Start by determining if the structure is an “existing structure”.

Does the structure have a legal certificate of occupancy?

- **NO** → This Code does not apply
- **YES**

Define the “design basis code”, which, if it exists, is the “general existing building code”, and is to be used for evaluation, repair, and rehabilitation, including seismic.

Is there a design basis code, such as IEBC, Chap 34 of IBC, or local provisions?

- **NO** → This Code does not apply
- **YES**

Was the design by a previous ACI 318?

- **NO** → This Code does not apply
- **YES**

Is the project 1 – 4?

- **NO** → This Code does not apply
- **YES**

Is the structure Safe?

- **NO** → Use this Code and the current ACI 318 for modifications
- **YES**

Is the structure at a minimum compliant with the previous ACI 318 code?

- **NO**
  - Use this Code and the current ACI 318 for modifications
  - See Pg. 3
- **YES** → The structure is structurally adequate – report findings of this evaluation

Define the “current building code” and if possible the “original building code”.

Is there a design basis code, such as IEBC, Chap 34 of IBC, or local provisions?

- **NO** → This Code does not apply
- **YES**

Was the design by a previous ACI 318?

- **NO** → This Code does not apply
- **YES**

Section 1.3.3 - Evaluate the structure using Sections 4.3 & Chap. 6

Is the structure Safe?

- **NO** → Use this Code and the current ACI 318 for modifications
- **YES**

Determine the nature of the concrete project as one of the following:
1. Restore deteriorated concrete and/or reinforcement resulting from aging, damage from an event (earthquake, storm, fire etc.), support displacements, or self-staining
2. Increase strength, stiffness, ductility, and/or durability of concrete elements & systems to correct construction deficiencies
3. Increase strength, stiffness, ductility, and/or durability of concrete elements & systems to correct design deficiencies
4. Combination of 1 to 3
5. Other

Was the building designed using a code?

- **YES**
  - See Pg. 2
- **NO** → No demand loads for evaluation in 4.3.3 & 4.3.4 - propose we refer Chap. 5

This is a problem for older buildings and other countries – propose – use this Code and current ACI 318.
Problem – See Sect. 1.1.6 – the design basis codes (IEBC etc.) do not address deficiencies resulting from faulty design or construction.

We could amend Sect. 1.1.6 to include restoration of existing members and system to original building code provisions with a limit not to exceed current code provisions.