# Carson City Building Division

*Kevin Gattis, Chief Building Official*

## *NEW CONSTRUCTION AND ADDITIONS*
### *COMMERCIAL PLAN SUBMITTAL REQUIREMENTS*

**General Requirements:**

- Plans shall be on **11″ x 17″ or larger** paper sizes, and all design sheets within the plan set should be the same size. The plans shall be designed to comply with applicable minimum approved scale. In addition, the plan cover sheet shall allow enough space on the cover sheet to allow staff to insert the necessary approvals, which translate to a blank area roughly 4” x 8 ½”.

- Plans **shall be photocopies, or original blue or black ink drawings**. The use of colored ink, other than blue or black, or the use of colored ink beyond that which is used for licensing seals and/or original signatures on plan sets, would constitute grounds for an automatic rejection of the application. Plans with original pencil drawings or notes, will also be rejected.

  Note: When allowed by the Plans Examiner, the designer may make handwritten corrections to plan submittals, using an ink color other than red. Only Carson City Development Services staff may use red ink for comments on plans.

- Plans shall be fully dimensioned, and drawn to a minimum 1/4″-1′-0″ scale or greater. Interior elevations or details shall be drawn to a minimum 1/2″-1′-0″ or greater scale. The scale shall be indicated on each page, and separate detail or elevation.

- Commercial plan submittal shall include the following:

  - Provide **two (02) copies** of the following:

    - **Truss calculations**, prepared by a Nevada licensed engineer and bearing an original seal and signature. Include a letter from the project structural designer (Architect or Engineer) acknowledging review and approval of the truss design, with the letter bearing an original licensing seal and signature.

    - **Project “Spec” Book** – required for projects that require Health Dept. approval

    - **Technical Drainage Study**

    - **Structural Calculations**

    - Complete ***COMcheck***, separate and independent from the plans; signed and sealed by the applicable designer.

  - Provide **three (03) copies** of the **Geotechnical Report** with seismic analysis. The Geotechnical Report for the proposed location shall include a complete assessment of the potential consequences of any <u>liquefaction</u> and <u>soil strength loss</u>, including <u>estimation of differential settlement</u>, <u>lateral movement or reduction in foundation soil-bearing capacity</u>, <u>and shall address mitigation measures</u>. (*’12 IBC 1803*)

  - Two (02) COMPLETE plan sets, sealed in compliance with the applicable Nevada Administrative Code (NAC) section.

  - Two (02) PARTIAL plan sets, identified for “Planning” and “Fire Prevention” plan review. These partial plan sets shall include the following minimum sheets: <u>Site Plan</u>, <u>Civil Plan(s)</u>, <u>Utility Plan</u>, <u>Landscaping Plan(s)</u>, <u>Exterior Lighting Plan(s)</u> & <u>Architectural Plans</u>.

- Two (02) PARTIAL plan sets, identified for "Engineering" plan review. Plan sheets submitted for Engineering Division review shall be on 24″x 36″ minimum paper size. These partial plan sets shall include the following minimum information: Civil plans with Landscaping plans and elevations.

- One (01) PARTIAL plan sets, identified for "Health Department" plan review. These partial plan sets shall include the following minimum sheets: Site Plan, Civil Plan(s), Utility Plan, Architectural Plans, Plumbing & Mechanical Plans

**NOTE:** In lieu of complete and partial plan submittal sets, the applicant MAY submit five (05) COMPLETE plan sets - six (06) COMPLETE sets for projects requiring Health Dept. approval

- **Carson City Health and Human Services (CCHHS)** will need to review plans for the following commercial projects:

  - Food and Drink Establishments
  - Commercial Pools and Spas
  - Hotels
  - Motels
  - Recreational Vehicle Parks
  - Mobile Home Parks
  - Child Cares facilities
  - Invasive Body Decoration
  - Public and Private Schools

  See CCHHS submittal packets for any additional requirements required for submittal of plans. These packets are available at the Carson City Building Department or our office.

- Plans shall be prepared by a Nevada licensed Registered Design Professional (Architect or Engineer), and shall bear an original licensing seal ("wet stamp"), in compliance with Nevada Administrative Code (NAC)

- A **General Contractor may assume architectural design responsibility**, when the following conditions are met:

  - When submitting plan sheets for review, it is the responsibility of the designer to provide a complete plan set that demonstrates a working knowledge of commercial design and all applicable construction codes. **Plan submittals that fail to show a minimum level of design proficiency will be rejected**, and the applicant will be instructed to seek the guidance of a licensed Nevada Registered Design Professional.

  - **Architectural plans prepared by a Nevada licensed General Contractor** shall have the following information on the printed in a block labeled "Designer" on the Cover Sheet of the plan set:

    - Business Name
    - Business Address
    - Bid Limit
    - License Classification Type
    - License Number

        - License Expiration Date
        - Name of Qualified Employee, with an original signature

- Sub-contractors (Electrical, Mechanical, Plumbing, Fire Suppression, etc.) when acting in the capacity of a "Design / Builder" shall assume responsibility for their portion of the project. Each individual plan sheet shall have the following information within a block labeled "Designer":
    - Business Name
    - Business Address
    - Bid Limit
    - License Classification Type
    - License Number
    - License Expiration Date
    - Name of Qualified Employee, with an original signature
- Provide a **Title Block** on each sheet of the plans with the following minimum information: Project Address with unit or suite designation, Assessor's Parcel Number (APN), and name of the commercial subdivision or plaza identified.

**Minimum Plan Submittal Requirements (***As dictated by the scope of the project***):**

- **Cover Sheet –**
    - **Indicate the design professionals** involved with the project, with address and contact number
    - **Indicate all contractors** involved with the project, with address, and project manager's name and contact numbers
    - **Design Criteria –**
        - **Construction Codes** applicable to project
        - **Building Construction Type**
        - Indicate if the building is equipped with an **Automatic Fire Extinguishing System (AFES)**
        - Indicate if the building is equipped with an approved **Fire Alarm System**, in conjunction with or independent of an Automatic Fire Extinguishing System (AFES)
        - **Total square footage** of proposed construction – For additions; provide a square footage breakdown of existing area versus proposed area.
        - **Occupancy Type(s)**
        - **Architectural Design Analysis** - The Architectural Design Analysis shall include a complete break down of the allowable area and height versus the actual area and height. The analysis shall indicate separated or non-separated uses for mixed occupancies, with a complete itemized breakdown of the assigned Occupancy types (uses) within the various areas of the structure.

          NOTE: If the registered design professional chooses to design the structure with "separated uses" (Occupancy separations), the uses shall be clearly shown on the plans,

and the plans shall clearly indicate the location and type of the rated separation between uses.

- Total **Occupant Load** (If applicable, broken down between the existing portion of the building and the addition)
- Indicate the project **Roof Snow Load**, **with site elevation**.
- Indicate the **Seismic** designation – as dictated by site analysis from geotechnical engineer.
- Indicate the **Wind Load**

- **Civil Plans –**
  - Utility plan
  - Drainage Plan
  - Landscaping Plan
- **Architectural Site Plan**
- **Accessible Route / Exit Discharge Plan –** Provide a separate plan sheet, independent of the other design sheets, which clearly shows the *Accessible Route / Exit Discharge Plan*. The *Accessible Route / Exit Discharge Plan* shall have the following minimum information from the accessible entrance of the facility to the public right of way. (*'12 IBC Section 1007, 1104.1 & ICC/ANSI A117.1-2009 Chapter 4 & 5*):
  - Indicate accessible route surface
  - Indicate accessible route slope
  - Indicate accessible route width
  - Indicate accessible route turn radius
  - Indicate all accessible ramps, with a dimensioned cross section details indicating slope & guardrails (where applicable)
  - Indicate the location and type of the detectable warning surface at curb ramps, island or cut-through medians (*ICC/ANSI A117.1-2009 Sections 406.13, 406.14 & 705*)
  - Indicate all accessible parking, with signage
  - Indicate location of all building and site accessible signage, with an elevation view to verify compliance with required text, height, etc.

  NOTE: The *Accessible Route / Exit Discharge Plan* shall clearly show the accessible route from the accessible entrance of the facility to the accessible parking, accessible passenger load zones, public transportation stops, public streets and sidewalks – as applicable to the site. (*'12 IBC 1007.2, & 1104.1*)

- **Egress Floor Plan –** Provide as a part of the plan set, independent of the Architectural Floor Plan, an *Egress Floor Plan*, with the following minimum information (*'12 IBC 107.2.3* ):
  - Label the use of each space or area. Ex.: "Office #2", "Lobby", "Conference Room", etc.
  - Provide the square footage for the individual space or area
  - Provide the calculated occupant load for each space or area

- Provide total occupant load break down, and methodology used to determine occupant load. (*'12 IBC 1004.1*)

- Indicate all components that constitute the "Exit Access" (Exit Enclosures, Exit Passageways, Horizontal Exits, etc.) (If applicable)

- Indicate travel distances "exit access" or "exit discharge".

NOTE: For additions to an existing building, where the new construction uses a portion of the existing structure as a part of the Egress system, Building Division staff may require a whole building Egress Floor Plan. Discuss this with Building Division staff prior to submitting the plans for review.

- **Architectural Floor Plan –**

  - Fully dimensioned floor plan

  - Provide door schedule, or indicate all relevant information on floor plan

  - Provide window schedule, or indicate all relevant information on floor plan

  - Location of all plumbing fixtures

  - Location of all mechanical equipment

- **Reflected Ceiling Plan –** When applicable

  - Complete layout of suspended ceiling

  - Indicate the suspended ceiling manufacturer and model name or number

  - Indicate International Code Council Evaluation Services Report number (ICC ESR #), and provide two (02) copies of the ICC ESR's for review and approval.

  - Include all of the necessary details and drawings to field construct and inspect the assembly

- **Architectural Elevations –**

  - Show all four sides of the structure (This may not be necessary for additions)

  - Dimension the overall vertical height, dimensioned from finish grade to the ridge (If applicable)

  - Dimension wall heights from bottom of mudsill/sole plate to top of top plate for each floor. (If applicable)

  - Indicate roof pitch slopes (If applicable)

  - Horizontally dimension roof overhang lengths

  - Specify all exterior finishes (siding/stucco/brick) and any special features. Indicate the <u>ICC Evaluation Services Report number (ICC ESR #</u>) for the specified system within the plans, and provide a minimum of two (02) copies of the applicable ICC ESR for review.

- **Building Sections –**

  - Show as many building sections as necessary to clearly show all framing details. A minimum of two (02) sections are required, with section views that bisect the structure in two (02) opposite directions. Provide complete sections (half sections are unacceptable).

- Buildings finished with a “stucco” type exterior plaster, include separate dimensioned design details showing the separation between the weep screed and finished grade, and between the weep screed and a hard surface (concrete, pavers, etc.)

- **Electrical Plan(s) –**
  - Electrical Floor Plan with the location of all receptacle outlets, light fixtures, switches, and electrical panels
  - Indicate wiring method used. Ex.: “Type MC Cable”, “EMT”, “FMC”, etc.
  - Panel Schedule, with following minimum information:
    - Circuit designation (number)
    - Circuit identification (“Break Room”, “Office #1, etc.)
    - Overcurrent Protection Device type (Ex.: “Circuit Breaker”, “Fuse”, etc)
    - Size in Amperes
    - Feeder / branch circuit conductor size and type (Ex.: “#12cu THHN”, “#00al THW”, etc.)
    - Panel voltage and phasing
  - Electrical load calculations, prepared in compliance NEC Article 220. OR a complete connected load breakdown, preformed circuit by circuit, with load computed in Volt-Amperes and then converted to Amperes.
  - Overhead lighting / reflected ceiling plan
  - Lighting compliance certification using *COMcheck*, to verify that the tenant space complies with the energy conservation requirements of the 2009 International Energy Conservation Code (*’09 IECC*)

    NOTE: This is applicable to all tenant improvements were new light fixtures are installed as part of the remodel.

    *COMcheck* is an energy conservation compliance software package, provided at no charge from the US Department of Energy (US DOE), and is available as a download at **www.energycodes.gov**.

- **Mechanical Plan(s) –**
  - **Mechanical Floor Plan**
    - Indicate the location of all return / supply registers
    - Indicate the location of all smoke and fire dampers
    - Indicate the location of the restroom exhaust fan.
    - Mechanical equipment, with size (Btu, tonnage, amperage, etc)
    - Combustion air calculations
    - Method of supplying combustion air
  - Separate **Duct Layout Plan** – A scaled duct layout indicating duct type and sizes (Ex.: “4″ round rigid”, “6″ Flex Duct Connector”, etc.), superimposed over a Mechanical Floor Plan.

- The "Mechanical Equipment" and "Building Envelope" compliance certification using *COMcheck*, to verify that the tenant space complies with the energy conservation requirements of the 2009 International Energy Conservation Code (*'09 IECC*)

  NOTE: This applicable to all complete building plans. Shell only buildings need only to provide the "Building Envelope" portion of the compliance certification. With the "Mechanical Equipment" portion of *COMcheck* being required as each tenant space is finished.

  *COMcheck* is an energy conservation compliance software package, provided at no charge from the US Department of Energy (US DOE), and is available as a download at **www.energycodes.gov**.

- **Plumbing Plan(s) –**

  - **Plumbing Floor Plan**, with all fixtures types and locations clearly noted

  - **Drain, Waste & Vent (DWV) Isometric** – with sizes and materials, drawn to scale or with developed lengths indicated

  - **Water Supply Isometric** – with sizes and materials, drawn to scale or with developed lengths indicated

  - **Gas Piping One-Line Diagram** – The gas piping diagram must include the Btu rating and CFH (Cubic Feet per Hour) of each appliance, the developed length of each pipe branch, and the size and material of each pipe branch. Furthermore, <u>provide calculations that clearly indicate the methodology used to size the gas piping system</u>.

- **Structural Plan(s) & Structural Detail Sheet(s) –** Provide all plan sheets and details necessary to construct the proposed structure. This includes Structural Calculations.

**Submittal Requirements:**

- Completed Carson City Building Division permit application

- Five (05) plan sets (six (06) plan sets when Health Department review is required)

- The installation of exterior signage requires a separate building permit submittal, and is not to be combined with the Tenant Improvement application.

**Policies & Procedures:**

- Plan Review time frames differ depending on the complexity of the project, please refrain from contacting the assigned Plans Examiner until the project has been reviewed. At time of submittal, the Permit Center staff will make the applicant aware of the typical plan review timeframes for the submitted project.

- Plan submittals that are reviewed and found deficient, the contractor will receive a detailed letter requesting that all deficiencies are to be addressed. It is the responsibility of the contractor, or the designated contact individual to coordinate the correction of all plan deficiencies. The designated contact individual will be notified to remove previously submitted plan sets for correction.

- Once all deficiency items have been addressed the designated contact individual for the project may resubmit corrected plan sets. However, please be aware that the Carson City Building Division will not accept incomplete or piecemeal resubmittals.

- Once plans are approved, the contractor of record will be notified.

# COMMERCIAL SUBMITTAL CHECKLIST

- ☐ Complete Application
- ☐ Water/Sewer Application
- ☐ Water Usage Form
- ☐ Required Number of Plans (maximum 24"x36" unless otherwise approved)

**Cover Sheet**:

- ☐ Project Identification
- ☐ Project Address and Vicinity map. (For Tenant space, include key map.)
- ☐ List design criteria and Zoning District.
- ☐ List owner, developers, all design professionals, addresses, telephone and fax numbers.

**Site plan / Improvement Plan**

- ☐ North Arrow
- ☐ Scale
- ☐ Legend
- ☐ Indicate all property lines with dimensions and existing corner elevations
- ☐ Parking Analysis, including required and provided parking. Indicate type and amount, i.e. standard, handicap, and compact.
- ☐ Show existing and proposed utilities (include water, sewer, and reclaimed water mains and services.)
- ☐ Show proposed structure location, and any existing buildings or structures on the parcel.
- ☐ Indicate drainage flow (three sets wet stamped & signed drainage calculations) (if applicable)
- ☐ Show all parking dimensions
- ☐ Show setback dimensions from the proposed building to each property line
- ☐ Show existing contours and proposed elevations.

**Building Plans**

- ☐ Foundation
- ☐ Floor Plan (label areas) Show doors and windows - provide schedule of size
- ☐ Framing plans and roof framing plans
- ☐ Exterior elevations of all four views showing roof mechanical equipment with type of visual screening.
- ☐ Building sections and wall sections
- ☐ Mechanical plans and systems
- ☐ Plumbing plans - if sewer required show all sewer lines.
- ☐ Electrical Plans and systems
- ☐ Structural Calculations (**two sets**, wet stamped & signed)
- ☐ Geotechnical report (if applicable) (**three** sets, wet stamped & signed)
- ☐ Specifications (if a food establishment)
- ☐ Energy Calculations (if applicable) (**two** sets)

**Landscaping Plans**

All landscaping plans shall be in compliance with the requirements contained in Development Standards Division 3. Parking requirements shall be in compliance with Development Standards Division 2. Ordinances are available for sale in the Planning and Community Development Department at 108 E. Proctor St. or call (775) 887-2180. An example of the required information includes, but is not limited to:

- ☐ Plans drawn to scale with north arrow shown
- ☐ Owner/Developer name, address, phone number, project location and assessors parcel number
- ☐ Name and authority, such as contractor, landscape architect or engineer to create plans. Stamped if applicable
- ☐ Landscape notes, including details showing compliance with NRS 555 and current ANSI Z60 standards. Include in detail notes: approval of all changes by the Community Development Department is required
- ☐ Irrigation plan with details
- ☐ Maintenance agreement, including detail showing replacement of dead or dying vegetation is required
- ☐ Details of preparation and planting for trees, deciduous and evergreen, as well as shrubs and

mulches

- ☐ Calculation for required and provided landscaping as required at 20% of impervious surface, excluding the building. Provide building(s) size, footprint. Show location of all proposed and existing buildings/trees on site
- ☐ Calculations for required and provided number of trees in each category, such as deciduous (minimum two inch caliper), evergreen (maximum 40% of required trees), parking (one tree each 10 parking spaces), roadway (one tree each 40 linear feet) and remaining area (one tree each 600 square feet)
- ☐ Minimum ten feet width landscaping adjacent to arterial roadways, six feet width adjacent to others.
- ☐ Plant list showing quantities, in legend format, with common and botanical names of each plant including species and genus, with a plant key or identifying symbol
- ☐ Proposed sizes of all trees, plants and shrubs, must be in compliance with minimum size requirements in all categories. Deciduous trees shown with minimum size two inch caliper, evergreen shown minimum height five feet, shrubs minimum five gallon size, perennials minimum one gallon size. Avoid choices which conflict with parking/utility areas at maturity, such as fruit on the ground, thorns, intrusive shape and size of tree, etc.
- ☐ Include location and amount of all non-living materials proposed, such as stone, rock, bark, wood chips, etc.
- ☐ Include in detail of all stone/rock choices: must be washed, screened and be free of debris. Provide detail of landscape fabric, which cannot be plastic.
- ☐ Show size of all planters in parking areas. Minimum size 72 feet.
- ☐ Calculation of minimum number of parking spaces required and provided

It is the responsibility of the Building Technician to complete the above minimum check of your plans prior to accepting the permit application. Unfortunately, your plans cannot be accepted at this time due to the deficiencies that have **NOT** been checked off. All items listed must be on your plans before they can be accepted. No added corrections can be in ink or pencil. Resubmitted plans will be checked each time for completeness.

This is a minimum preliminary check. During review by each department, deficiencies may be noted that delay the issuance of the permit. To better serve you, your plans should be complete. A commercial handout, describing in detail the minimum design standards, is available at the Building Department to assist you in preparing a complete set of construction plans.