



# CLARK COUNTY DEPARTMENT OF BUILDING & FIRE PREVENTION

4701 W. Russell Road • Las Vegas, NV 89118  
(702) 455-3000 • Fax (702) 221-0630

Ronald L. Lynn, Director/Building & Fire Official  
Samuel D. Palmer, P.E., Assistant Director • Girard W. Page, Fire Marshal

## **SUBJECT: TG-703 PERMIT NOW PLAN REVIEW PROGRAM AND CUSTOMER DRIVEN CONSULTANT SERVICES PLAN REVIEW PROGRAM AUDITS**

- 1.0 PURPOSE:** The purpose of this technical guideline is to outline the plan review audit process for projects submitted under the Permit Now and the Customer Driven Consultant Services plan review programs.
- 2.0 SCOPE:** The scope of this technical guideline is to specify the audit selection criteria and audit requirements. Any plan review audits required by other Clark County Departments, including Fire Prevention are not included within the scope of this program.
- 3.0 ABBREVIATIONS & ACRONYMS:**

BAC: Building Administrative Code of Clark County

CCDBFP: Clark County Department of Building and Fire Prevention Bureau

IBC: International Building Code

IRC: International Residential Code

NRS: Nevada Revised Statutes

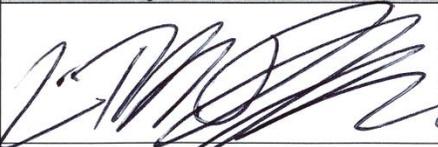
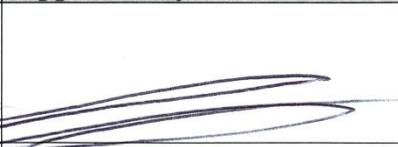
RDP: Registered Design Professional

SF: Square Feet

TG: Technical Guideline

**APPROVED DATE: SEPTEMBER 10, 2014**

**EFFECTIVE DATE: SEPTEMBER 10, 2014**

Written By:	Concurred By:	Approved By:
		
Kevin T. McOsker, P.E., C.B.O. Plans Examination Manager	Samuel D. Palmer, P.E. Assistant Director	Ronald L. Lynn, C.B.O. Director/Building Official

**4.0 DEFINITIONS:** For the purposes of this TG, certain terms, phrases, words and their derivatives shall be construed as specified in this section and the BAC.

**Approved Construction Document:** Construction documents that have been reviewed and accepted for permit by the Building Official pursuant to the BAC.

**Auditor:** Any person designated by the Building Official to perform an audit of these plan review programs.

**Building Official:** The designated Clark County official who is charged with the administration and enforcement of the BAC and the technical guidelines. The term “Building Official” may also mean the employees who are appointed and authorized by the Building Official pursuant to NRS 278.570(2) to assist in the performance of the duties of his position.

**Owner/Tenant:** The owner of the building or property or the tenant who is acting as an agent of the owner.

**Registered Design Professional:** An individual who is registered or licensed to practice their respective design profession as defined by the statutory requirements of the professional registration laws of the state of Nevada.

**Permit Now or Permit Now Professional RDP:** a registered design professional approved by CCBD to submit projects under the Self-Certification Plan Review Program.

**Plan Review Consultant:** A firm listed to provide plan review services on behalf of CCDBFP under the Customer Driven Consultant Services (TG-702)

**5.0 REFERENCES:**

Building Administrative Code of Clark County

International Building Code

International Residential Code

National Electrical Code

Uniform Plumbing Code

Uniform Mechanical Code

International Energy Conservation Code

**6.0 RESPONSIBILITIES:**

**6.1 CCDBFP:**

CCDBFP shall determine which projects require an audit, perform the audits, and

administer document findings.

**6.2 Owner:**

The owner shall ensure that any required changes to the approved construction documents and the construction based upon the audit results are implemented.

**6.3 RDP:**

The RDP shall ensure that the approved construction documents submitted are revised to incorporate any required changes due to the audit findings.

**6.4 Permit Now RDP or Plan Review Consultant:** The Permit Now RDP and/or Plan Review Consultant shall respond to all audit findings.

**7.0 PROCEDURE:**

**7.1 Audit Selection:** The table below outlines the audit selection criteria for projects submitted under the Permit Now and Consultant Driven Plan Review Programs. CCDBFP Plans Examination shall notify the owner when a project has been selected for an audit.

**AUDIT CHART**

<b>Automatic Audits</b>
<ul style="list-style-type: none"><li>• All projects over 10,000 sf</li><li>• All residential standard plans</li></ul>
<b>Selective Audits*</b>
<ul style="list-style-type: none"><li>• A field inspection conducted by CCDBFP determines that the approved construction documents are not in compliance with the Building Code of Clark County.</li><li>• The Building Official may select any project submitted for an audit.</li></ul>
* Audits are not considered random.

**7.2 Audit Timelines:** All audits will be completed within thirty (30) days of permit issuance.

Exception: Selective audits that are the result of a field inspection.

**7.3 Audit Criteria:** CCDBFP shall perform an audit on each plan review discipline included in the selected projects. CCDBFP shall utilize, as a minimum, the audit checklists in Appendix A.

**7.4 Audit Findings:** CCDBFP shall notify the owner and the Permit Now RDP or Plan Review Consultant of the audit findings. The notification will provide a summary of the audit results and will direct either the Permit Now Professional or

the Plan  
Review Consulting Firm to address any code violations found in the audit.

7.4.1 Failure to respond to the audit findings in writing within 14 days after notification will result in the project being placed on hold and no inspections will be allowed to be submitted.

7.4.2 Corrections will be submitted to CCDBFP Plans Examination as a revision to the building permit.

7.4.3 If the audit does not score at least 70% of the possible total audit score the audit is considered a failing audit.

7.4.4 The Permit Now RDP and/or Plan Review Consultant shall pay the hourly fees associated with the resolution of any audit findings. Failure to pay the required administrative audit finding fees shall result in removal from the CCDBFP approved listings.

7.5 **Appeal Process:** If the owner, Permit Now RDP, or Plan Review Consultant disputes the audit findings the following process will be followed.

7.5.1 Schedule a meeting with the Plans Examination Manager to review and discuss the disputed audit finding(s).

7.5.2 The sole administrative recourse for an audit result is contained in 22.02.560 of the BAC.

**8.0 RECORDS:**

All documents associated with the audit program shall be sent to the Records Division.

**9.0 ATTACHMENTS:**

Appendix A: Audit Checklists

**10.0 REVISION HISTORY:**

Title	Revision/Approved Date	Effective Date
TG-703-2014	September 10, 2014	September 10, 2014

APPENDIX A

**AUDIT CHECKLISTS BY DISCIPLINE**  
**Architectural Audit Checklist**

**PAC #:** \_\_\_\_\_ **Project Name:** \_\_\_\_\_

**Permit Now RDP or Plan Review Consultant:** \_\_\_\_\_

<b>Audit Item</b>	<b>Points</b>	<b>Y</b>	<b>N</b>	<b>NA</b>	<b>Comments</b>
Verify approved personnel performed permit now RDP/consultant plan review.	2				
Verify the plans stamped and signed by the qualified registered design professional, and all sheets are also stamped approved by the permit now RDP/consultant plan review.	2				
Verify the code analysis, including code year, occupancy group, type of construction, actual and allowable floor area, building height and stories, and fire sprinklers, etc	8				
Verify location on the property, exterior opening protection	3				
Verify occupancy, and occupant load. Check for mixed use that requires occupancy separation and fire separation include incidental use.	5				
Verify both passive and active fire and smoke protection features requirement, such as fire sprinklers, fire alarm requirements, fire resistance rating in accordance with IBC Chapter 7, Chapter 9 and other pertinent code provisions.	5				
Verify the means of egress in accordance with IBC Chapter 10 including doors, gates, turnstiles, handrails, guards, and accessible means of egress.	8				
Verify building's accessibility in accordance with the IBC and ICC/ ANSI A117.1, including accessible entrance, route, special occupancy requirements, other features and accessible parking as well.	3				
Verify number of type of plumbing fixtures calculations. Verify Family or Assisted –Use toilet room in Group A and M Occupancies.	2				
Verify building's envelope, building vestibule for energy conservation compliance in accordance with the IECC code requirements.	2				
Verify building interior finishes, combustible materials in Type I and II construction	2				
Verify building interior environment, glass & glazing, plastic, elevators in according with pertinent IBC requirements	2				
Verify special use requirements in accordance with IBC Chapter 4 if applicable.	2				
Verify steel fire proofing plans and calculations if applicable.	2				
Check cross sections, elevations, details and partial plans, ICC ES reports, products' technical reports manufacturer instruction for compliance.	2				
<b>SCORE</b>	<b>/50</b>				

\_\_\_\_\_  
 Auditor Name

\_\_\_\_\_  
 Date

### Structural Audit Checklist

**PAC #:** \_\_\_\_\_ **Project Name:** \_\_\_\_\_

**Permit Now RDP or Plan Review Consultant:** \_\_\_\_\_

Audit Item	Points	Y	N	NA	Comments
Verify approved personnel performed permit now RDP/consultant plan review.	2				
Verify all sheets stamped approved by the permit now RDP/consultant plan review.	2				
Plans stamped and signed by appropriate registered design professional.	2				
Check if the design criterion of the adopted code and standard is in-place (i.e. code year, lateral analysis, county amendments, etc.).	5				
Verify material specifications. Check if material specified on plan (concrete, steel, masonry, etc.) complies with material used in the analysis.	3				
Verify Statement of Special Inspections	2				
Verify the soils report recommendations with regard to the bearing capacity, min thickness and depth of footings, pile capacity (if any), drainage, etc., and check if they were followed through in the analysis.	2				
Verify load combinations with overstrength factor have been used correctly.	2				
Verify gravity load system, columns, and beams roof/floor slab, foundation being addressed in the design.	10				
Verify lateral force-resisting system, including diaphragms, collectors, chords and hold-downs being addressed in the design.	10				
Check cross sections, elevations, details and partial plans for compliance.	10				
<b>SCORE</b>	<b>/50</b>				

\_\_\_\_\_  
 Auditor Name

\_\_\_\_\_  
 Date

### Geotechnical/Grading Audit Checklist

**PAC #:** \_\_\_\_\_ **Project Name:** \_\_\_\_\_

**Permit Now RDP or Plan Review Consultant:** \_\_\_\_\_

Audit Item	Points	Y	N	NA	Comments
Verify approved personnel performed permit now RDP/consultant plan review.	2				
Verify all sheets stamped approved by the permit now RDP/consultant plan review.	2				
Plans stamped and signed by appropriate registered design professional.	2				
Verify geotechnical report required per Amendment 1803.2	5				
Verify minimum exploration requirements per Amendment 1803.3.2	2				
Verify Geotechnical report per Amendment 1803.6	8				
Verify geotechnical report addresses hillside grading (slopes, slope stability, benching, etc)	5				
Verify geotechnical report is current within the last 12 months	1				
Verify geotechnical engineer has reviewed the grading plan (2012 IBC)	1				
Verify grading plan required per Amendment J104.1	5				
Verify proper site drainage per Amendment 1804.3	3				
Verify grading plan complies with Amendment J104.2	8				
Verify grading plan complies with hillside requirements (slope, terracing, benching, etc.)	5				
Check cross sections, elevations, details and partial plans for compliance.	1				
<b>SCORE</b>	<b>/50</b>				

\_\_\_\_\_  
 Auditor Name

\_\_\_\_\_  
 Date

### Electrical Audit Checklist

**PAC #:** \_\_\_\_\_ **Project Name:** \_\_\_\_\_

**Permits Now RDP or Plan Review Consultant:** \_\_\_\_\_

Audit Item	Points	Y	N	NA	Comments
Verify approved personnel performed self-certification RDP/consultant plan review.	2				
Verify all sheets stamped approved by the self-certification RDP/consultant plan review.	2				
Verify Plans stamped and signed by appropriate registered design professional or Electrical Contractor.	3				
Verify that the design criteria are of the current adopted code and county amendments.	5				
Verify Plans meet the current IECC Energy code.	3				
Verify A Panel schedule(s) provided for all Panels and locations are shown.	3				
Provide electrical load calculations for service and feeder.	3				
Show location of service equipment (new or existing). Show service size and existing loads to insure service is adequate for new loads.	3				
Verify Ground Fault and Arc Fault requirements are shown on the plans.	2				
Provide a single line drawing showing conduit, wire sizes, bonding and equipment grounding. If emergency power is required for the project then emergency power 1-lines are needed.	2				
Verify Lighting fixture schedule, symbol legend, energy conservation calculations and general notes (if any).	2				
Power plan shall indicate circuiting for all devices, signage circuit and any electrical equipment along with their perspective details. All equipment that requires wiring larger than a 20amp circuit shall indicate wire size. Also, include items on the roof, such as HVAC units and their maintenance receipts. The size and type of disconnects for the HVAC equipment must be shown on the plans and be coordinated with the mechanical plans.	<b>2</b>				
Lighting plan shall indicate all lighting circuiting, and show window receipts, egress lightening and exit signs. If the IBC requires emergency lighting for the occupancy then that needs to be address on the plans.	2				
Auxiliary plan for all low voltage wiring	2				
Ampacity of wire, sizing of motor circuit.	2				
Cables protection for emergency power.	2				

Load calculations for all electrical panels to include information such as Single or Three Phase, MLO(Main Lug Only) or MCB(Main Circuit Breaker), Voltage, Amperage, AIC rating, NEMA 1 or 3, etc.	3			
Single line diagram. Existing and new service equipment, Voltage, Amperage, Phases, AIC rating, NEMA 1 or 3, number of Meter and Mains, Grounding System.	3			
For Photovoltaic system, check overcurrent protection and wiring, disconnects, location requirements, generators and transfer switches.	2			
Fault calculations.	2			
<b>SCORE</b>	<b>50</b>			

\_\_\_\_\_  
 Auditor Name

\_\_\_\_\_  
 Date

### Plumbing/Mechanical Items to be Reviewed Checklist

**PAC #:** \_\_\_\_\_ **Project Name:** \_\_\_\_\_

**Permit Now RDP or Plan Review Consultant:** \_\_\_\_\_

Audit Item	Points	Y	N	NA	Comments
Verify approved personnel performed self-certification RDP/consultant plan review.	2				
Verify all sheets stamped approved by the self-certification RDP/consultant plan review.	2				
Plans stamped and signed by appropriate registered design professional or Plumbing /Mechanical Contractor.	3				
Verify that the design criteria are of the current adopted code and county amendments.	3				
Verify Plans meet the current IECC Energy code.	3				
<b>Plumbing Checklist</b>					
Provide an isometric drawing if applicable for clarity, showing pipe size of gas, water, drain, waste, vents and sewer.	3				
Where applicable, provide a grease interceptor calculations, criteria and design.	3				
Review drainage, waste and vent, water and gas distribution systems for material type and sizing.	3				
Review plumbing fixture schedule for water conservation, water closets in public areas. Verify showers and public lavatories are thermostatically controlled or other approved means of tempering the hot water.	2				
Verify combustion air and discharge of temperature and pressure relief valves for water heaters.	3				
Roof drains (sizes)/overflow drains.	2				
Termination of vents.	2				
<b>Mechanical Checklist</b>					
Provide a complete HVAC mechanical equipment schedule detailing the CFM, BTU, SEER, EER, electrical requirements and the energy type. Provide the location of all H.V.A.C. equipment. If units or curb cuts exist, state this on the drawings. If H.V.A.C. units are new, provide structural calculations for additional weight on roof and effects on roof diaphragm.	3				

Show duct material, sizing, fire/smoke dampers assemblies and registers.	2				
Provide outside air calculations per Southern Nevada Amendment 1203.6 or UMC chapter 4. Check compatibility with the mechanical equipment and the mechanical energy compliance certificate if applicable.	3				
Where applicable, provide sizing criteria and duct material for grease hoods and replenished air (makeup air).	2				
Show roof access location.	2				
Locate all fire-rated walls, and ceilings, to locate where the Fire and Smoke Damper are to be Installed where required.	3				
Termination of exhaust ducts, flues, outside air, etc.	2				
HVAC automatic shutoffs, equipment access and working space, and condensate drains. On commercial kitchen, check type of cooking equipment and clearly identify ventilation, exhaust, interlocks and make-up air systems, hood location and clearances, and grease ducts.	2				
<b>SCORE</b>	<b>50</b>				

\_\_\_\_\_  
 Auditor Name

\_\_\_\_\_  
 Date

### Residential Architectural Audit Checklist

**PAC #:** \_\_\_\_\_ **Project Name:** \_\_\_\_\_

**Permit Now RDP or Plan Review Consultant:** \_\_\_\_\_

Audit Item	Points	Y	N	NA	Comments
Verify approved personnel performed self-certification RDP/consultant plan review.	2				
Verify all sheets stamped approved by the self-certification RDP/consultant plan review.	2				
Plans stamped and signed by appropriate registered design professional.	2				
Check if the design criterion of the adopted code and standard is in-place (i.e. code year, lateral analysis, county amendments, etc.).	5				
Review the Plans for IECC Energy, Envelope, Mechanical and Electrical Requirements	3				
Review the structure on the property Opening Protection, Exterior walls for Location	3				
Review the Stairs/Guardrails ,Height Spacing	3				
Review the Plans for the Occupancy Separation between the Garage and the House	3				
Review the Plans for Room Light and Ventilation Requirements	2				
Review the Plans for the Minimum Room Dimensions and Ceiling Heights	2				
Review the Plans for Smoke and Carbon Monoxide Detectors	4				
Review the Plans for Windows Egress and Heights	3				
Review the Plans for Exterior wall Covering, Foam Requirements for Thermal Barriers	2				
Review the Plans for Roof Covering, Slope, and Roof Flashing	2				
Review the Plans for Attic Ventilation with Calculations, Bathroom Ventilations	2				
Review the Plans for the Window sizing and Egress Requirements	2				
Review the Plans for all Safety Glazing	4				
Review the Plans for Interior and Exterior Drywall	2				
Review the Plans for any Fireplace Requirements	2				

\_\_\_\_\_  
Auditor Name

\_\_\_\_\_  
Date