

Inspection Services



Governing Authority

(who requires inspections?)

- South Dakota Codified Laws:
 - Specific requirements
- Local Jurisdiction:
 - Local Building Officials requirements
- Project Owner/Owner's Representation:
 - Owner's request, or contract requirements
- Project Lending Companies/Financial Institution:
 - Possible in-house requirements

SD Codified Law

(abridged)

- 36-18A-46. ***Construction administration services to be provided by architect or engineer. No person other than an architect or professional engineer may provide architectural and engineering services which include construction administration services on projects that are not exempt pursuant to §§ 36-18A-2 and 36-18A-3. The architect or professional engineer of record, or another designated architect or professional engineer without conflict of interest, shall provide a written report of observed deficiencies or variations from the submitted plans and specifications to the building official, owner, and builder before project completion.*** The board may promulgate rules pursuant to chapter 1-26 to establish construction administration services criteria including coordinating and prime professional criteria for persons licensed by the board.
- 36-18A-2. “construction administration services which include the review or observation of construction for the purpose of determining whether the work is in general accordance with the design, drawings, specifications, codes, and other technical submissions;”

SD Codified Exempt Structures

36-18A-9

- Any person engaged in the preparation of plans and specifications for the erection, enlargement, or alteration of any of the following buildings:
 - ◆ Any dwelling for a single family, and any outbuilding in connection therewith, such as a barn or private garage;
 - ◆ Any two, three, or four family dwelling;
 - ◆ Any five to sixteen family dwelling, inclusive, located in a governmental subdivision of this state which provides a detailed building code review of building projects by a building inspection department which is a Class A member of the International Conference of Building Officials;
- Any farm or ranch building or accessory thereto except any building regularly used for public purposes;
- Any temporary building or shed used exclusively for construction purposes, not exceeding two stories in height, and not used for living quarters;
- Any person who prepares detailed or shop plans required to be furnished by a contractor to a registered professional engineer or architect, and any construction superintendent supervising the execution of work designed by an architect or professional engineer registered in accordance with this chapter;

- Any person engaged in the preparation of plans and specifications for the new construction, the enlargement or the alteration of any of the following buildings:
- Any building occupied as a hospital, hotel, motel, restaurant, library, medical office, nursing facility, assisted living facility, jail, retirement home, or mortuary, if the gross square footage of the new construction, the enlargement, or the alteration is four thousand square feet or less;
- Any building occupied as an auditorium, church, school, or theater if the gross square footage of the new construction, the enlargement, or the alteration is five thousand square feet or less;
- Any building occupied as a bowling alley, office, shopping center, bank, fire station, service station, or store if the gross square footage of the new construction, the enlargement, or the alteration is seven thousand square feet or less;
- Any building occupied as an industrial plant or public garage if the gross square footage of the new construction, the enlargement, or the alteration is eleven thousand square feet or less;
- Any building occupied as a warehouse if the gross square footage of the new construction, the enlargement, or the alteration is twenty thousand square feet or less;
- Any building with an occupancy other than those listed in subsections (a) to (e), inclusive, of this subdivision if the gross square footage of the new construction, the enlargement, or the alteration is four thousand square feet or less;
- Any pre-engineered or predesigned building, or any pre-engineered or predesigned building with a predesigned system, designed for the intended use of that building, including building structure, electrical, plumbing, and mechanical systems, if the buildings and systems are supplied directly, or indirectly, by a company engaged in the business of designing and supply such buildings and systems and if the company has in its employ one or more engineers or architects licensed in South Dakota, who prepare all designs for such buildings and systems.

Benefits of Inspection Services

(Why implement if governing authority does not require them)

- To establish another level of expertise on the project without conflict of interest.
- To provide documentation of the project during the construction process.
- To ensure construction conforms to construction documents/code.
- To document any nonconforming work for future reference.
- To support the design intent.
- To lessen project risks.
- To identify and resolve construction problems early.
- To supplement the client's construction knowledge.
- To provide a "check and balance" and accountability presence for the project.

Level of Services

Governing Authority (who you're representing) may determine level of inspection services:

- Frequency
 - Typically monthly in conjunction with GC's application for payment.
- General Contractor's application for payment services
 - Review and confirm that the application for payment accurately represents the work performed, and construction material for the project during a specific time period.
- Change order approvals
 - Review and validate proposed costs for change orders comparable to the construction documents.
- Field observation reports
 - Develop and execute written observation reports of the project.
- Additional lending institution reports/forms
 - Coordinate any additional or specialized documentation as required.
- Punch list services
 - Provide a list of incomplete or non conforming construction elements that require completion.
- Certificate of substantial completion
 - Documentation of the date when the project is completed and the owner assumes control and responsibility for the building, including the cost of insurance, maintenance and utilities. Warranty initiates.

Knowledge and Skills Required

- Substantial design and construction experience.
- Understanding of construction techniques and methods.
- Ability to understand and interpret the design intent.
- Understanding of building codes and standards.
- Ability to communicate, negotiate, and resolve disputes.
- Keen observational skills.
- Ability to document observations and decisions.
- Ability to organize and manage project records.



July 08, 2014

Owner
Name
Address
City, State ZIP

Re: Your Apartments
Sioux Falls, SD 57110

Mr. Owner,

I visited the project site on July 08, 2014 to review the Application and Certificate for Payment #10 and to review construction progress. In attendance were: *Name (company)*, *Name (company)*, *Name (company)*, and myself.

Brief Project Description:

The project consists of 3 two-story apartment buildings. The total projects consists of 12 one-bedroom one bath, 34 two-bedroom two bath units and 24 three-bedroom units; 2-2 bedroom units and 1-3 bedroom units are handicap units and 16- 3 bedroom 2 bath units, for a total of 89 units. 5 (5%) units will be type "A" fully handicapped accessible, and an additional 2% will be sensory impaired. All units are to be energy star certified. Of the 3 buildings two will be a 28 unit building, with the other being a 33 unit building with a community center. A playground is to be located in the south east corner of the site. The project is located and accessed off (*Address*). Site utilities are located off (*Street*). The site contains 5 acres. There are 106 parking spaces shown including accessible spaces.

Building construction consists of poured concrete footings and foundations, concrete floor slab with under slab perimeter insulation. Conventional wood frame construction is used for the structure with wood floor and roof trusses. Roofing to be asphalt shingles on roofing felt. Buildings will be sprinklered NFPA 13R (NFPA 13 @ clubhouse). Exterior walls consist of prefinished fiber-cement horizontal and panel siding, and stone veneer. Windows to be vinyl single hung type with low-e insulated glazing. Individual unit entrance doors to be prehung insulated units. Interior doors to be prefinished prehung embossed hardboard units. Flooring is to be a combination of carpet and vinyl sheet goods. Base and trim are to match the doors. Units have individual furnace and air-conditioning units. Walls are to be painted gypsum wallboard.

The unit/building breakdown for each building is as follows:

BLDG ##### & #####: (56 units)

30- 1 bedroom
18- 2 bedroom
8- 3 bedroom

BLDG #####: (22 units)

12- 1 bedroom
8- 2 bedroom
2- 3 bedroom

Suite 200
212 S. Phillips
Ave.
Sioux Falls, SD
57104-6320

(605) 339-4411
(605) 339-4414 Fax

1. Draw Review:

We have reviewed the Contactor’s Application and Certificate for Payment #10 for the period though 6/30/2014 requesting the following:

Original Contract Sum:	\$10,000,000.00
Net change by Change Order:	0.00
Contract Sum to Date:	10,000,000.00
Total Completed and Store to Date	4,000,000.00
Retainage (5%)	200,000.00
Total Earned Less Retainage:	3,800,000.00
Less Previous Certificates for Payment	2,000,000.00
Current Payment Due:	1,800,000.00
Balance to Finish Project	\$6,200,000.00

The total amount requested is approximately 40% of the total contract amount. Comparing the amount requested to the work completed to date, the amount appears to be reasonable and we are recommending payment of the amount requested.

A. Budget Reallocations:

Currently there are none.

B. Change Orders:

Currently there are no change orders, or pending change orders.

C. Lien Waivers:

Owner/Contractor will provide in their draw package.

D. Progress (schedule):

Project appears to be currently on schedule.

2. Project documents and misc. items:

A. Project Drawings/Specifications in place:

Civil Plans	x	
Architectural Plans	x	
Structural Plans	x	
Mechanical Plans	x	
Electrical Plans	x	
Misc.		

B. Project Drawings outstanding:

None at this time.

C. Additional outstanding documents (surveys, cert of occupancy, ect):

None at this time.

D. On Site Materials:

1. Siding and trim
2. Tub/showers
3. Engineered stone veneer
4. Appliances
5. Doors
6. Windows
7. HVAC ductwork
8. Sheet rock

E. Off Site Materials stored:

None

3. Construction Progress:

A. Site Work Status:

1. Site is scraped.
2. Erosion control (silt) fence is installed.
3. Site water utilities are in place.
4. Sewer is installed on site.
5. Tracking station is in place.
6. Retention pond is in place.
7. Fire hydrants are installed.
8. Electrical transformer is set
9. Temporary electrical service is available on site.
10. Playground equipment install is complete.
11. Curb & gutter is poured.

B. Buildings:

1. **Footings and foundations:** All are poured and back filled. Drain tile is installed.
2. **Flat work:** Building slabs are poured.
3. **Masonry:** Stone veneer install is complete on bldg. #####.

4. **Carpentry:** All wall framing complete. Roof truss install and sheathing is complete.
5. **Insulation:** Is complete for bldg. #####. Foundation perimeter insulation is installed. at bldg. #####.
6. **Roofing:** bldg. ##### is completed, bldg. ##### is complete.
7. **Siding:** bldg. ##### weather barrier is installed. bldg. ##### siding is completed.
8. **Doors & windows:** bldg. ##### windows install is completed, doors are installed. bldg. ##### has windows installed.
9. **Finishes:** Dry wall install is roughly 20% on bldg. #####, bldg. ##### is 100% installed and roughly 90% textured and painted. Cabinets are 50% installed at bldg. #####. Gypcrete and sheet vinyl is roughly 95% installed at bldg. #####.
10. **Accessories & Appliances:** Are roughly 75% installed at bldg. #####.
11. **HVAC:** Roughly 95% of all duct work is installed and furnaces are being set in bldg. #####.
12. **Plumbing:** Underground plumbing rough-ins are complete. Roughly 70% of all interior plumbing rough-ins are complete.
13. **Electrical:** Electrical rough in 95% complete at bldg. #####. Devices are roughly 95% installed in bldg. #####.
14. **Fire suppression:** Rough-in completed on bldg. #####, and is roughly 75% complete on bldg. #####.

C. Current Construction Observations/Discussions:

1. Tentative turnover of building bldg. ##### is August 01, 2014.
2. The third floor of bldg. ##### had its initial cleaning. Cleaning of units will continue as the units/stair enclosures/unit corridors are completed.
3. Steel stair stringers need to be painted black to match door frames.

D. Past Construction Observations:

1. Plumbing tests were performed for bldg. #####.
2. The main gas line to the site is installed and temporary gas is available to bldg. #####, allowing them to heat the main floor.
3. Russ asked about structural shear wall construction and locations.- Locations have been coordinate with the architect and structural engineer of record.
4. Some steel stair stingers were stolen from the site over the holidays. Estimated value was \$3,000.-Contractor reported the theft to local authorities and ordered replacements.
5. It appears the pre-fab steel stair stringers will not fit the width of the stair enclosure with the concrete treads that were ordered and to be installed.

- GC will coordinate with the architect of record and stair tread mfr to develop a solution.- Stair stringers are being modified to fit the width of the stair well. -completed.
6. Tub sizes from the construction documents were change from oversize to standard size. Some underground plumbing rough-ins will need to be changed due to the reduced depth of tubs; concrete cutting and removal is completed. GC to coordinate with the plumbing contractor. -completed.
 7. Contractor commented the bearing heights on the plans do not correspond with other wall sections. Architect of record clarified dimensions with GC. –clarification completed.
 8. Contractor commented that there is a difference in top of deck elevations on the plans for second floor, as well as two different gypcrete flooring depths called out. Architect of record stated $\frac{3}{4}$ ” gypcrete topping can be used though-out. –clarification completed.
 9. Fire suppression system was tested and leaks were repaired. -completed.
 10. Delivery of metal stair stingers for building bldg. #####are on site.- completed.
 11. Windows in stair wells are required to be tempered glazing. -completed.

E. Workforce on site:

1. 5 Plumbers
2. 3 Sheet rockers
3. 3 HVAC
4. 2 Electricians
5. 4 trim carpenters

4. Quality and Compliance:

A. Material testing:

1. Soils report is completed and distributed.
2. Concrete cylinder testing has been performed and all samples to date have passed.

B. City Inspections and permits performed/issued:

Footing Foundation Permit	x	all bldgs
Building Permit	x	all bldgs
Electrical Inspection	x	bldg. #####
Plumbing Inspection	x	bldg. #####
Fire protection Systems Inspection	x	bldg. #####
Misc.		

C. General opinion:

Insofar as we were able to observe construction completed to date appears to be a fair and reasonable representation of the work required by the project construction documents. The quality of materials and workmanship appears satisfactory and in compliance with the construction documents. No major deviations from the contract documents were observed.

Attached are photographs taken at the project site for your file.

The next scheduled site visit is T.B.A.

If you have any questions, please contact this office.

Respectfully,



(Name)

(Title)

VAN DE WALLE ASSOCIATES LLC

cc: *All parties involved in Project*



1st floor bldg. ##### interior framing



Typical Unit Framing bldg. #####



Draft stop and air sealing



Frost protecting footings



FIRE SEPERATION NEEDS TO CONTINUE THROUGH TRUSS SPACE



WEATHER BARRIER SHOULD BE OVER THE METAL FLASHING



WEATHER BARRIER SHOULD LAP OVER VENT FLASH.



DOUBLE TOP PLATE IS NOTCHED AT ROOF TRUSSES??