R-2 occupancies; and in Group U occupancies that are accessory to a Group R-3 occupancy or accessory to individual *dwelling units* in Group R-2 occupancies; the maximum riser height shall be 8 inches (203 mm); the minimum tread depth shall be 10 inches (254 mm); the minimum *winder* tread depth at the walkline shall be 10 inches (254 mm); and the minimum *winder* tread depth shall be 6 inches (152 mm). A *nosing* projection not less than ³/₄ inch (19.1 mm) but not more than 1¹/₄ inches (32 mm) shall be provided on *stairways* with solid risers where the tread depth is less than 11 inches (279 mm).
4. See Section 503.1 of the *International Existing Building Code* for the replacement of existing *stairways*.
5. In Group I-3 facilities, *stairways* providing access to guard towers, observation stations and control rooms, not more than 250 square feet (23 m²) in area, shall be permitted to have a maximum riser height of 8 inches (203 mm) and a minimum tread depth of 9 inches (229 mm).

1031.3.1 Minimum size. *Emergency escape and rescue openings* shall have a minimum net clear opening of 5.7 square feet (0.53 m²) with no exceptions.

1104.4 Multistory buildings and facilities. At least one *accessible* route shall connect each *accessible story, mezzanine* and occupied roofs in multilevel buildings and *facilities*.

Exceptions:

1. An *accessible* route from an accessible level is not required in facilities that are less than three stories in height or have less than 3,000 square feet (278.7 m²) per story. This exception shall not apply to:
 - 1.1 Multiple tenant facilities of Group M occupancies containing five or more tenant spaces used for the sales or rental of goods and where at least one such tenant space is located on a floor level above or below the accessible levels.
 - 1.2 *Stories* or *mezzanines* containing offices of health care providers (Group B or I).
 - 1.3 Passenger transportation facilities and airports (Group A-3 or B).
 - 1.4 Government buildings.
 - 1.5 Structures with four or more dwelling units.
2. *Stories, mezzanines* or occupied roofs that do not contain accessible elements or other spaces as determined by Section 1108 or 1109 are not required to be served by an accessible route from an *accessible* level.
3. In air traffic control towers, an *accessible route* is not required to serve the cab and the floor immediately below the cab.
4. Where a two-story building or facility has one *story* or *mezzanine* with an *occupant load* of five or fewer persons that does not contain *public use* space, that *story* or *mezzanine* shall not be required to be connected by an *accessible route* to the *story* above or below.

1204.4.1 Controls. The control for activation of the required *stairway* lighting shall be in accordance with the *National Electrical Code*.

1205.3.3 Court drainage. The bottom of every *court* shall be properly graded and drained to a public sewer or other *approved* disposal system complying with the *Uniform Plumbing Code*.

[P] 1502.1 General. Design and installation of roof drainage systems shall comply with this section, Section 1611 of this code and shall be sized in accordance with the *Uniform Plumbing Code*. Unless roofs are sloped to drain over roof edges, roof drains or scuppers shall be installed at each low point of the roof.

Roofs shall be sloped a minimum of 1 unit vertical in 48 units horizontal (2 percent slope) for drainage unless designed for water accumulation in accordance with Section 1611.2 Ponding instability.

[P] 1502.2 Secondary (emergency overflow) drains or scuppers. Where roof drains are required, secondary (emergency overflow) roof drains or scuppers shall be provided where the roof perimeter

construction extends above the roof in such a manner that water will be entrapped if the primary drains allow buildup for any reason. The installation and sizing of secondary emergency overflow drains, leaders and conductors shall comply with Section 1611 of this code and the *Uniform Plumbing Code*.

1502.5 Discharge. Roof drainage water from a building shall not be allowed to flow onto adjacent public property.

1601.1 Scope. The provisions of this chapter shall govern the structural design of buildings, structures and portions thereof regulated by this code.

It shall not be the responsibility of the building official to determine engineering requirements of this code. Exclusive of Conventional Light-Frame Wood Construction provisions referenced in Section 2308, the method to resist loads as referenced in this chapter is the responsibility of a structural engineer or other qualified design professional.

1612.3 Establishment of flood hazard areas. To establish *flood hazard areas*, the applicable governing authority shall adopt a flood hazard map and supporting data. The flood hazard map shall include, at a minimum, areas of special flood hazard as identified by the Federal Emergency Management Agency in an engineering report entitled “The *Flood Insurance Study* for the City of Pierre,” dated May 17, 2004, as amended or revised with the accompanying *Flood Insurance Rate Map* (FIRM) and Flood Boundary and *Floodway* Map (FBFM) and related supporting data along with any revisions thereto. The flood hazard map and supporting data are hereby adopted by reference and declared to be part of this Ordinance. The Flood Insurance Study is on file in the Office of the City Engineer at 2301 Patron Parkway, Suite 1, Pierre, South Dakota.

1703.1 Approved agency. An approved agency or the design professional of record shall provide all information as necessary for the *building official* to determine that the agency meets the applicable requirements specified in Sections 1703.1.1 through 1703.1.3.

1802.2 Reinforcing materials. Where concrete foundation elements bearing the structural loads of the building require reinforcing, such reinforcing material shall be steel. Other concrete reinforcing products including, but not limited to, fiberglass or basalt fiber are prohibited.

Exception: Non-structural concrete slabs or flatwork fully supported by the ground below.

1807.1.4 Permanent Wood Foundation Systems. Permanent wood foundation systems shall be designed by a qualified engineer and installed in accordance with AWC PWF. Lumber and plywood shall be treated in accordance with AWPA U1 (Commodity Specification A, Use Category 4B and Section 5.2) and shall be identified in accordance with Section 2303.1.9.1.

1808.7.4 Foundation elevation. On graded sites, the top of any exterior foundation shall extend above the elevation of the top of curb a minimum of 12 inches (305 mm) plus 2 percent. Alternate elevations are permitted subject to the approval of the *building official*, provided that it can be demonstrated that required drainage to the point of discharge and away from the structure is provided at all locations on the site.

1809.5 Frost protection. Except where otherwise protected from frost, foundations and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:

1. Extending below the frost line of the locality, 42 inches for the City of Pierre.
2. Constructing in accordance with ASCE 32.
3. Erecting on solid rock.

Exception: Free-standing buildings meeting all of the following conditions shall not be required to be protected:

1. Assigned to *Risk Category I*.
2. Area of 1,200 square feet (138 m²) or less for *light-frame construction* or 400 square feet (37 m²) or less for other than *light-frame construction*.

Shallow foundations shall not bear on frozen soil unless such frozen condition is of a permanent character.

SECTION 3109 - SWIMMING POOL ENCLOSURES AND SAFETY DEVICES

3109.1 General. The design and construction of barriers for pools and spas shall comply with the requirements of Section 3109 and other applicable sections of this code.

3109.2 Definitions. For the purposes of these requirements, the terms used shall be defined as follows and as set forth in Chapter 2:

ABOVE-GROUND/ON-GROUND POOL. See “Swimming Pool”.

BARRIER. A fence, wall, building wall or combination thereof that completely surrounds the swimming pool and obstructs access to the swimming pool.

HOT TUB. See “Swimming Pool”.

IN-GROUND POOL. See “Swimming Pool”.

RESIDENTIAL POOL. That which is situated on the premises of a detached one-or two-family dwelling or a one-family *town house* not more than three stories in height.

SPA, NONPORTABLE. A non-permanent structure intended for recreational bathing in which all controls, water heating and water circulating equipment are an integral part of the product.

SWIMMING POOL. Any structure intended for swimming, recreational bathing or wading that contains water over 24 inches (610 mm) deep. This includes in-ground, above-ground, on-ground pools, hot tubs, spas and fixed-in-place wading pools.

SWIMMING POOL, INDOOR. A swimming pool that is totally enclosed within a roof covered structure and surrounded on all four sides by walls of the enclosing structure.

SWIMMING POOL, OUTDOOR. Any swimming pool that is not an indoor pool.

SWIMMING POOLS, PRIVATE. Any swimming pool that is not considered as public with or without associated fees.

SWIMMING POOL, PUBLIC. Any swimming pool that is open to the general public with or without associated fees.

3109.2.1. Application. The provisions of this section shall control the design of barriers for swimming pools, spas and hot tubs. These design controls are intended to provide protection against potential drownings and near-drownings by restricting access to swimming pools, spas and hot tubs.

This requirement shall be applicable to all new swimming pools hereafter constructed, other than indoor pools, and shall apply to all existing pools, which have a depth of 24 inches (610 mm) or more of water. No person in possession of land within the city, either as owner, purchaser, lessee, tenant, or a licensee, upon which is situated a swimming pool having a depth of 24 inches (610 mm) or more shall fail to provide and maintain such barrier as herein provided.

3109.3 Public swimming pools. Public swimming pools shall be completely enclosed by a barrier at least 42 inches in height or a screen enclosure. Openings in the barrier shall not *permit* the passage of a 4-inch-diameter (102 mm) sphere. The barrier shall be equipped with self-closing and self-latching gates. The openings or indentations in the barrier or gate shall not present any ladder like features that would provide climbing of the barrier.

3109.4 Residential swimming pools. Residential swimming pools shall comply with Sections 3109.4.1 through 3109.4.5.

Exception: A swimming pool with a power safety cover or a spa with a safety cover complying with ASTM F 1346.

3109.4.1 Barrier height and clearances. The top of the barrier shall be at least 42 inches (1219 mm) above grade measured on the side of the barrier that faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51 mm) measured on the side of the barrier that faces away from the swimming pool. Any openings or indentations in the barrier shall not produce a ladder-like or horizontal feature. Where the top of the pool structure is above grade, the barrier may be at ground level or mounted on top of the pool structure, and the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches (102 mm).

3109.4.2. Openings. Openings in the barrier shall not allow passage of a 4-inch-diameter (102 mm) sphere.

3109.4.3. Solid barrier surfaces. Solid barriers which do not have openings shall not contain indentations or protrusions that would provide ladder like features except for normal construction tolerances and tooled masonry joints.

3109.4.4. Outdoor swimming pool. An outdoor swimming pool, including an in-ground, aboveground, or on-ground pool, hot tub or spa, shall be surrounded by a barrier that shall be installed, inspected, and approved prior to filling with water that completely surrounds and obstructs access to the swimming pool, which shall comply with the following:

The top of the barrier shall be at least 42 inches (1067mm) above *grade* measured on the side of the barrier that faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51 mm) measured on the side of the barrier that faces away from the swimming pool. Where the top of the pool structure is above grade, such as an aboveground pool, the barrier may be at ground level, such as the pool structure itself, or mounted on top of the pool structure. Where the barrier is mounted on top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches (102 mm).

Openings in the barrier shall not allow the passage of a 4-inch-diameter (102 mm) sphere.

Where an aboveground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps, then:

The ladder or steps shall be capable of being secured, locked, or removed to prevent access; or

The ladder or steps shall be surrounded by a barrier, which meets the requirements of Item 1 above. When the ladder or steps are secured, locked, or removed, any opening created shall not allow the passage of a 4-inch-diameter (102 mm) sphere.

All gates or door openings through the barrier shall be equipped with self-closing and self-latching devices for keeping the door or gate securely closed at all times when the pool is not in actual use, except that the door of any dwelling that forms part of the enclosure need not be so equipped.

3109.4.5 Barrier exceptions. Spas or hot tubs with a safety cover that comply with ASTM F 1346 shall be exempt from the provisions of this provision. Modifications in individual cases, upon a showing of good cause with respect to height, nature, or location of a fence, wall, gates, or latches, or the necessity thereof, may be made by the building official, provided the protection as sought hereunder is not reduced thereby. The building official may grant permission for other protective devices or structures to be used as long as the degree of protection afforded by this substitute device or structure is not less than the protection afforded by the wall, fence, gate, and latch described herein. A reasonable period within which to comply with the requirements of this section for existing swimming pools shall be allowed, which period shall not exceed 90 days after notification by the building official.

3111.2 Solar thermal systems. Solar thermal systems shall be designed and installed in accordance with this section, the International Mechanical Code and the International Fire Code. Where light-transmitting plastic covers are used, solar thermal collectors shall be designed in accordance with Section 2606.12.

SECTION 3115 - INTERMODAL SHIPPING CONTAINERS

Not adopted by the City of Pierre.

APPENDIX C – GROUP U AGRICULTURAL BUILDINGS

This appendix is adopted in its entirety without amendments.

APPENDIX E – SUPPLEMENTAL ACCESSIBILITY REQUIREMENTS

This appendix is adopted in its entirety without amendments.

APPENDIX G – FLOOD-RESISTANT CONSTRUCTION

This appendix is adopted in its entirety without amendments.

APPENDIX J – GRADING

This appendix is adopted with the following amendments, additions, and deletions:

J102.1 Definitions. The following words and terms shall, for the purposes of this appendix, have the meanings shown herein. Refer to Chapter 2 of this code for general definitions.

APPROVAL. Shall mean that the proposed work or completed work conforms to this chapter in the opinion of the *city engineer*.

AS-GRADED. Is the extent of surface conditions on completion of grading.

BEDROCK is the hard, unbroken layer of rock underlying unconsolidated surface materials such as looser rocks and soil. Pierre shale may not qualify as bedrock; additional engineering will be required to determine suitability.

BENCH. A relatively level step excavated into earth material on which fill is to be placed.

BORROW is earth material acquired from an off-site location for use in grading a site.

CIVIL ENGINEER is a professional engineer registered in this state to practice in the field of civil works.

CIVIL ENGINEERING is the application of the knowledge of the forces of nature, principles of mechanics and the properties of materials to the evaluation, design, and construction of civil works.

COMPACTION. The densification of a fill by mechanical means.

CUT. See “*Excavation*.”

DOWN DRAIN. A device for collecting water from a swale or ditch located on or above a slope, and safely delivering it to an approved drainage facility.

EARTH MATERIAL is any rock, natural soil or fill or any combination thereof.

ENGINEERING GEOLOGIST is a geologist experienced and knowledgeable in engineering geology.

ENGINEERING GEOLOGY is the application of geologic knowledge and principles in the investigation and evaluation of naturally occurring rock and soil for use in the design of civil works.

EROSION. The wearing away of the ground surface as a result of the movement of wind, water or ice.

EXCAVATION. The removal of earth material by artificial means, also referred to as a cut.

FILL. Deposition of earth materials by artificial means.

GEOTECHNICAL ENGINEER See “soils engineer.”

GRADE. The vertical location of the ground surface.

EXISTING GRADE is the grade prior to grading.

FINISH GRADE is the final grade of the site that conforms to the approved plan.

ROUGH GRADE is the stage at which the grade approximately conforms to the approved plan.

GRADING. An excavation or fill or combination thereof.

KEY. A designed compacted fill placed in a trench excavated in earth material beneath the toe of a proposed fill slope.

PROFESSIONAL INSPECTION is the inspection required by this code to be performed by the civil engineer, soils engineer or engineering geologist. Such inspections include that performed by persons supervised by such engineers or geologists and shall be sufficient to form an opinion relating to the conduct of the work.

SITE is any lot or parcel of land or contiguous combination thereof, under the same ownership, where grading is performed or permitted.

SLOPE. An inclined surface, the inclination of which is expressed as a ratio of horizontal distance to vertical distance.

SOIL is naturally occurring superficial deposits overlying bedrock.

SOILS ENGINEER (GEO-TECHNICAL ENGINEER) is a person, formally educated and licensed in the practice of soils engineering. (geo-technical engineering)

SOILS ENGINEERING (GEO-TECHNICAL ENGINEERING) is the application of the principles of soils mechanics in the investigation, evaluation and design of civil works involving the use of earth materials and the inspection or testing of the construction thereof.

TERRACE. A relatively level step constructed in the face of a graded slope for drainage and maintenance purposes.

J103.1 Permits required. Except as exempted in Section J103.2, no person shall do any excavating, grading or filling without first having obtained a *permit* therefor from the *building official* as per City of

Pierre Ordinance Section 4-6-401. A separate permit shall be obtained for each site and may cover both excavations and fills.

J103.2 Exemptions. A grading *permit* shall not be required for the following:

1. When approved by the *building official*, grading in an isolated, self-contained area, provided that the public is not endangered and that such grading will not adversely affect adjoining public or private properties.
2. An excavation below finished grade for basements and footings of a building, retaining wall or other structure authorized by a valid building permit. This shall not exempt any fill made with the material from such excavation or exempt any excavation having an unsupported height greater than 5' (1524 mm) after the completion of such structure.
3. Excavation for construction of a structure permitted under this code.
4. Cemetery graves.
5. Refuse disposal sites controlled by other regulations.
6. Excavations for wells, or trenches for utilities.
7. Mining, quarrying, excavating, processing or stock-piling rock, sand, gravel, aggregate or clay controlled by other regulations, provided that such operations do not affect the lateral support of, or significantly increase stresses in, soil on adjoining properties.
8. Exploratory excavations performed under the direction of a registered design professional.
9. An excavation that (1) is less than 2 feet (610 mm) in depth or (2) does not create a cut slope greater than 5' (1524 mm) in height and steeper than 1 unit vertical in 1½ units horizontal (66.7% slope).
10. A fill less than 1 foot (305 mm) in depth and placed on natural terrain with a slope flatter than 1 unit vertical in 5 units horizontal (20% slope), or less than 3 feet (914 mm) in depth, not intended to support structures, that does not exceed 50 cubic yards (38.3 m³) on any one lot and does not obstruct a drainage course.

Exemption from the *permit* requirements of this appendix shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction.

J103.3 Hazards. Whenever the *building official* determines that any existing excavation or embankment or fill on private property has become a hazard to life and limb, or endangers property, or adversely affects the safety, use or stability of a public way or drainage channel, the owner of the property upon which the excavation or fill is located, or other person or agent in control of said property, upon receipt of notice in writing from the *building official*, shall within the period specified therein repair or eliminate such excavation or embankment to eliminate the hazard and to be in conformance with the requirements of this code.

J104.1.1 Grading Designation. Grading in excess of 500 cubic yards (382.3 m³) shall be performed in accordance with the approved grading plan prepared by a civil engineer and shall be designated as “engineered grading.” Grading involving less than 500 cubic yards (382.3 m³) shall be designated “regular grading” unless the permittee chooses to have the grading performed as engineered grading, or the building official determines that special conditions or unusual hazards exist, in which case grading shall conform to the requirements for engineered grading. When any part of any natural or finished graded building lot contains an area in which the average slope from any property line to an opposite property line is 5% or greater, the area will be determined to have special conditions or hazards and the engineered grading requirements of Section J104.1.2 shall apply. This requirement shall not be construed to prevent the building official from requiring engineered grading due to any perceived special conditions or unusual hazards.

J104.1.2 Engineered Grading Requirements. Application for a grading permit shall be accompanied by two sets of plans and specifications, and supporting data consisting of a soils engineering report and engineering geology report. The plans and specifications shall be prepared, signed and stamped by an individual licensed by the state to prepare such plans or specifications when required by the building official.

Specifications shall contain information covering construction and material requirements.

Section 3. That the part of Ordinance No. 1761, of the City of Pierre, identified as Section 1, entitled Adoption of International Building Code, and all other ordinances or parts of ordinances in conflict herewith are hereby repealed.

Section 4. That if any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this ordinance.

Section 5. That nothing in this ordinance or in the Building Code hereby adopted shall be construed to affect any suit or proceeding impending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any act or ordinance hereby repealed as cited in Section 3 of this ordinance; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this ordinance.

Section 6. That the Finance Officer is hereby ordered and directed to cause this ordinance to be published.

Section 7. That this ordinance and the rules, regulations, provisions, requirements, orders and matters established and adopted hereby shall take effect and be in full force and effect twenty (20) days from and after the date of its adoption and publication.

Source: R.O. Pierre, 1957, 4.0101; Ord. No. 805, 1969; Ord. No. 838, 1971; Ord. No. 1080, 1982. Ord. No. 1136, 1984, Ord. No. 1176, 1986; Ord. No. 1232, 1989; Ord. No. 1295, 1992; Ord. No. 1373, 1996; Ord. 1427, 1998; Ord. No. 1511, 2002; Ord. No. 1567, 2005; Ord. No. 1621, 2008; Ord. No. 1641, 2008; Ord. No. 1698, 2012; Ord. No. 1761, 2016; Ord. No. 1820, 2021; Ord. No. 1878, 2025.

Statutory reference: SDCL 9-19-7, codes incorporated by reference.

Cross reference: Chapter 12, planning and zoning generally.

Section 11-1-102. Establishment of fire zones. (Repealed.)

Source: R.O. Pierre, 4.0103; Ord. No. 805, 1969; 838, 1971; 944, 1976; Ord. No. 1080, 1982.

Cross reference: Sections 11-3-101, et. seq., fire prevention code and permits.

Section 11-1-103. Conflicts with International Building Code.

If there should be a conflict between any provision of the International Building Code and any other Ordinance of the City of Pierre, the most restrictive provision shall apply.

Source: Ord. No. 1136, 1984; Ord. No. 1511, 2002; Ord. No. 1761

Sections 11-1-104 to 199, inclusive. Reserved.

Source: R.O. Pierre, 1957, 4.0101; Ord. No. 805, 1969; Ord. No. 838, 1971; Ord. No. 1080, 1982. Ord. No. 1136, 1984, Ord. No. 1176, 1986; Ord. No. 1232, 1989; Ord. No. 1295, 1992; Ord. No. 1373, 1996; Ord. 1427, 1998; Ord. No. 1511, 2002; Ord. No. 1567, 2005; Ord. No. 1621, 2008; Ord. No. 1641, 2008; Ord. No. 1698, 2012; Ord. No. 1761, 2016

Statutory reference: SDCL 9-19-7, codes incorporated by reference.

Cross reference: Chapter 12, planning and zoning generally.

Section 11-1-102 Establishment of fire zones. (Repealed.)

Source: R.O. Pierre, 4.0103; Ord. No. 805, 1969; 838, 1971; 944, 1976; Ord. No. 1080, 1982.

Cross reference: Sections 11-3-101, et. seq., fire prevention code and permits.

Section 11-1-103 Conflicts with International Building Code.

If there should be a conflict between any provision of the International Building Code and any other Ordinance of the City of Pierre, the most restrictive provision shall apply.

Source: Ord. No. 1136, 1984; Ord. No. 1511, 2002

Sections 11-1-104 to 199, inclusive. Reserved.