**KPFF Seismic descriptions for website 12/2/16**

**Modernizations**

The seismic renovation for Franklin, Roosevelt and Grant high schools will be designed to meet ASCE/SEI 41-13 “Seismic Evaluation and Retrofit of Existing Buildings.”  ASCE/SEI 41-13 is a national standard published by the American Society of Civil Engineers / Structural Engineers Institute and is recognized by the state of Oregon as an acceptable code for seismic renovations and is considered state of the art.

While the ASCE/SEI 41-13 performance level is often referred to as ‘Life Safety’, it actually consists of two performance levels, a slightly higher level for less intense earthquakes and slightly lower level for more intense earthquakes.  The Basic Performance Objective for Existing Buildings (BPOE) used for these buildings includes two structural performance levels, Damage Control at the BSE-1E seismic hazard and  Limited Safety structural performance at the BSE-2E seismic hazard.

The intent of ASCE/SEI 41-13 design is to prioritize protection of the occupants, not the buildings.

**IP/ Summer incremental seismic strengthening work**

Summer bond work includes incremental seismic strengthening.  Typically, this work is one step of a phased approach to a complete retrofit to meet ASCE/SEI 41-13 Basic Performance Objective for Existing Buildings for Risk Category III buildings. The seismic roof strengthening during roof replacements, chimney and parapet bracing and hollow clay tile partition bracing along major routes of egress meet Damage Control for BSE-1E and Limited Safety for BSE-2E. Additional strengthening work will be required in the future to have structural performance complying with the ASCE/SEI 41-13 BPOE.