Cultural Stone Stability Index

| SCORING: Please indicate your score by CLEARLY circling 0, 1, 2 or | ndicate your score by CLEARLY circling 0, 1, 2 or | ARLY circling 0, 1, 2 or 3 | our score by Cl | Please indicate | SCORING: |
|--|---|----------------------------|-----------------|-----------------|----------|
|--|---|----------------------------|-----------------|-----------------|----------|

| Site Setting (Overarching Geologic Factors) | Not present | Present | Obvious | Dominant |
|---|-------------|---------|---------|----------|
| Fissures independent of stone lithification (pressure release, calcrete wedging) | 0 | 1 | 2 | 3 |
| Fissures dependent on lithification (bedding, foliations) | 0 | 1 | 2 | 3 |
| Anthropogenic fissures (mortar work) | 0 | l | 2 | 3 |
| Changes in textural anomalies (banding, concretions) | 0 | 1 | 2 | 3 |
| Rock weakness (Modified Moh's Hardness: 0 = quartz scratch/can't scratch; 1 = knife blade scratch; 2 = penny scratch; 3 = fingernail scratch) | 0 | 1 | 2 | 3 |
| Weaknesses of the Edifice/Façade/Dressed Stone (Impending and Future Loss) | Not present | Present | Obvious | Dominant |
| Fissuresol (future location of break-off) | 0 | 1 | 2 | 3 |
| Roots | 0 | 1 | 2 | 3 |
| Plant growth near or on facade | 0 | 1 | 2 | 3 |
| Scaling & Flaking (future location of centimeter- to half meter-size diameter) | 0 | 1 | 2 | 3 |
| Splintering (following stone structure and oblique to stone surface) | 0 | 1 | 2 | 3 |
| Undercutting (larger than scaling) | 0 | 1 | 2 | 3 |
| Weathering-rind development | 0 | 1 | 2 | 3 |
| Other concerns (e.g. water flow, pollution, foot traffic, etc.) | 0 | 1 | 2 | 3 |
| Evidence of Large Erosion Events On and Around the Edifice/Façade/Dressed Stone (Large Losses, Already Occurred) | Not present | Present | Obvious | Dominant |
| Anthropogenic activities | 0 | 1 | 2 | 3 |
| Fissuresol/calcrete wedging (or dust in fissuresol, or both) | 0 | 1 | 2 | 3 |
| Fire | 0 | 1 | 2 | 3 |
| Undercutting (larger than scaling) | 0 | 1 | 2 | 3 |
| Other natural causes of break-off (wedgework of roots, earthquakes, intersection of fractures,) | 0 | 1 | 2 | 3 |

| CONTINUE SCORINGCLEARLY circling 0, 1, 2 or 3 | | | | |
|---|-------------|---------|---------|----------|
| Evidence of Small Erosion Events On the Edifice/Façade/Dressed Stone (Incremental Losses, Already Occurred) | Not present | Present | Obvious | Dominant |
| Abrasion (from sediment transport by water; plants rubbing; people leaning/scratching on facade) | 0 | 1 | 2 | 3 |
| Anthropogenic cutting (carving, chiseling, bullet impact) | 0 | 1 | 2 | 3 |
| Anthropogenic joints/jointing (mortar work) | 0 | 1 | 2 | 3 |
| Alveolization (honeycombed appearance) | 0 | 1 | 2 | 3 |
| Crumbly disintegration (in groups of grains or powdery) | 0 | 1 | 2 | 3 |
| Flaking (single or multiple; centimeter to a few inches in size) | 0 | 1 | 2 | 3 |
| Granular disintegration (frequently sandstone and granitic) | 0 | 1 | 2 | 3 |
| Lithobiont pitting | 0 | 1 | 2 | 3 |
| Loss parallel to stone structure (layers "peeling" from stone surface parallel to bedding plane) | 0 | 1 | 2 | 3 |
| Rock coating detachment (usually incomplete; includes paint material and "leafing" in inscriptions) | 0 | 1 | 2 | 3 |
| Rounding and/or blurring of carved edges or inscriptions | 0 | 1 | 2 | 3 |
| Scaling (fist-sized; thicker than flaking) | 0 | 1 | 2 | 3 |
| Textural anomaly features erode differentially (clay lenses, cementation differences, nodules) | 0 | 1 | 2 | 3 |
| Splintering (following stone structure and oblique to stone surface) | 0 | 1 | 2 | 3 |
| Other forms of incremental erosion (e.g. insects, birds) | 0 | 1 | 2 | 3 |
| Rock Coatings On the Edifice/Façade/Dressed Stone | Not present | Present | Obvious | Dominant |
| Anthropogenic (chalking, graffiti, exhaust, dust, other) | 0 | 1 | 2 | 3 |
| Carbonate (showing on the stone surface, NOT part of rock) | 0 | 1 | 2 | 3 |
| Case hardening (hardened outer shell) | 0 | -1 | -2 | -3 |
| Oxidation (rusting on the stone surface) | 0 | 1 | 2 | 3 |
| Rock coating present | 0 | -1 | -2 | -3 |
| Salt efflorescence or subflorescence | 0 | 1 | 2 | 3 |

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| Your name: Date: Building/Cultural Stone Name/ID: | |
|--|--|
| GPS Coordinates and/or Address: | |
| Quick Sketch of the Edifice/Façade/Dressed Stone to be Assessed: | |
| | |

Notes on rock type and environment:

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| Highlighting Var | ndalism and other Issues | | | | |
|--|--|-------------------------|------------------|-----------------|------------------|
| CONCERNS | Please briefly describe the problem and why you believe that this concern endangers the panel. Put in "X" on the right to indicate whether this concern creates a "severe danger", "great danger", "urgent danger" or "problem" for the panel. | Creates a problem | Urgent Danger | Great Danger | Severe Danger |
| Graffiti | | | | | |
| Other Vandalism (describe) | | | | | |
| Trash | | | | | |
| Visitor impact (e.g. dust, road proximity) | | | | | |
| Land use issues (e.g. livestock, off-road vehicles) | | | | | |
| Natural processes that are a major concern to you | | | | | |

Notations on Rock Coatings (note: these notes do not alter the Index Score, but are useful in analyzing a site's context)

Less difficult to identify in the field

| Rock Coating | Circle your answer | Notes | |
|-------------------------------|----------------------|-------|--|
| Droppings | Yes / No / Uncertain | | |
| Dust Coatings | Yes / No / Uncertain | | |
| Iron Film | Yes / No / Uncertain | | |
| Lithobionts (e.g., lichen) | Yes / No / Uncertain | | |
| Pollution | Yes / No / Uncertain | | |
| Rock Varnish (desert varnish) | Yes / No / Uncertain | | |

Other Notes: