



DEPARTMENT OF PLANNING & BUILDING
 BUILDING DIVISION
 276 Fourth Avenue, Chula Vista CA 91910
 619-691-5272 619-585-5681 FAX

SINGLE FAMILY RESIDENCES/ DUPLEXES: MINIMUM SUBMITTAL STANDARDS

FORM 4601

Documents referenced in this Form

- **Building Permit Worksheet/Minor Permit Worksheet**
- **Form 4559, Minimum Plans Requirement**
- **Form 4605, Allowable Shear for Wood Stud Walls**
- **Form 4595, How to Prepare a Residential Plot Plan**
- **Form 4603, Typical Residential Single Story Framing Section**
- **Form 4602, Span Tables: Roof & Floor Framing**
- **Form 4592, Minimum Construction Specifications**

The purpose of this handout is to assist you in preparing for plan submittal. The items listed must be included before the Building Division can accept your plans. This is to ensure a more timely and complete plan check for your project. When a submittal package is incomplete we will be unable to render a complete and thorough plan check. This will cause delays in plan check and permit issuance.

In addition to avoiding delays in the permitting process, clear and complete plans will also expedite the construction and inspection process. When your plans plainly show what you intend to build and how you intend to build it, costly and time consuming errors can be avoided. A simple test to determine if the plans are sufficiently clear is to consider if the plans are understandable without verbal explanations. Put yourself in the place of an inspector who has just arrived at a construction site and no one is there to explain the scope of the project. Will the inspector be able to quickly read and understand the plans without explanation?

To further prevent costly and time-consuming plan changes, applicants whose projects require other approvals such as grading plans, zoning Use Permits, Design Review, etc., should consult those other Departments/Divisions first and, at a minimum, obtain preliminary approval prior to submitting plans to the Building Division for building permits.

These other approvals may require that the applicant make separate submittals to other departments or other agencies.

FREQUENTLY NEEDED PHONE NUMBERS FOR OTHER AGENCIES:

- **Zoning Information**
 Contact the Planning Division at (619) 691-5101
 Zoning (setbacks, height limits, uses allowed, etc.)
 Conditional Use Permits, Design Review, Sign Permit approval, etc.
- **Chula Vista Fire Department**
 New Residential Construction Fire Sprinkler System
 (After permit issuance) Plan Review
 call (619) 691-5055

For clarification or additional information for a specific project, call (619) 691-5272 or visit the Public Service Counter, Building Division at 276 Fourth Avenue, Chula Vista.

I. PLAN SPECIFICATION

Four identical sets of plans are required for plan submittal. Plans must be drawn to scale and must be of sufficient clarity to indicate the location and extent of the work proposed. Plans must show in detail that the proposed work will conform to the provisions of the Codes and all relevant laws, ordinances, rules and regulations in effect in the City of Chula Vista on the day of plan submittal fee payment. Label and dimension all items on the plans. Section IV, "Drawings to Supply" identifies minimum items to include in the plans.

If property is vacant, sufficient information must be provided so that an address can be assigned to new buildings.

*Plans must be complete; partial submittals will not be accepted. **A sample checklist is included on page 5** to aid in determining if you have all the items required for plan submittal.*

II. FORMS TO COMPLETE

A. Building Permit Worksheet/Minor Permit Worksheet

California Law requires that every permit applicant supply specific information and make certain declarations regarding the proposed work.

At plan submittal time, the address, legal description, existing use, habitable square footage, garage square footage, and square footage of any accessory structures such as balconies, decks, retaining walls, patio covers, description of work, name and address of applicant and owner are required. If no address is available for the property, then

the correct Assessor's Parcel Number must be provided. This information can be found on the tax bill for the property.

B. OWNER BUILDER FORM

An owner/builder verification form is required for all owner/builder projects. This form will be sent by mail to the owner or may be given at the Building Counter to the owner with a valid identification.

III. PLAN CHECK FEES

Plan check fees based on the construction valuation established by the Building Division must be paid at the time the plans are submitted by cash or check. Checks must be made payable to the "City of Chula Vista." It is best to bring a blank check. If you need assistance in calculating fees for plan submittal, call (619) 691-5272.

IV. DRAWINGS TO SUPPLY

Minimum items to be included in plans are listed below. Supporting documentation for some of the items is also listed. Two copies of supporting documentation are required at plan submittal time. A sample checklist is provided for your convenience on page 5 of this Bulletin.

All plans must include the items listed in this guideline that apply to your project. In general, plans must conform to the following:

- Be legible and fully dimensioned
- Must be drawn to scale. 1/4": 1 foot is preferable
- Must clearly indicate new construction vs. existing construction.
- Each page of the plans must be numbered
- All notes must be right side up
- All notes must be clear and legible
- Pencil drawings or notations are not acceptable
- Paper should be of a uniform size no smaller than 18" x 24" (Except for Plot Plan)
- Thirty inch (30") maximum rolled length preferred
- Reverse plans are not acceptable

A. Intended Use

Plans must specify the present and proposed use of the building site. List the use of all proposed and existing structures on the Site/Plot Plan. If structures are to be demolished, list the use of the structure such as "existing one-story, two-bedroom, single family residence to be demolished." Separate demolition permits must be obtained when an entire structure is to be demolished.

B. Architect's or Engineer's Signature

Plans for single family residences and duplexes are required to be signed and stamped by a currently registered engineer or licensed architect when the proposed construction does not meet the conventional construction provisions of the 2001 California Building Code. When signed, stamped plans are required; each page must be signed and stamped by the responsible architect or engineer. At plan submittal time, only the set being submitted for structural plan review requires a wet signature. Other sets may be copies.

The responsible engineer or architect must sign the first page of the structural calculations. For more information, refer to Form 4610 "WHO MAY PREPARE PLANS & INCOMPLETE PLANS."

Unlicensed persons are limited to the design of:

- Single-family dwellings (two-story maximum) of conventional wood- frame construction.

- Garages, barns and other wood frame buildings accessory to a single-family dwelling
- If any portion of the building does not conform to the conventional framing requirements of the 2001 California Building Code then the plans are required to be designed by a California licensed Architect, Civil Engineer or Structural Engineer
- When plans are incomplete or unclear the Building Official will require that the plans be prepared by a California licensed Architect, Civil Engineer or Structural Engineer
- Plans prepared by a licensed design professional must be signed upon submittal to the Building Division. Per State law, all licensed individuals must also stamp all submittal documents. If the documents do not contain a proper stamp, a Statement of Licensure is required. It must be signed and state that the person who has prepared the plans and specifications is licensed in California to prepare plans and specifications
- When plans are prepared by a licensed professional they must be stamped and **wet signed** prior to issuance of the permit

C. Title Sheet

For smaller projects, the data found on the title sheet may be incorporated into the Plot Plan.

The title sheet shall contain the following information:

- Site address
- Name, title, address and phone number of responsible parties (Owner, Architect, etc.)
- Table of Contents
- Schedules of materials, notations, symbol legends, abbreviations
- Project data
 - ? Building use and height
 - ? Area of each use
 - ? Occupancy Group
 - ? Type of construction
- List of all current editions of codes that apply to the proposed construction. (The 2001 CBC, 2001 CPC, 2001 CMC, 2001 CEC, and 2001 CFC are current at this time)

If existing buildings are to be demolished, a summary of those building uses and areas should be provided.

If not included with the structural plans, a summary of special inspection requirements per the California Building Code and the Soils Report must be shown.

If not included in the Plot Plan, a Vicinity Map must be shown. State law requires that the following statement be included on the plans:

"These plans and all work shall comply with the California Building Standards Code found in State of California Title 24 CCR as amended and adopted by the City of Chula Vista."

D. Plot Plan and Vicinity Map

This plan shows the general layout of the lot and must include the following information.

1. Property lines and dimensions.
2. Adjacent streets, proposed and or existing curb cuts, sidewalks, and alleys; curb to property line distance or center line of street to property line distance.
3. Location and dimension of existing and proposed buildings, structures, parking and landscaping areas; identification of the use of all existing and proposed structures, including the number of stories.

4. Distances from the street property line to the nearest building or structure; distances from exterior building walls to the nearest adjacent property line or building.
5. All architectural projections including stairs, balconies and eave overhangs.
6. Location of all utility lines and meters.
7. Show all accessories, structures and site development items (retaining walls, stairs and driveways).

For more information, refer to Form 4595, "How to Prepare a Residential Plot Plan."

E. Grading Plan

Grading plans and a grading permit are required when there will be 250 or more cubic yards of earth moved or when there will be a cut or fill of 3 feet or more in depth. Plans for a single-family dwelling must be submitted for plan check and a separate grading permit application must be completed in order to obtain a grading permit through the Engineering Department.

For more grading permit information, call City of Chula Vista Engineering Department at (619) 691-5021.

F. Foundation Plan

Provide dimensions and details of foundations including continuous footings, grade beams, and pier footings. Show footing dimensions, thickness of concrete slabs and reinforcing steel.

The foundation plan shall show the following:

- Locations and sizes of pier footings, grade beams, and continuous footings
- All footing dimensions, slab dimensions, and all reinforcing steel sizes and clearances
- Type, size and location of all hardware; foundation bolts, straps, holdowns (and their anchor bolts when required), post bases, etc.
- For raised wood-framed floors, show size and spacing of all girders and floor joists
- Access to under floor areas and ventilation requirements
- The entire building perimeter must be installed on a continuous footing. A building solely supported on a post and pier footing system must have a lateral bracing system designed by a licensed design professional
- Show all recommendations from soils and/or compaction reports

For foundation specifications refer to Form 4592, "Minimum Construction Specifications."

G. Framing Plan, Structural Plans & Details

1. Show the material, size, and location of headers, beams, planks, girders, floor joists and/or trusses. Show reinforcing steel for pre-stressed and conventionally reinforced concrete members.
2. Provide dimensions. Clarify the direction and span length of all members.
3. Show location, spacing, size and type of posts or columns.
4. All exterior walls **and** bearing walls immediately below the level of the framing (i.e. for the second floor framing plan show the first floor walls below).
5. All openings in the walls shown to scale with the size of the header or beam over the opening clearly specified.
6. All cross sections and details clearly cross-referenced with **both** the detail or section identification symbol (numerical or

alphabetical) and the page number on which the detail can be found.

7. Thickness, grade, panel identification index and nailing schedule for all roof and floor sheathing.
8. Location, width and type of Braced Wall Panels (Shear panels)
9. Shear transfer details.
10. Structural material specifications. (Specifications are statements of the quality of materials and workmanship while plans are diagrams showing construction details).
11. Post-tensioned plans must "stand on their own" as the foundation plan for the project.

Refer to Form 4602, "Span Tables: Roof & Floor Framing" for minimum rafter and joist sizes.

H. Floor Plan

Provide a complete floor plan for every floor. Include the following information:

1. Exterior and interior dimensions.
2. Use of all rooms.
3. Size and type of all windows and doors. Size of supporting headers above.
4. Plumbing fixture and locations.
5. Location of heating and air-conditioning equipment.
6. All interior finishes.
7. Location of new and existing smoke detectors.
8. Emergency egress windows and doors.
9. Fire separation at garage.

I. Cross Section Views

The cross section views should include the following information:

1. Interior and exterior finishes.
2. Size, spacing and type of materials used in wall, ceiling and roof construction.
3. Insulation type and location.
4. Cross references to connection details.
5. References to Plans.
6. Show the ceiling heights.
7. Framing plans are also required.

See Form 4603, "Typical Residential Single-Story Framing Section" for additional information.

J. Roof Plan

The roof plan should include the following information:

1. Roof pitch and provisions for drainage.
2. Any special framing at roof area.
3. Complete roofing specifications. (ICBO Evaluation # maybe required)
4. Show underlayment.

See Form 4592, "Minimum Construction Specifications" for information on roof specifications and nailing schedules.

K. Elevation Views

This is a drawing or view of each new exterior wall. Include the following information:

1. Doors, windows and other openings.
2. Vertical dimensions.
3. Exterior finishes for the walls and roof.
4. Preexisting and finished grades with building height dimensioned.

L. Details:

1. General: Stairs, handrail elevation changes, roof flashing, waterproofing and fireproofing.
2. Structural - shear transfer, wood to concrete or masonry, post to beam and non-bearing wall.

M. Lateral Bracing Provisions

Either the framing plans, foundation plans or floor plans must show the location of shear panels or other lateral bracing provisions. See Form 4605, "Allowable Shear for Wood Stud Walls" for specifications and nailing requirements for shear panels.

N. Structural Calculations

Structural calculations are usually required when using non-conventional construction as defined in the California Building Code. Structural calculations must have the signature and stamp of the licensed engineer or architect who performed the calculations.

O. Truss Calculations

If roof plans include prefabricated trusses, two copies of engineered truss drawings must accompany plans, stamped by a licensed engineer. The truss drawings number must be cross-referenced on the roof framing plans.

P. Soils Report

Due to the presence of expansive soil throughout the City of Chula Vista, a soil investigation report acceptable to the Building Official shall be submitted for all projects (Section 1803, 1998 California Building Code.)

Waiver of this requirement is at the discretion of the Building Official, and will be considered for one and two story additions to existing residential single family/duplex structures only. See Form 4597 "Request to Waive Soils Investigation Report."

Q. Electrical, Mechanical and Plumbing Plans

Mechanical and plumbing plans need only include:

1. Type and location of each plumbing fixture.
2. Type, output and location of each air conditioning and heating unit.
3. Size and location of all windows (including opening size for ventilation) and all doors.
4. Location and output capacity of mechanical ventilation equipment.
5. Plumbing fixture locations. Include location of dryer vents and water heater relief valves and raised platforms (if required).
6. Provisions for meeting the low-flow requirements of Water Utilities per Health and Safety Code Section 17921.3(b).

The inspector at the construction site checks the electrical wiring. All smoke detectors, exhaust fans, HVAC equipment, and outlets must be

shown on the floor plan for residential **services of 200 amps or less**. A circuit card (available at our counter) must be completed prior to framing inspection.

All residential projects with an electrical **service over 200 amps** require complete electrical plans and load calculations as follows:

ELECTRICAL PLAN

- Label and show the location of all equipment, electrical panels, and required GFCI receptacles.

ELECTRICAL LOAD CALCULATIONS AND PANEL SCHEDULES

- Show electrical load calculations to justify the size and type of equipment and conductors to be installed
- Show panel-rated capacity, AIC rating, voltage, main lugs only or with main protection; and panel locations
- Show total load and per-phase load in watts and amperes

R. Title 24 Documentation for Energy

Show compliance with a component package or submit with Title 24 Energy Calculations. See "Residential Manual for Compliance with the 2001 Energy Efficiency Standards (for Low-Rise Residential Buildings)." This publication is available from the California Energy Commission 1-800-772-3300.

Affix or incorporate Certificate of Compliance (CF-1R) and Mandatory Measures Checklist (MF-1R) to be part of the plans.

S. Special Inspection and Structural Observation

When plans require special inspection and structural observation, these requirements must be clearly shown on the plans and meet the intent of Sections 106.3.5, 1701, and 1702 of the 2001 California Building Code.

The plans must contain a listing of the work requiring special inspection and provide the following information:

- The type of inspections required (i.e., concrete, post-tensioning high-strength bolting, epoxy bolts, shotcrete, etc.)
- A description of the work requiring special inspection
- The location on the structure of the elements requiring special inspection
- The sheet numbers of plans and page numbers of specifications where information required to perform those inspections may be found
- Allowable design stresses of construction materials and other pertinent information

A completed Form 4606 "Special Inspection Program" to be incorporated and made a permanent part of the plans.

Sample Minimum Standards Checklist for SINGLE FAMILY RESIDENCES AND DUPLEXES

PLAN REQUIREMENTS		NEW CONSTRUCTION ITEM REQUIRED	ROOM ADDITION ITEM REQUIRED	ITEM ON YOUR PLAN
Architectural and Structural	Application/Worksheet	Y	Y	
	Engineer's or Architect's Signature	P	P	
	Title Sheet	Y	P	
	Plot plan/Site plan	Y	Y	
	Vicinity Plan	P	P	
	Grading Plan	Y	P	
	Foundation Plan	Y	Y	
	Framing Plan	Y	Y	
	Floor Plan	Y	Y	
	Cross Section	Y	Y	
	Elevation	Y	Y	
	Roof Plan	Y	Y	
	Details	Y	Y	
	Structural Calculations (2 COPIES)	P	P	
	Truss Calculations (2 COPIES)	P	P	
	Soils Report (2 COPIES)	Y	P	
Plumbing and Mechanical	Electrical, Mechanical and Plumbing	Y	Y	
	Plans (Equipment location)	Y	Y	
	Energy Title 24 Documentation	Y	Y	
	Special Inspector	P	P	

- v FIRST SUBMITTAL MINIMUM FOUR SETS OF PLANS
- v SUBSEQUENT SUBMITTAL MINIMUM 2 SETS



LEGEND	
Y	REQUIRED
P	POSSIBLE REQUIREMENT
N	NOT REQUIRED

