



RESIDENTIAL ADDITIONS PLAN SUBMITTAL REQUIREMENTS AND EXAMPLE PLANS

SUBMIT:

- One (1) properly completed permit application.
- Four (4) sets of building plans (1/4 inch – 1 inch scale, 18"X24" size min. 36"X48" size max.).
- Two (2) sets of Structural Calculations.
- Two (2) sets of Energy Compliance Forms.
- Two (2) sets of Truss Calculations.
- Two (2) sets of Geotechnical/Soils Report (Additions over 500 sq. ft. and on soils problematic zones).
- Flood Zone Certificate (if in a flood zone area)

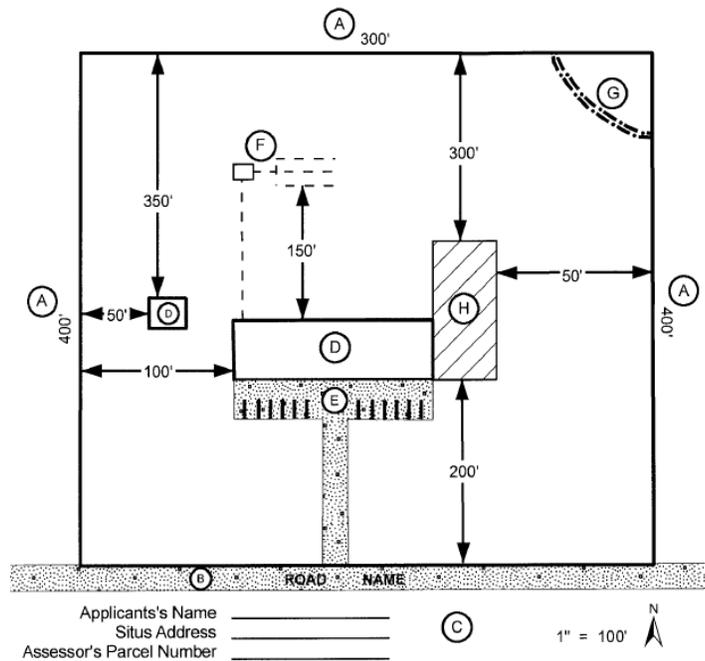
AGENCY CLEARANCES:

- Be sure that your proposed project is approved by the Planning Division (650) 853-3189
- The following agencies will be reviewing as part of the Building submittal: Menlo Park Fire District (650) 688-8425, Sanitary District (EPA or West Bay), Sequoia High School District (650) 369-1411 ext. 22290, and other agencies depending on project scope.

PLOT PLAN INFORMATION:

- Parcel shape and dimensions.
- Adjacent streets/roads.
- Location and uses of existing building(s) and proposed addition.
- Distances from proposed addition to existing buildings and property lines.
- North arrow and Scale.
- Location of all underground or overhead utilities and size of sewer, and easements.
- Project data table showing new & existing use, occupancy, area, stories, height, sprinklers, etc.
- Provide a note on site plan: ***"All construction and demolition debris shall be contained on-site (not in the public right-of-way) in constantly covered bins which include adequate service. At a minimum, 65% of the project waste stream shall be recycled; prior to final project approval, a receipt shall be provided to the building inspector to verify 65% recycling has occurred. Self hauling is prohibited in the City of East Palo Alto; and authorized hauler shall be utilized."***

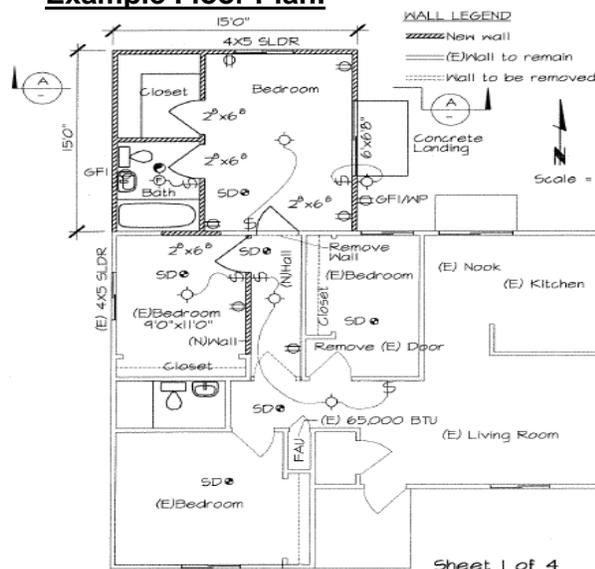
Example Plot Plan



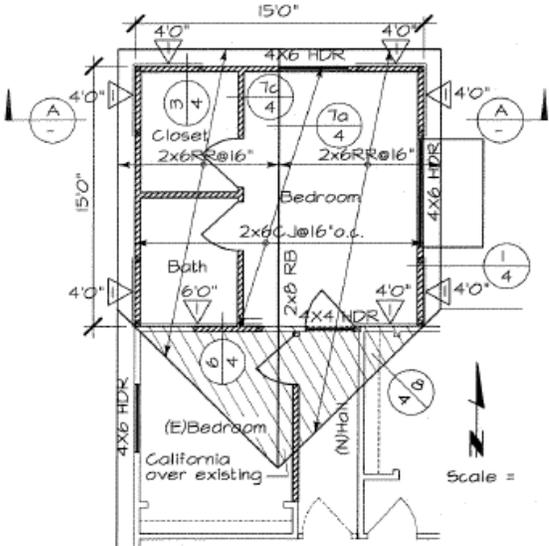
FLOOR PLAN INFORMATION:

- Dimensions of new exterior walls, and new interior partitions.
- Complete floor plan of existing conditions
- Dimensions of existing adjoining room and window sizes.
- Locations and sizes of new windows, doors, stairways and plumbing fixtures
- Describe use of all rooms.
- Show all new and existing smoke/carbon monoxide detectors. Refer to EPA's C.O. and Smoke Detector Handout for additional information.
- Show all new electrical work proposed.
- F.A.U, wall heaters, fire places, etc...
- Exterior door landings (dimensioned)

Example Floor Plan:



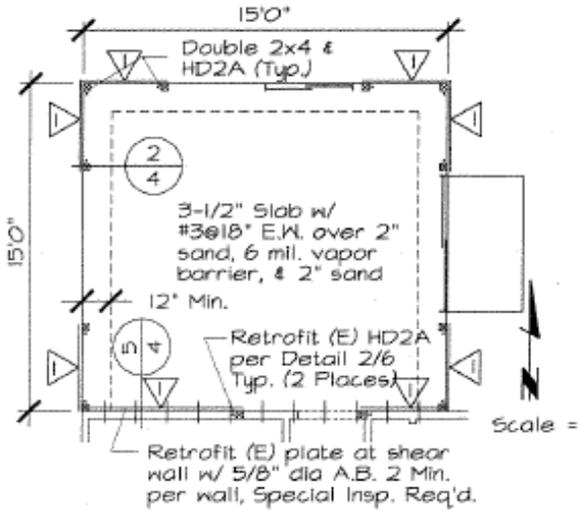
Example Framing Plan



FRAMING PLAN INFORMATION:

- Types of material, location, sizes, spans, & spacing of all new structural members (ridge, sheathing, roof and ceiling joist, post, etc...)
- Structural connections between addition and adjoining rooms.
- Brace wall locations, lengths & brace wall schedule.
- Continuous boundary element, blocking, strapping, etc...

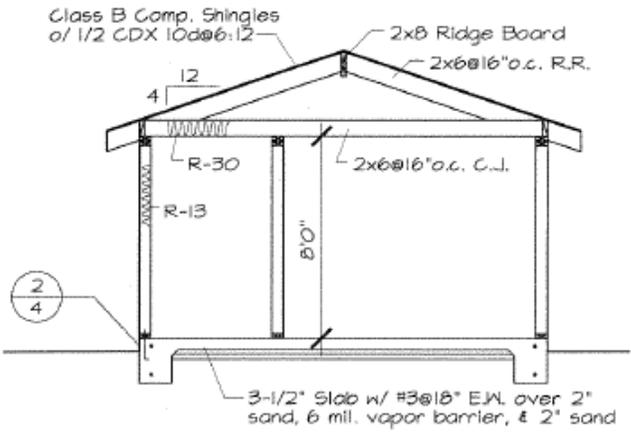
Example Foundation Plan



FOUNDATION PLAN INFORMATION:

- Slab thickness, reinforcing, and underlayment
- Dimensions and width of continuous footing.
- location of new piers and crawl space opening
- Sizes, spans & spacing of joist, girders, and size of sheathing (for raised floor only).
- Connection of existing to new foundation.
- Location of any embeds including post bases, hold downs, anchor bolts.

Example Building Section



BUILDING SECTION INFORMATION:

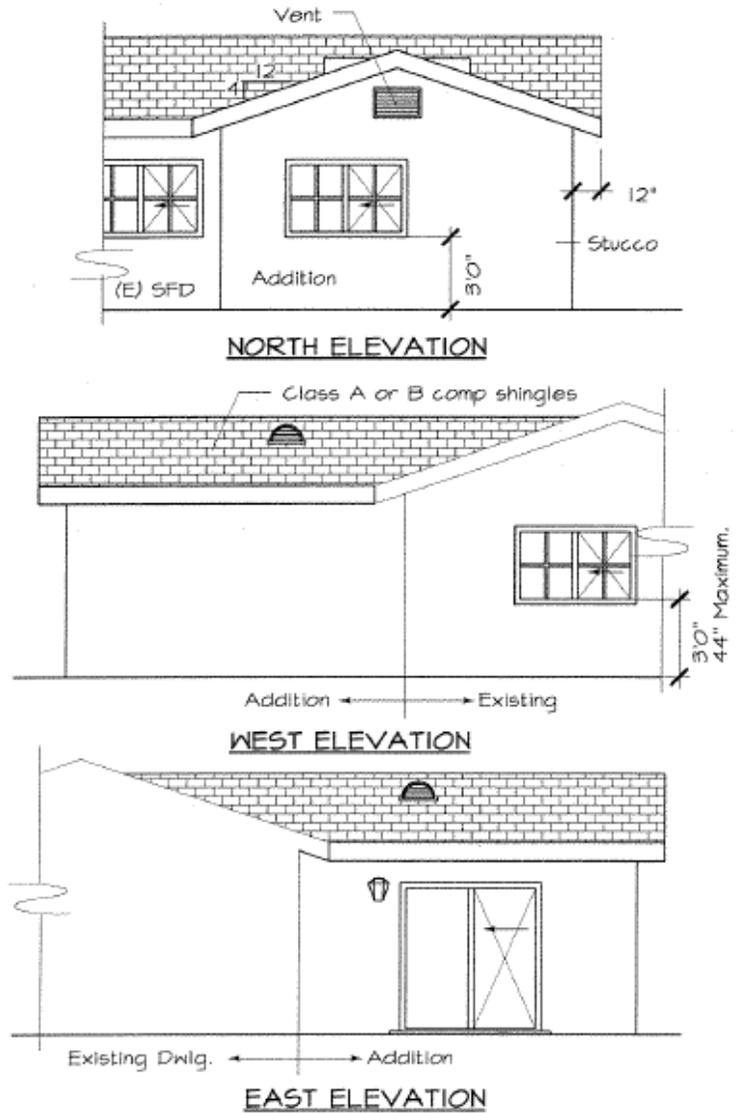
- Ceiling height of addition.
- Insulation materials for wall, floor, & attic interior and exterior finish.
- Sizes, spans, & spacing of new structural members for roof/ceiling, floor/wall & foundation assemblies.

FRAMING SECTION A-A

BUILDING ELEVATIONS INFORMATION:

- Exterior views of addition.
- Roofing material and pitch.
- Location of new windows, doors and attic ventilation opening.
- Exterior finish materials.
- Weep screed (stucco applications).
- Egress windows (bedroom) requirements dimensioned.
- Tempered glass requirements.
- Height dimensions from grade to roof ridge.

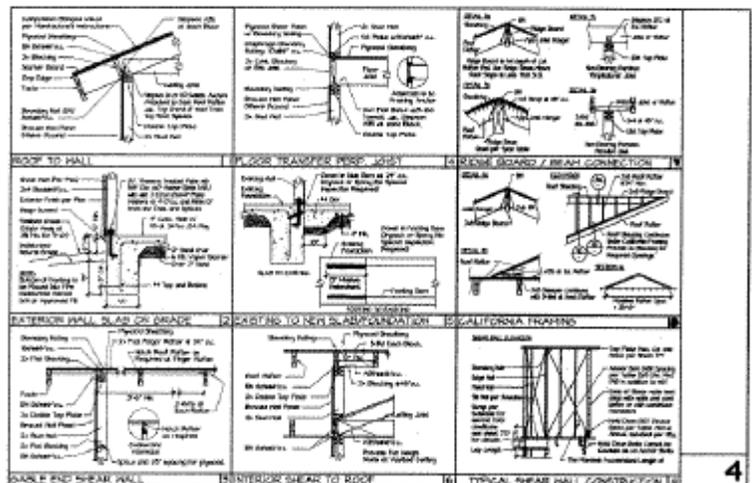
Example Elevations



CONSTRUCTION DETAILS INFORMATION:

- Details showing connection of new to existing
- Foundation construction, anchor bolt (type/sizes), reinforcement (size/types) etc...
- Typical shear wall and shear transfer details, foundation, top plate, floor, roof, new to existing, interior shear wall, shear wall to roof sheathing
- Special detail such as stair framing, deck construction, ridge beam, post connections, hold down anchors, weep screed etc...
- Construction Best Management Practice details. To access the standard plan: <http://www.flowstobay.org/construction>

Example Construction Details



CONSTRUCTION NOTES:

- General code information for fire life safety
- Structural specifications for the grade of building materials – timber, steel, concrete, and masonry
- Non-structural component, specification such as piping to be used, or finishes to be applied, mechanical systems, etc...
- List any special inspections or required structural observation. Submit the City's Statement of Special Inspections Form available on the website.
- Imprint CRC Table 2304.10.1 Fastening Schedule

ENERGY CONSERVATION:

- Energy calculations are not required for non-habitable buildings (garage, storage, etc...), nor for buildings with no heating and air conditioning systems (workshop, recreation room with no insulation.. etc...). Compliance with mandatory measures is still required for lighting.
- Energy calculations are required for habitable buildings (accessory living quarters, recreation room with insulation ... etc...).
- Title 24 energy compliance documents (may be imprinted on plans, or submitted in an 8-1/2X11).

STRUCTURAL CALCULATIONS:

- Plans may be prepared by unlicensed individuals when the proposed design complies with conventional construction requirements of the California Residential Code.
- When structural calculations are required, they shall be prepared by a licensed design professional (engineer or architect). Both calculations and plans shall be stamped and signed by the licensed design professional.

FLOOD HAZARD SPECIFIC PLAN AREAS:

- The building is within the FEMA Designated 100-year flood zone. Provide a Flood Elevation Certificate based on the construction drawings showing the **finish floor a minimum 18 inches above the Base Flood Elevations (BFE)** completed by a licensed surveyor, or engineer which is required prior to plan check.
- If the building is within the FEMA Designated 100-year flood zone and the improvements exceed 50% of the current market value of the existing structure (including all improvements within the last three years) then the entire structure must be raised above the BFE.
- Note on plans that an approved Flood Elevation Certificate based on the actual elevation of the building, by a licensed surveyor, or engineer is required prior to pouring the slab or prior to pouring a stem wall. In addition a final flood elevation certificate is required prior to final inspection that includes utilities and flow through vents.
- Base Flood Elevation (BFE) must be shown on the site plan and building plans; on the elevation views include Base Flood Elevation and finish floor must be one foot above the Base Flood Elevation (BFE).
- All materials within 18 inches above and below from the Base Flood Elevation (BFE) must be approved (FEMA Technical Bulletin # 3-93), specified and clearly shown on the plans, Garage/under-floor. Pressure treated solid wood, treated or marine grade plywood, concrete or steel etc.
- All heating, ventilation, plumbing and air conditioning equipment must be designed and located so as to prevent water from entering or accumulating within the components during conditions of flooding, without a special design authorized by the Building Department, mechanical equipment and plumbing fixtures shall be located **18 inches above the Base Flood Elevation (BFE)**.
- All electrical equipment must be located 18 inches above the Base Flood Elevation (BFE). "***Electrical equipment***" includes load centers, sub-panels, circuit breakers, and ground fault circuit interrupting devices, motors, etc. Electrical branch circuits may extend below the Base Flood Elevation (BFE) only if protected by a ground fault circuit interrupting device located above the BFE.
- Venting requirements: all fully enclosed areas below the lowest floor that is subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood water. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria: Provide complete structural plans, details and calculations demonstrating that the proposed structure is adequate to withstand the flood depths, pressures, velocities, impact, uplift forces, and other factors associated with floods.
- The property is located in a 100 year flood hazard area; a Conditional Letter of Map Revision for Fill (CLOMR-F) is optional and has to be completed and reviewed by FEMA. If the CLOMR-F is approved, this is the advantage of the homeowner due to the fact that the map would be revised and the building would be taken out of the flood hazard area.