



# City of Box Elder

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## NONE RESIDENTIAL BUILDING PERMIT APPLICATION CHECKLIST

Please submit the following information for a timely plan review and permit application review on Commercial projects.

1. **SITE PLAN** - Show all proposed construction on the site plan including, but not limited to: grading, utilities, retaining walls, easements, building locations, erosion control, and drainage. Show all drainage features by existing and proposed contours, to include drainage arrow, etc. The site plan is required to be prepared by a Licensed Professional Civil Engineer who is familiar with drainage infrastructure. Drainage calculations are required if the site plan dictates. Show the location of all utilities, fire hydrants, service lines, service line sizes, easements, flood plain, and rights-of-way.
2. **PARKING PLAN** - Show the correct number of parking stalls, parking stall dimensions, and the aisle widths as required by the ordinance. The plan shall indicate that all parking and circulation is hard surfaced. Additionally, the plan shall show the number of handicap accessible spaces, signage, accessible route and slope at parking stalls and ramps.
3. **LANDSCAPE PLAN** - Show all required landscaping as per ordinance, including materials schedule and plant varieties.
4. **EROSION & SEDIMENT CONTROL** - Show the limits of construction, limits of stockpile areas if proposed on-site, locations of stabilized staging areas and protection requirements if proposed on-site, location of vehicle tracking station if proposed on-site, direction of surface water run off, location of portable toilets if proposed on-site, location of concrete washout areas, if proposed on-site, identify required structural and non-structural bmps,, identify soil surface stabilization measures, and show square footage of the site.
5. **BUILDING PLANS** - Show the footing, foundation, floor plans, elevations, wall sections, roof plan, framing plan, bracing details, fire wall plan, fire sprinkler plans, exterior envelope, stair sections, and plans for special equipment. Plumbing, mechanical, and electrical plans shall also be provided. Plans shall comply with ANSI A117.1 for handicapped accessibility.
6. **SPECIAL EQUIPMENT** - Plans for special equipment or systems such as Type 1 or Type 2 mechanical hoods, elevators, venting, fire sprinklers and fire alarms shall be included.

All plans shall be drawn to scale

Other permits may be necessary, such as, but not limited to: Demolition, grading, flood plain development, no-rise flood certification, moving, sign, conditional zoning, supplemental utility tap fees, permit to work in the right-of-way, on-site wastewater disposal systems, etc.

Development in or adjacent to the floodplain shall require pre- and post-elevation certificates.

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All plans are required to comply with South Dakota Codified Law 36-18.

A code analysis by the designer of the project is required.

Submit three (3) sets of plans and a permit application. The review process will vary, but applications should anticipate a minimum of ten (10) days.

**TO AVOID, SUBMIT COMPLETE ACCURATE PLANS**  
**PLEASE USE THE FOLLOWING CHECKLIST AS A REFERENCE**

**SITE PLAN REQUIREMENTS:**

**General:**

- All features drawn to scale: (1" = 40' min. 1" = 20' preferred, architectural scale not acceptable)
- North Arrow
- Title Block
- Legal Description
- Lot Lines with dimensions
- Street Names of adjacent right-of-ways (ROW)
- Easements, existing and proposed
- Contours, existing and proposed
- Finished floor elevations
- Existing Utilities in adjacent ROW or easements (gas, electrical, communication, etc.)

**Drainage:**

- Drainage ways, existing and proposed
- Storm Sewers, existing and proposed; with sizes and materials
- Storm Sewer inlets, existing and proposed; on site and within 500' of property
- Floodplain and floodplain elevators (if applicable)

**Erosion & Sediment Control:**

- Limits of Construction
- Limits of stockpile areas if proposed on-site
- Stabilized staging areas and protection requirements if proposed on-site
- Vehicle traffic station if proposed on-site
- Direction of surface water run off
- Portable toilets if proposed on-site
- Structural or nonstructural bmps
- Soil surface stabilization measures
- Square footage site

**Streets/Sidewalks**

- Curb line of Street(s) adjacent to the site
- Paved Driveway extended to adjacent street
- Paved Parking showing circulation, number of parking stalls, and dimensions
- Sidewalks, existing and proposed

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## Landscaping

- Landscaping Plan
- Table of Landscaping material points
- Landscaping Plant Varieties - label each plant or plant group

## Sewer Service

- Sewer Mains, existing and proposed, in adjacent ROW
- Sewer Service Lines, existing and proposed; with size and material type
- Sewer Service Cleanout locations, as required
- On-site Wastewater Disposal System application (if applicable)

## Water Service

- Water Mains, existing and proposed, in adjacent ROW
- Water Service Lines, existing and proposed, with size, material type, and curb stop location
- Fire Hydrants, existing and proposed; within 500 ft. of property lines
- Fire Service Lines, existing and proposed; material type, and PIV

Any additions or changes to public infrastructure must be designed by and have plans prepared by a Professional Engineer.

## BUILDING PLAN REQUIREMENTS:

GROUND SNOW LEVEL	WIND SPEED (MPH)	SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP.	ICE BARRIER UNDERLAY REQUIREMENT	FLOOD HAZARD	AIR FREEZING INDEX	MEAN ANNUAL TEMP
			WEATHERING	FROST LINE DEPTH	TERMITE					
42 psf <sup>1</sup>	115 <sup>2</sup>	See footnote <sup>3</sup>	Moderate	42"	None to slight	-7	Yes	June 2013	1548	48 F

## Foundation Plan

- Show all foundations and footings
- Indicate size, location, thicknesses, materials and strengths and reinforcing.
- Show all imbedded anchoring such as anchor bolts, hold-downs, post bases, etc.
- Provide a geotechnical report for the proposed structure at the site.

## Floor Plan

- Show all floors including basements.
- Show all rooms, with their use, overall dimensions
- Show locations of all structural elements and openings
- Show all doors and windows
- Provide door and window schedules.
- All fire assemblies, area and occupancy separations and draft stops

## Framing Plans and Roof Framing Plans

- Show all structural members, their size, methods of attachment, location and materials for floor and roof plans.
- Climate Zone 6 Minimum Requirements:
  - o Ceilings: R-49

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## Framing Plans and Roof Framing Plans (Cont.)

- Windows: U – 0.35
- Walls: R-20
- Floors: R-30

## Exterior Elevations

- Show all views
- Show all vertical dimensions and heights
- Show all openings and identify all materials
- Show all lateral bracing system, where applicable

## Building Sections and Wall Sections

- Show the entire mechanical system
- Include all units, their sizes and mounting details
- Show all duct work and duct sizes
- Indicate fire dampers where required
- Provide equipment schedules
- Submit energy conservation calculations as per State of South Dakota

## Plumbing System

- Show all fixtures
- Show all pipes, slopes, materials and sizes.
- Show point of connections to utilities, septic tanks, pre-treatment sewer systems and water wells.

## Electrical System

- Show all electrical fixtures (interior, exterior and site)
- Show all wiring sizes and circuiting, grounding, panel schedules, single line diagrams, load calculations and fixture schedules.
- Show point of connection to utility

## Structural Calculations

- Where required, provide structural calculations for the entire structural system of the project.

## Specifications

- Either on the drawings or in booklet form, further define construction components, covering materials, methods of construction, wall finishes and all pertinent equipment.
- Schedules may be incorporated in the project manual in lieu of drawings.

## Addenda and Changes

- It shall be the responsibility of the individual identified on the cover sheet as principal design professional to notify the Building Official of any and all changes throughout the project and provide revised plans, calculations or other appropriate documents prior to actual construction. If there is no principal design professional who is overall coordination, it is the owner's responsibility to arrange for coordination among all the professions.

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## Revisions

- For clarity, all revisions should be identified with data symbol and clouded on the drawings or resubmitted as a new plan set.

**NOTE: This checklist is provided to you in order for your project to receive complete and timely plan review as required for the issuance of a building permit. Omission of any of this information on the plans could delay the issuance of a building permit.**

South Dakota Codified Law requires a design professional to prepare and stamp all construction drawings for all structures with the following exceptions found in **SDCL 36-18A-9**:

1. Single-family dwelling and outbuildings such as a barn or private garage.
2. Two, three and four family dwelling.
3. Five to sixteen family dwelling if located where a class A building inspection department of the ICBO will provide a detailed building code review of the dwelling.
4. Farm or ranch building or accessory except for a building regularly used for public purposes.
5. Temporary building or shed used exclusively for construction purposes, not exceeding two stories in height, and not used for living quarters.
6. Specific structure with gross square footage or less for new construction, enlargement or the alteration of the following:

Airport Hanger	20,000 sf
Assisted Living Facility	4,000 sf
Auditorium	5,000 sf
Bank	7,000 sf
Bowling Alley	7,000 sf
Car wash	7,000 sf
Church	5,000 sf
Day care center	4,000 sf
Farm implement w/repair Garage	11,000 sf
Fire station	7,000 sf
Hospital	4,000 sf
Hotel	4,000 sf
Industrial plant	11,000 sf
Jail	4,000 sf
Library	4,000 sf
Medical office	4,000 sf
Mortuary	4,000 sf
Motel	4,000 sf
Nursery school	4,000 sf
Nursing facility	4,000 sf
Office	7,000 sf
Preschool center	4,000 sf
Public garage	11,000 sf
Rec. Center/Health spa	5,000 sf
Restaurant	4,000 sf
Retirement home	4,000 sf
Service station	7,000 sf
School	5,000 sf
Shopping center	7,000 sf
Store	7,000 sf
Theater	5,000 sf
Warehouse	20,000 sf

**Any building with an occupancy designation not listed above over 4,000 square feet shall employ a design professional.**

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## **DESIGN PROFESSIONAL WORK**

An architect may engage in the practice of engineering or an engineer may engage in the practice of architecture, but only to the extent, that such practice is incidental to a project.

**Architects**, typically address the following matters:

1. Site layout (e.g., parking, zoning requirements, grading, landscaping, building layout)
2. Aesthetics and overall design.
3. Building circulation and existing (e.g., stairway, exit width, travel distances, corridors)
4. Building classification (e.g., occupancy, type of construction)
5. Life safety considerations (e.g., requirements for sprinklers, fire ratings, fire walls, separations, fire alarm, smoke control)
6. Interior space planning.(e.g., durability, function, aesthetics, fire ratings)
7. Environmental impacts (e.g., sound attenuation, quality of living, impact on natural surroundings)
8. Physically handicapped criteria.

**Engineers**, typically address the following matters:

1. Structural systems (e.g., framing, structural connections, foundations)
2. Electrical systems (e.g., power distribution, security, fire alarm and smoke detection)
3. Mechanical systems (e.g., drains and venting, water distribution systems, HVAC, fire protection systems)
4. Soil analysis (e.g., soil reports, soil stabilization, geotechnical investigations)
5. Civil work (e.g., site work, site drainage, grading, utilities, circulation)
6. Engineering work such as power stations, dams, bridges, sewage treatment facilities.

Either the architect or engineer can perform project coordination and construction administration services. **SDCL 36-18A-46** requires a written report of observed deficiencies or variations from the submitted plans and specifications to the Building Official, owner and builder before project completion on all projects that are not exempt.

South Dakota has specific laws that plans submitted to governmental agencies bear the seal of the design professional. **SDCL 36-18A-70** states:

*"No public officer or employee, as defined in subdivisions **22-1-2 (37) and (39)**, charged with authority or responsibility of approving or accepting plans, specifications, plats, or any other technical submissions, may accept or approve such plans, specifications, plats, or technical submissions which have been prepared in violation of this chapter."*

The Building Official as related to this South Dakota Codified Law, shall require owners to engage and designate an architect or engineering professional, who shall act as the professional of record on projects not exempted by SDCL 36-18A-9.

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