

Bridge Deck Maintenance – A Contractor's Perspective



- Long Term Performance Based Contracting – inspection, maintenance and operation of structures for owners/clients over long period of time. Examples are Sunshine Skyway Bridge over Tampa Bay in Florida, Ravenel Bridge in Charleston, South Carolina, South Jordan River Bridge in Norfolk-Portsmouth, Virginia.
- Unit Based Contracting – owner/clients produces plans and contracts, pay items are by the unit

Methods of Contracting

- Sweeping / cleaning deck
- Vacuuming (deck / joints / drains)
- Deck & Joint Washing especially in areas that use de-icing chemicals
- Drains and scupper cleanouts
- Joints

Preventative / Routine Maintenance



Clogged Deck
Joint (Modular)



Cleaning (Vac)
Deck Joints

- Crack sealing
- Spall repairs (shallow) Asphalt overlay repairs (potholes)



Minor Repairs



- Partial / full depth repair
- Overlays
- Innovative Products – Spray-Lock

Deck Rehab



Shallow Steel



FlexPatch Epoxy



Demo/Prep for
Minor Repair



FlexPatch Epoxy
Patch



Leaking
Expansion Joint



Removing old
joint sealant



Chipping out for
new joint header



New Epoxy
(Silspec) Joint



Armored Joint
Repairs



Removing armor
headers



Using Silspec to
reseal the joint



Finished Joint



Deck Overlays
(Epoxy)



- Traffic / Lane Closure Restrictions (night work)
- Weather (rain, falling temps / cure time)
- Product approval by owner (pre-qual'd products, or submitting innovative ideas)
- Old design / poor construction (shallow steel, little cover)
- Worn deck grooving / skid resistance

Deck Maintenance Challenges

Deck Maintenance Challenges



- Old design / poor construction (shallow steel, little cover)
- 2013 Repair St. Pete, FL – Sika 321

