

City of Bonney Lake
Department of Planning and
Community Development
Building Division
8720 184th Avenue E
Bonney Lake, WA. 98390
253.447.4352

Structural Design and Inspection Information

City of Bonney Lake
Building Division

Structural Design and Inspection Information

The following information packet was compiled to assist the designer; contractor and owner to better understand the code requirements related to the structural design and inspection of non-conventional construction. The designer should use this booklet during the submittal process to organize the inspection team and develop a schedule to assist the contractor/builder.

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City of Bonney Lake

Building Division

Structural Observation Agreement

The owner shall employ _____, Engineer of Record, who agrees to provide services as described below for the project located at _____ for permit number _____.

Structural observation is defined as the visual observation of the structural system beginning at the foundation stage and continuing through the framing stage. This includes, but is not limited to, the elements and connections at significant stages. A written statement by the Engineer of Record shall be submitted to the building official prior to each inspection required under Section 1709 of the International Building Code and the City of Bonney Lake Building Division. The statement shall indicate that each completed stage is in general conformance with the structural requirements of the building code and the approved plans and specifications.

Structural observation does not exclude or waive the responsibility for the inspections required by Section 109 of the International Building Code or the City of Bonney Lake Building Division or for the special inspection as required by Section 1704 of the International Building Code.

Owners Signature

Engineers Signature and Seal

Date

Date

City of Bonney Lake

Building Division

Special Inspection and Testing Agreement

To permit applicants of projects requiring special inspection and/or testing per Section 1704 of the International Building Code (I.B.C.).

Project Name/Address: _____

Permit Number: _____

BEFORE A PERMIT CAN BE ISSUED: The owner, the engineer or architect of record acting as the owner's agent, shall complete two (2) copies of this agreement, the special inspections qualification form and the attached structural tests and inspections schedule including the required acknowledgments. A pre-construction conference with the parties involved may be required to review the special inspection requirements and procedures.

APPROVAL OF SPECIAL INSPECTORS: Each special inspector shall be approved by the Building Division; prior to performing any duties. Each special inspector shall complete the enclosed Special Inspector Qualification Form and submit his/her qualifications to the Building Division and is subject to a personal interview for pre-qualification. Special inspectors shall display approved identification, as stipulated by the Building Division, when performing the function of a special inspector. Special inspection and testing shall meet the minimum requirements of I.B.C. Section 1704. The following conditions are also applicable:

A. Duties and Responsibilities of the Project Owner:

1. Funding

The project owner, the engineer or architect of record, acting, as the owner's agent is responsible for funding special inspection services (See I.B.C., Section 1704.1.)

2. Employment

The project owner/agent hereby, agrees that he/she shall not terminate his/her contract for special inspection services; with the below named firm until he/she has obtained the services of another inspection firm and submitted a new Special Inspection Agreement Form for approval and accepted by the building official.

B. Contractor Responsibilities:

1. Notify the Special Inspector

The contractor is responsible for notifying the special inspector or agency regarding individual inspections for items listed on the attached schedule and as noted on the building

division approved (stamped) plan(s). Adequate notice shall be provided so that the special inspector has time to become familiar with the project.

2. Provide Access to Approved Plans

The contractor is responsible for providing the special inspector access to the approved (stamped) plans at the job-site.

3. Retain Special Inspection Records

The contractor is also responsible for retaining at the job-site all special inspection records submitted by the special inspector and providing these records for review by the building division's inspector, upon request.

It is the responsibility of the contractor to review the building division's approved (stamped) plans for additional inspections or testing requirements that may be noted.

4. Samples

Only the special inspection agency or materials engineering laboratory shall be permitted to take laboratory samples and transport them to the facility.

C. Duties and Responsibilities of the Special Inspector:

1. Observe Work

The special inspector shall observe the work for conformance with the building division approved (stamped) design drawings and specifications and applicable workmanship provisions of the I.B.C. architect/engineer-reviewed shop drawings and/or placing drawings may be used only as an aid to inspection.

Special inspections are to be performed on a continuous basis; meaning that the special inspector is on site in the general area at all times observing the work requiring special inspection. Periodic inspections, if any, must have prior approval by the building official based on a separate written plan reviewed and approved by the building official and the project engineer or architect.

2. Report Nonconforming Items

The special inspector shall bring nonconforming items to the immediate attention of the contractor and note all such items in the daily report. If any item is not resolved in a timely manner or is about to be incorporated in the work, the special inspector shall immediately notify the building official by telephone or in person, notify the engineer or architect, and post a discrepancy notice.

3. Furnish Daily Reports

On request, each special inspector shall complete and sign both the Special Inspection Record and the Daily Report Form for each day's inspections to remain at the job-site with the contractor for review by the building division's inspector.

4. Furnish Weekly Reports

The special inspector or inspection agency shall furnish weekly reports of tests and inspections directly to the building official project engineer or architect and others as designated. These reports must include the following:

- a. Description of daily inspections and tests made with applicable locations;
- b. Listing of all nonconforming items;
- c. Report on how nonconforming items were resolved or unresolved as applicable; and
- d. Itemized changes authorized by the architect, engineer and building department if not included in conformance items.

5. Furnish Final Report

The special inspector or inspection agency shall submit a final report to the building official stating that all items requiring special inspection and testing were fulfilled and reported and, to the best of his/her knowledge, in conformance with the approved (stamped) design drawings, specifications, approved change orders and the applicable workmanship provisions of the I.B.C. Items not in conformance, unresolved items or any discrepancies in inspection coverage (i.e. missed inspections, periodic inspections when continuous was required, etc.) should be specifically itemized in this report.

D. Building Division Responsibilities

1. Approved Special Inspection

The building official shall approve all special inspectors and special inspection requirements.

2. Monitor Special Inspection

Work requiring special inspection and the performance of special inspectors, shall be monitored by the building division's inspector. His/her approval must be obtained prior to placement of concrete or other similar activities in addition to that of the special inspector.

3. Issue Certificate of Occupancy

The building official will only issue a certificate of occupancy after all special inspection reports and the final report have been submitted and accepted.

ACKNOWLEDGMENTS

I have read and agree to comply with the terms and conditions of this agreement.

Owner: _____ By: _____ Date: _____

Contractor: _____ By: _____ Date: _____

Special Inspector or
Inspection Agency: _____ By: _____ Date: _____

Project Engineer/
Architect: _____ By: _____ Date: _____

ACCEPTED FOR THE BUILDING DEPARTMENT

By: _____ Date: _____

SPECIAL INSPECTOR QUALIFICATION FORM

Each special inspector making inspections for any inspecting/testing agency shall complete this form and enclose a work experience resume for the past five (5) years.

INSPECTORS' NAME: _____

ADDRESS: _____

CITY, STATE, ZIP: _____

PHONE: _____

INSPECTION
CLASSIFICATION: _____

ICBO NUMBER: _____

PROJECT
NAME: _____

PROJECT
ADDRESS: _____

STATEMENT OF UNDERSTANDING

I, _____
HEREBY AFFIRM THAT I HAVE BEEN EMPLOYED BY:

(Firm)

(Address)

To perform special inspection at above stated project and that I am aware that in performing this inspection, I am acting as an agent for the jurisdiction and responsible to the building official. I am aware that my duties include compliance with the approved plans, specifications, the International Building Code and recognized construction practices, which do not conflict with any of the aforementioned documents. I will submit written reports to the building official as required.

Signature

City of Bonney Lake Building Division

SPECIAL INSPECTION AND TESTING SCHEDULE

Project Name

Building Permit Number

Project Address

Testing/Inspection Agency/Special Inspector

REINFORCED CONCRETE, GUNITE, GROUT & MORTAR:

Concrete Gunite Grout Mortar

| | | | | |
|--|--|--|--|------------------------|
| | | | | Aggregate Tests |
| | | | | Reinforcing Tests |
| | | | | Mix Designs |
| | | | | Reinforcing Placements |
| | | | | Batch Plant Inspection |
| | | | | Inspect Placing |
| | | | | Cast Samples |
| | | | | Pick-up Samples |
| | | | | Compression Tests |

STRUCTURAL STEEL/WELDING:

- Sample & Test (list specific members below)
- Shop Material Identification
- Welding Inspection [] Shop [] Field
- Ultrasonic Inspection [] Shop [] Field
- High-strength Bolting Inspection
- [] Shop [] Field
- [] A325 [] A490 [] N [] X [] F
- Metal Deck Welding Inspection
- Reinforcing Steel Welding
- Metal Stud Welding Inspection
- Concrete Insert Welding Inspection

PRECAST/PRESTRESSED CONCRETE:

Piles Post-Tens Pre-Tens Cladding

| | | | | |
|--|--|--|--|-------------------------|
| | | | | Aggregate Tests |
| | | | | Reinforcing Tests |
| | | | | Tendon Tests |
| | | | | Mix Designs |
| | | | | Reinforcing Placement |
| | | | | Insert Placement |
| | | | | Concrete Batching |
| | | | | Concrete Placement |
| | | | | Installation Inspection |
| | | | | Cast Samples |
| | | | | Pick-up Samples |
| | | | | Compression Tests |

FIREPROOFING:

- Placement Inspections
- Density Tests
- Thickness Tests
- Inspect Batching

INSULATING CONCRETE:

- Sample and Test
- Placement Inspection
- Unit Weights

FILL MATERIAL:

- Acceptance Tests
- Placement Inspection
- Field Density

MASONRY:

- Special Inspection Stresses Used
- Preliminary Acceptance Tests (Masonry Units, Wall Prisms)
- Subsequent Tests (Mortar, Grout, Field Wall Prisms)
- Placement Inspection of Units

STRUCTURAL WOOD:

- Shear Wall Nailing Inspection
- Inspection of Glu-lam Fab.
- Inspection of Truss Joist Fab.
- Sample and Test Components

ADDITIONAL INSTRUCTIONS OR OTHER TESTS AND INSPECTIONS:

Form completed by: _____ Title: _____

Telephone No.: _____ Date: _____

City of Bonney Lake
Building Division

APPENDIX A

**SPECIAL INSPECTION FORMS, SCHEDULES AND
AGREEMENTS**

1. DAILY REPORT FORM
2. WEEKLY REPORT FORM
3. DISCREPANCY NOTICE
4. SPECIAL INSPECITON FINAL REPORT FORM
5. STRUCTURAL OBSERVATION AGREEMENT

SPECIAL INSPECTOR DAILY REPORT

City of Bonney Lake Building Division Date: _____

Project Name/Address: _____

Inspection Type(s)/Coverage: _____ [] Continuous [] Periodic

Time Beginning Inspection: _____ Time Ending Inspection: _____

Describe Inspections Made, Including Locations: _____

List Test Made: _____

List Items Requiring Correction, Corrections of Previously Listed Items and Previously Listed
Uncorrected Items: _____

List Changes to Approved Plans Authorized by the Building Official and Architect or Engineer:

Comments: _____

To the best of my knowledge, the work inspected was in accordance with the building division approved design drawings, specifications and applicable workmanship provisions of the I.B.C. except as noted above.

Signed: _____ Date: _____

Print Full Name: _____ I.D. Number: _____

(This report to remain at job-site with the contractor for review by the building division's inspector upon request).

SPECIAL INSPECTOR WEEKLY REPORT

City of Bonney Lake Building Division

Project Name/Address: _____

Inspection Type(s)/Coverage: _____ [] Continuous [] Periodic

Describe Inspections made, Including Locations: _____

List tests Made: _____

Total Inspection Time Each Day:

| | | | | | | | |
|-------|--|--|--|--|--|--|--|
| Date | | | | | | | |
| Hours | | | | | | | |

List Items Requiring Corrections, Corrections of Previously Listed Items and Previously Listed Uncorrected Items: _____

List Changes to Approved Plans Authorized by the Building Official and Architect or Engineer: _____

Comments: _____

To the best of my knowledge, the work inspected was in accordance with the building division approved design drawings, specifications and applicable workmanship provisions of the I.B.C. except as noted above.

Signed: _____ Date: _____

Print Full Name: _____ I.D. Number: _____

cc: Building Division
Engineer/Architect

(This form to be distributed weekly when required by the building division and/or engineer/architect.) Special Inspections

City of Bonney Lake

Building Division

DISCREPANCY NOTICE

PERMIT NUMBER: _____

DATE: _____ JOB ADDRESS: _____

JOB DESCRIPTION:

AREA INSPECTED: _____ TYPE OF INSPECTION: _____

SPECIAL INSPECTOR: _____ LABORATORY: _____

NOTICE DELIVERED TO: CONTRACTOR DATE: _____ TIME: _____

ENGINEER/ARCHITECT BUILDING DIV.

MAKE THE FOLLOWING CORRECTIONS AND SECURE INSPECTION APPROVAL
PRIOR TO PROCEEDING WITH THIS PHASE OF THE WORK.

CONTRACTOR'S RESPONSE:

REPAIR OR REPLACE IN ACCORDANCE
WITH APPROVED (STAMPED) PLANS
AND SPECIFICATIONS

MODIFICATION EVALUATION

Signed: _____ Date: _____

Signed: _____ Date: _____

COMPLETED AND APPROVED

CONTRACTOR: _____

DATE: _____

INSPECTOR: _____

DATE: _____

DO NOT REMOVE THIS NOTICE

Post Adjacent to Building Permit Inspection Record Card

FINAL SPECIAL INSPECTION REPORT

Date: _____

To: City of Bonney Lake
Department of Planning and
Community Development
Building Division
8720 184th Avenue E
Bonney Lake, WA. 98390

Attention: Jerry E. Hight, Building Official

Re: Final Project Report

Project Name: _____

Address: _____

To Whom it May Concern:

This is to certify that I performed special inspection on the following portions of the work at the above address, which required continuous inspection and which I was employed to inspect:

Based upon my personal observation and written reports of this work, it is my judgment that the inspected work was performed, to the best of my knowledge, in accordance with the approved (stamped) plans, specifications and the applicable workmanship provisions of the International Building Code.

(Special Inspector's Signature)

Print Full Name

Date

Registered Professional Signature*

Date

*(Affix professional wet seal)

cc: Client/Owner
Architect/Engineer