KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV Condominium

Saint Augustine, Florida

Facility Inspection

Survey Report and Results

Prepared By

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MAY 2024

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May 11, 2024
Sand Dollar IV Condominium
8090 A1A South
Saint Augustine, FL 32080

Re: Sand Dollar IV 2024 Limited Building and Site Condition Assessment & Evaluation Written Report

EXECUTIVE SUMMARY

Keystone Engineering and Consulting, Inc. performed a limited and generally non-destructive visual condition survey of the condominium structure and site conditions of the Sand Dollar IV Condominium located in St. Augustine, Florida. The purpose of this survey was to gather information as to the condition of the existing accessible exterior structural components, which included evaluating the elevated walkways & balconies, parking structure, envelope, balcony sliding glass doors, windows, coatings, sealants, aluminum guard railings, and other related building elements. The survey was specifically conducted to determine where areas of distress existed relating to reinforcing steel corrosion. Keystone was also to recommend repair and preventative maintenance actions that would both correct the existing damage andslow the degradation of the building to reduce future maintenance expenses.

Our findings have concluded that many areas of the building are exhibiting structural maintenance needs with some advanced locations where actions should be performed as soon as practical. At this point, there are conditions that are not desirable for protecting the structure against water intrusion or additional ingress of chlorides.

The existing spalled conditions at the walkways & balconies, including general waterproofing details, are all contributing to the continued effects associated with corrosion and water intrusion.These adverse issues can be corrected during a repair project by utilizing proper materials and methods. Additionally, these actions can be integrated with overall improved aesthetics of the structure.

Within this report are the findings and recommendations for the repair and maintenanceof the building. Included in the report are example photos of the issues described with a conceptual budget intended for planning purposes.

Keystone Engineering is available to present these findings in a PowerPoint format for your owners. We will explain our findings and recommendations and answer any questions you may have. We can also discuss the preparation of a Project Manual to solicit competitive bids for the work and the execution of the construction phase and look forward to assisting Sand Dollar IV Condominium in the continuing evaluation of this project and consulting with you during the upcoming decision-making process.

WRITTEN REPORT

BUILDING STRUCTURE DESCRIPTION

The Sand Dollar IV condominium is a 40-Unit, direct ocean-front, 5-story tall masonry structure with cast-in-place columns and conventionally reinforced floor slabs with cantilevered balconies and walkways that were placed into service in the early-to-mid 1980's.

All living Units enjoy one balcony space that incorporates a fall protection provision consisting of welded aluminum railings that have been replaced since original construction. The Units are accessed via one elevator cab leading to open elevator lobbies and two fully enclosed stairwells.

Envelope vertical surfaces are coated with waterborne products that appear to be mostly solvent-based sealants at penetrations, and the walkway & balcony slabs are protected with a polyurethane deck coating system. The exterior walls are concrete masonry unit (CMU) construction and textured with a Portland-based stucco veneer.

The roof is a reinforced concrete slab covered with a recently replaced low-slope spray polyurethane assembly reportedly installed by Weathertight Systems in 2023.

Common area doors are fire-rated steel framed assemblies where required by the building code and Unit entry doors are mostly the original wood design.

Original construction fenestrations, defined as windows and doors, were aluminum-framed assemblies and thirty-three owners have elected to install a storm shutter on at least one glassed opening of their Units.

INVESTIGATION METHODOLOGY

The inspection process was completed on a visual and hands-on basis with all efforts overseen by Jason Boatright, P.E., a Florida Registered Professional Engineer and trained assistants. The full survey included inspection of all Units, incorporating the walkways, stairwells, parking structure, pool deck, main roof, walkways, stairwells, electrical room, and storage rooms into this report. The field study required multiple visits that commenced on November 30, 2023, for Mr. Tomas Ponce, P.E., MSCE, to evaluate the parking structure, February 29, 2024, to perform the first day of surveying the residential building that focused on the balconies because an escort was required, with a subsequent visit on March 14th to assess all remaining areas of the facility.

Generally, the inspection of an aged oceanfront condominium focuses on the existing and potential for reinforcing steel damage that occurs due to water intrusion sources. As a result of the actual and potential damage, affected building components such as floorfinishes, guard

railings, window assemblies, sliding glass doors, and storm shutters are also evaluated as applicable.

The inspection process was completed in a generally non-destructive manner, except for specific areas where the spalling had manifested to a degree concrete removal was simple to observe underlying conditions, such as concrete cover over the reinforcing steel.

The results of the inspection and evaluation will generate an anticipated and recommended scope of work. It must be considered and understood that many work items identified are interrelated and therefore not easily or cost-effectively addressed separately. For example, to repair slab damage associated with reinforcing steel corrosion the fall protection railings will be affected and therefore must be considered as part of the repair process.

It should also be well understood that portions of the work anticipated are estimated quantities, while other items are fixed quantities. In general, all of the concrete activities are an estimated quantity due to the number of variables involved and the high likelihood of hidden damage. Therefore, the concrete work is typically bid on a unit cost basis since we can establish the necessary repair task items accurately but cannot estimate the exact quantities. Unit Cost Line Items provide the fairest basis for both owner and contractor, as the contractor is paid only for the number of each unit completed at the unit rate bid, whether the quantities are higher or lower than the engineers' estimate. The remainder of the bid items will generally be at fixed cost, as they are directly measurable quantities and the known scope of work. Waterproofing of walls and floors, glass door replacement and railing replacement or removal and re-installation are some examples of fixed items as both the task and quantities can be generally established accurately in advance.

OBSERVATIONS

Sand Dollar IV Condominium is in fair condition overall after considering the age of the structure and its location in an indisputably highly corrosive environment for approximately four decades.

Nineteen balconies exhibited no structural distress, but unfortunately three Units were documented to have visible or acoustically detected concrete spalling inside or immediately adjacent to the sliding glass door opening, meaning a high probability exists for encroachment at the sliding glass doors; those were: 208, 402 and 403. Should you look through the site maps incorporated into this report, understand the arrow drawn on the map indicates a confirmation, and or likelihood, of entering the living space, but that disruptive intrusion will not occur until all exterior excavations have been exhausted without the engineer approving the termination as complete and proper.

The two most prominent and widespread maintenance situations found at the site are documented reinforcing steel corrosion and water intrusion sources at penetrations. Although these critical components have lasted well for decades the symptoms of spalling and delamination is visually detectable that range from minor-to-moderate.

Quality, long lasting repairs are crucial in controlling future maintenance costs. Taking steps to reduce the ingress of water has proven to be a good investment of maintenance dollars eliminating the redundancy of repairs to the same areas. This can be achieved by ensuring proper industry standard waterproofing details are accomplished during the rehabilitation project.

For the specific situations at Sand Dollar IV, the most effective solutions available to us involve reducing the exposure of the structural components of the building to the atmospheric elements along with the use of properly specified products. This is best achieved by the elimination of all water intrusion sources at envelope surfaces, at railing anchorage points, at fenestrations to include windows and sliding glass doors, and all exterior horizontal surfaces by utilizing proper fasteners, methods, sealants, and coatings. While these efforts will not fully stop the effects of normal deterioration on the building structure, they can greatly reduce the magnitude and rate of their effects over time. This will save the Association substantially in terms of maintenance costs, future assessments, the inconvenience, and loss of use because of construction and the collateral costs of construction including removing, reinstalling and/or replacing components such as railings, coatings, and doors.

FINDINGS

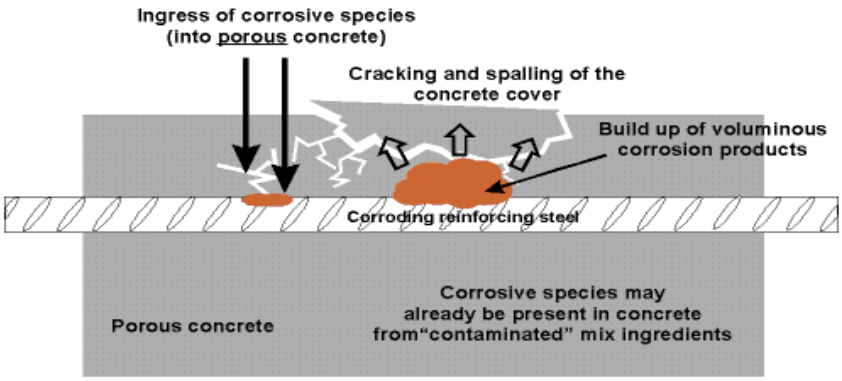
The photograph section of this report is intended to present a global overview of our findings and point out typical discrepancies and we can provide all photographs electronically if you wish.

The pattern of concrete spalling was found to be characteristic with structures of this age with distressed areas located through visual inspection and acoustical sounding techniques. The acoustical process was completed utilizing either a metal rod or chain-drag techniques that create a distinct sound when sub-surface delamination exits due to reinforcing steel corrosion where the concrete interface with the steel has been compromised. Historically, with wide variations based upon certain factors, such as amount of concrete cover over the reinforcement, roughly 20% of the volume of spalling is acoustically determined.

One challenge Keystone encountered was to fully evaluate the topside of the walkway & balcony slabs where polyurethane deck coatings exist that historically has hidden underlying spalling until the conditions reach a relatively advanced stage.

Concrete Damage General Discussion

Concrete spalling is due to the long-term exposure to the coastal salt air, whereby chlorides will migrate through the concrete and reach the reinforcing steel. Once the chlorides accumulate at the steel depth, the corrosion process will accelerate in an exponential fashion, resulting in expanding steel reinforcement due to corrosion activity, internal delamination of the reinforced concrete, cracking and spalling of the surrounding concrete. Left unabated, this process will lead to increasingly costly building repair projects.



Initial concrete spalling typically becomes noticeable as the building approaches 15-20 years of age, grows exponentially, and then cyclically thereafter depending on the level and quality of repairs and protective measures.

Structural

Generally, the structural cast-in-place concrete components where evaluation could be performed were found in fair-to-good condition with no necessity to install temporary shoring at this time.

Balcony and Walkway Slabs - The conventionally reinforced floor slabs at the balconies and walkways were observed to have periodic visible and or acoustically detectable subsurface spalled conditions. The locations were generally small in size as a testimonial to the previous cycle administered by Keystone in 2017 with only the balcony totals estimated at 69 square feet of surface spalling, 13 linear feet of edge spalls and 10 square feet of overhead spalling. The walkways and stairwells were found to have roughly 31 square feet of surface spalling, 7 linear feet of edge spalls and less than 5 square feet of overhead spalling. The reinforced components with stucco veneer called out as spalling have likelihood of being delaminated stucco only and should that occur a significantly lower repair rate shall apply.

Door assemblies allowing ingress of soluble salts over extended periods involve one area and the original construction "cored-in" design of the handrail stanchions attribute to another obvious path for chloride contamination as well as the increased exposure to the elements. Understand that to repair documented spalling adjacent to the glassed openings, for example multiple deck spalls at Unit 208, that encroachment into the living areas at some repair locations could occur. Facilitating repairs would require a containment provision, such as a hardwall barricade constructed out of lumber and plywood and obviously collaterally impact interior finishes.

Parking Structure – The parking structure work includes the garage columns, beams, precast double tees, and the spandrel panels that serve as a guard at the perimeters.
Diagonal cracking exists in the precast soffit beams at the perimeters averaging about 0.006 of an inch diameter with no shoulder deflected or displaced. The cracks should be inspected by a

competent party semiannually and any noticeable changes in diameter of plane at the cracks an engineer should be contacted to review.
Spandrel panel weld clips at the column-to-panel connections combine the original steel and the retrofitted aluminum angles with all locations maintaining the necessary rigid connection for stabilization of the panels. The planned work will include sandblasting any steel angles and applying a two-coat system of epoxy and the replaced aluminum angles will be cleaned up and coated.
Horizontal and vertical reinforcing steel in the spandrel panels that is near surface from the precast plant have caused minor spalling at the top and sides of the panels and will be excavated and trimmed to achieve at least a one-concrete cover condition.
Horizontal reinforcement in the top plate of the tee is exhibiting corrosion symptoms primarily at the perimeters as expected due to the increased exposer to chlorides and the weld plates embedded at the sides of each tee have local spalling that is expected after decades in service. The areas should be visually inspected on a quarterly frequency and remove any delaminated sections found before it dislodges and harms person or property. Topical treatment with an epoxy to encapsulate the accessible areas, for example Sherwin Williams Macropoxy, should be performed after mechanically removing all scale.
Kneewalls at the lower area have cracks in the masonry blocks caused by vehicular contact or telegraphing through the very thin application of stucco veneer with both conditions cosmetic only and also a few spalls periodically.
The parking deck height restriction barrier at the approach ramp to the parking deck should be maintained to mitigate unwanted overweight vehicles from accessing the deck.
West elevator scuppers in the panels should be fully sealed at the outside penetration to direct water away from the area below.

Stairwells - The two enclosed stairwells were inspected and found in good condition other than routine maintenance needs.

FLP Vault - The room was found unsecured and from the doorway a couple of spalls were discovered that are small, but coordination with the utility company will be required in advance to gain a safe work area.

Elevator, Electrical and Maintenance Room, Owners Storage Room, Mechanical Rooms – All rooms were entered, and miscellaneous areas of work were documented without any prioritized needs, although the pool pump room ceiling was found with significant spalling. The association should disallow storage inside these rooms to ensure an unimpeded pathway exists to the electrical disconnects, or other service equipment, and specifically deny storage of any combustible materials like petroleum, solvents, wood or plastic.

Envelope

The Portland-based stucco veneer on the main building, and garage structure, was found in good condition overall, with the dry film thickness of paint exists where another r high-build elastomeric coating application is not recommended. Unit 202 was found with drywall removed at the east wall of the living room where daylight was observed through a hole believed to be for the storm shutter. The expanded metal lathe was corroded but serviceable,

although the light gauge steel framing at the slab was severely corroded requiring bottom channel and some stud replacement. All envelope static cracks will be treated and sealed with elastomeric patching compounds and if dynamic in nature will be routed-and-sealed with a polyurethane sealant. The planned paint system will incorporate a conditioner and one finish coat of 100% acrylic with a satin sheen for added self-rinsing qualities to achieve a standard Sherwin Williams 7-year standard warranty.
Unsealed envelope penetrations, for example light fixtures and receptacle boxes, and should be replaced or sealed to achieve a weathertight condition.

Fenestrations

The few common area fenestrations at the Lower Level are from existing construction and are serviceable.
Unit owner expense sliding glass door and window assemblies have been replaced in some openings with a combination of aluminum and vinyl-framed alternatives.
Several original construction sliding glass doors have holes oxidized through the threshold, which are 207, 306, 403, 501 and 504, creating a water intrusion source and should be replaced.
The recommendation is the association adopt a fenestration policy as a rule and regulation to ensure and enforce a durable choice is made regarding water intrusion and air infiltration rates to minimize damages to interiors during elevated wind driven rain events.
Steel fire rate doors and their frames are corroding at many openings and will be a reoccurring need until replaced. Should steel be chosen again as the replacement option, we recommend upgrading to a G90 galvanization level with all accessible areas primed prior to the installation with a zinc rich primer for added protection. Keystone recommends a Fiber Reinforced Polymer option be selected, with Chem-Pruf as an example, although approximately twice the installed cost of the traditional steel because of the minor maintenance necessary.

Guard Rails

The fall protection railings at the balconies were found in fair condition and very minor filiform corrosion witnessed indicating a proper specification of the Architectural Aluminum Manufacturers Association coating and pretreatment was installed.
Walkway railings, although serviceable, have advanced oxidation at some areas of the top and bottom member receptor fasteners located at the terminal ends that have caused stucco delamination and cracking. The recommendation and budget reflects keeping the rails in-service and addressing the deficient fasteners on an as-needed approach with the cost assigned to miscellaneous fasteners and or the guard rail allowance.
Rails at the pool deck and southern service ramp were inspected and found serviceable and any maintenance actions will also be corrected under the allowance line item.

Pedestrian Coating

Balcony and walkway horizontal surfaces are coated with a polyurethane, pedestrian-grade fluid-applied waterproofing membrane and remain serviceable as a deterrent against chloride ingress as intended. The intent is to prepare and recoat the surfaces without stripping to bare

concrete to avoid the added expense that was deemed necessary in the previous cycle. The cant bead sealant, defined as the polyurethane sealant bridging the horizontal-to-vertical transitions of the balconies and walkways, will be replaced on an as-needed approach in the miscellaneous sealant line item.
Enclosed stairwell landings and treads are coated with an unknown product and if it doesn't provide a low permeability rate to mitigate chloride ingress a waterproof coating is recommended.

Vehicular Coating

Parking deck and the approach ramp coating is also a polyurethane system with varying degrees of friction wear symptoms existing that remains serviceable as a waterproofing measure to deter chlorides.

Sealant

The envelope sealant at fenestration perimeters and penetrations and terminations range from good-to-failed. The cost was earmarked to replace it on an as-needed basis, since roughly 10% is reaching its useful life, including other deficient areas at doors.
The three expansion/construction joints leading from the parking deck to the walkways will be replaced and a Watson Bowman preformed joint is the planned rather than the sealant that exists to provide a longer service life.

All replaced sealant at painted surfaces will follow fundamental industry standards specified in the Sealant, Waterproofing and Restoration Institute guidelines and be 100% polyurethane dry-tooled to create a proper and durable joint.

Roof

The low-slope main roof covering was recently replaced with a spray polyurethane assembly reportedly installed by Weathertight Systems in 2023. The associated work at the condenser stands excluded needed electrical work to eliminate hazards with unserviceable disconnects as an example. There is a probability spall repairs to the parapet wall will encounter the prefabricated aluminum coping cap that will require coordination with a roofing contractor.

RECOMMENDATIONS and CONCLUSION

General Industry Methodology

There are several basic aspects to concrete spalling and restoration that must be understood and accepted to allow for the findings and recommendations to be discussed productively. The following represents some basic industry positions that dictate the consultants thought process:

Spalling-Concrete spalling is delamination of the concrete from the expansive effects of reinforcing steel corrosion. Spalling occurs when chlorides migrate to the reinforcing steel, which changes the chemistry of the concrete and creates a corrosive environment. Spalling can be detected visually and/or acoustically and requires an experienced eye to distinguish between spalling and non-spalling and to extrapolate findings into estimated quantities.

Contractor Selection-Concrete restoration is a small, specialized, yet mature industry. While the work must be performed by a licensed general contractor under the supervision of an experienced professional engineer, not all general contractors are experienced in concrete restoration of an existing occupied building. There is a relatively short, but high-quality list of local qualified restoration contractors. Restoration contractors generally perform best in their local region.

Project Timing-Project timing will be dictated by the decision-making process and contractor availability. However, the lowest cost project is one that is done today, as a single-phase project. Unnecessarily delaying a project or doing it in multiple phases will increase the project costs due to increased corrosion damage and rate, inflationary costs, and mobilization costs. Financing is available to allow for payments overtime, while getting the work done in a single, lower cost, lower impact project.

Project Considerations-Project considerations are primarily prioritized as safety, asset preservation and aesthetics. It is up to the Association to decide on what level of asset preservation and aesthetics they wish to employ. The engineer can only make recommendations and explain the consequences of the decisions. Safety is the only area where the engineer has to insist on a solution. The Association can decide to adopt all, some, or none of the engineer's recommendations.

Comprehensive Solution-A long-term comprehensive solution provided is the most effective at minimizing future restoration cycles and providing the most aesthetic result. It is the lowest cost over time, and considers proactive protective measures and maintainable coating finishes, and overall protection of the structure from the elements.

Decision-Making-Not everyone wants the same level of building maintenance, aesthetic considerations, or maintenance budget funding. Everyone will have their individual opinion of what is appropriate or acceptable. That is one of the challenges of providing consultation to a condominium, as we cannot provide any solution that will please all parties. Each of you has the discretion to agree or disagree with our recommendations.

A prioritized effort should be undertaken to correct all structural component deficiencies and diminish ingress of future chlorides as soon as practical. The rehabilitation repairs should be accomplished as soon by an experienced restoration contractor under the supervision of a restoration engineering expert. It is further recommended that the association undergo a complete structural and exterior weatherproofing effort and preventative maintenance project as soon as funds are available. The work would include, but not be limited to; column, slab and beam repairs, and other envelope activities, replacement of any deficient sealant or application at missing penetrations, horizontal waterproof coating finishes after proper concrete repairs and general maintenance actions that typically reoccur on a 7 to 8-year cycle as asset-preservation.

Once the information in this report is reviewed, discussed, and understood, the Association can reach conclusions as to the planning and timing of the recommended repair work. Keystone Engineering can provide valuable input and services towards this discussion. Keystone can also provide the necessary services for the subsequent solicitation of bids for the work from qualified contractors as well as the oversight of the construction phase to ensure the work is properly executed, including control of the budget, quality of work, contractor payments and warranties.

It is our intention to assist and guide you to complete a quality and cost-effective project that will both enhance the value of your building and provide extended service life. We look forward to meeting and discussing the project further to assist with the ongoing decision-making process.

Sincerely,

Jason Boatright, P.E. Chuck Hays, C.G.C.

PHOTOGRAPHS

Figure 1. 306 sliding glass door threshold oxidized condition replacement is required to mitigate the water intrusion.

Figure 2. 202 living room east wall severely corroded framing and metal lath condition.

Figure 3. Example of a surface spall at 501 balcony.

Figure 4. 504 balcony surface spall.

Figure 5. Roof parapet spall above 505 balcony.

Figure 6.Parapet spall where coping cap may be impacted. `

Figure 7. Example of a column spall outside 302 balcony.

Figure 8. 208 several surface spalls.

Figure 9. Surface spall at walkway 207.

Figure 10. Multiple spalls at 204 walkway area.

Figure 11. Edge spall overhead outside 204 entry door.

Figure 12. Unit 201 walkway balcony surface spall.

Figure 13. 2nd floor north stairwell door jamb spall and rail receptor anchor failed from oxidation.

Figure 14. Generator room ledger angle corroded to failure.

Figure 15. Column spall 2nd floor elevator landing.

Figure 16. Ceiling spall inside FPL vault.

Figure 177. South elevation service ramp erosion and deflection with masonry cracking in walls.

Figure 18. 103 walkway window reached useful life of structural connections.

Figure 189. Example of a corroding anchor to be replaced under miscellaneous fastener Line Item of the budget.

Figure 20. Example of oxidizing aluminum fasteners at walkway railing wall receptors.

Figure 21. Example of many witnessed unsealed window and door assemblies.

Figure 22. Example of oxidizing aluminum fasteners at walkway railing wall receptors.

Figure 23. Example of double tee plate spall in garage.

Figure 24. Example of garage perimeter beam end spall.

Figure 25. Example of garage perimeter beam cracks evaluated for diameter.

Figure 26. Column spall at south end of the garage.

Figure 27. Garage west elevation perimeter beam spalled.

Figure 28. Spall was discovered at the top of the garage beam near the tee bearing point.

SITE MAPS

Sand Dollar IV

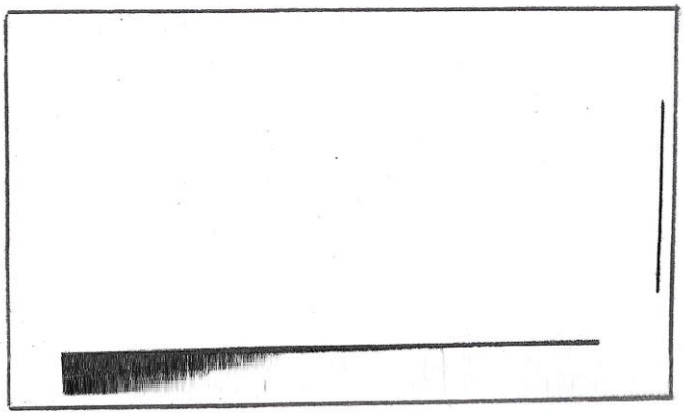
Site map key

- SGD/slider = sliding glass door
- Guest br/GBR = guest bedroom
- MBR = master bedroom
- LR = Living room
- SF = square feet
- CF = Cubic feet
- LF = Linear feet
- Vis = Visible
- Possible Encroachment = Spall might include inside work to complete repair
- RS (C, W) = rust spot (ceiling or wall)
- BTM = bottom
-  = overhead spall
-  = surface spall

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV

Unit: 501



Replace ← Slider Bottom of frame degraded not serviceable

Shutters

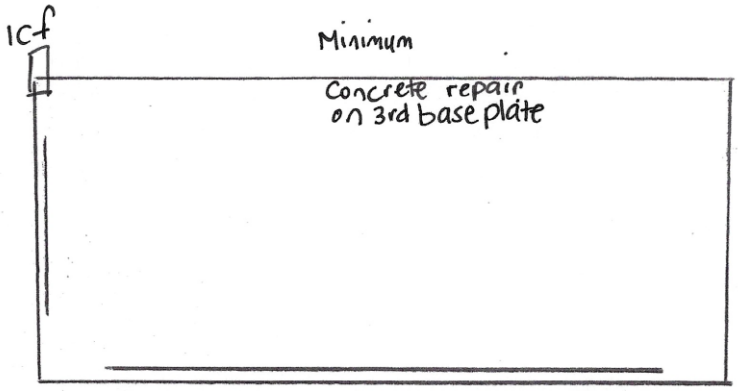
original S.G.D.'s (holes in jambs & thresholds)

Seal Light & receptacle

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV

Unit: 502



Some peeling/Blistering paint

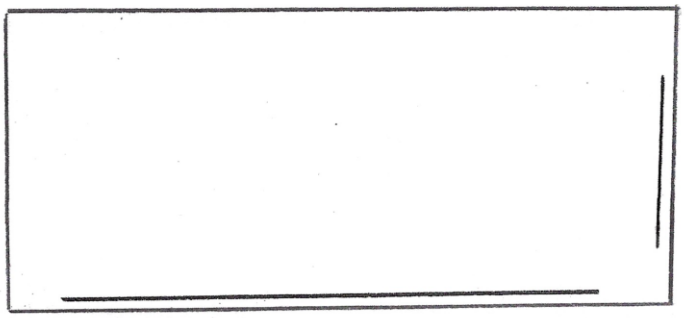
SGD's need wet zone Sealed

light not Sealed

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV

Unit: 503



- Shutter
- Newer SGD's (Both) Vinyl -missing push plugs, Perimeter Sealant open/missing
- Seal Light /receptacle

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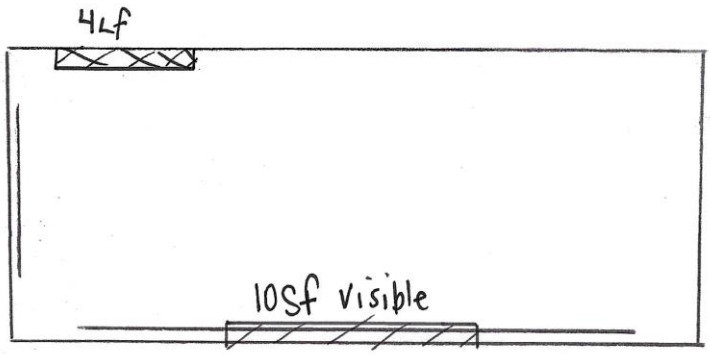
Sand Dollar IV
Unit: 504



Shutter

Original SGD's. - holes in threshold

Seal light / receptacle

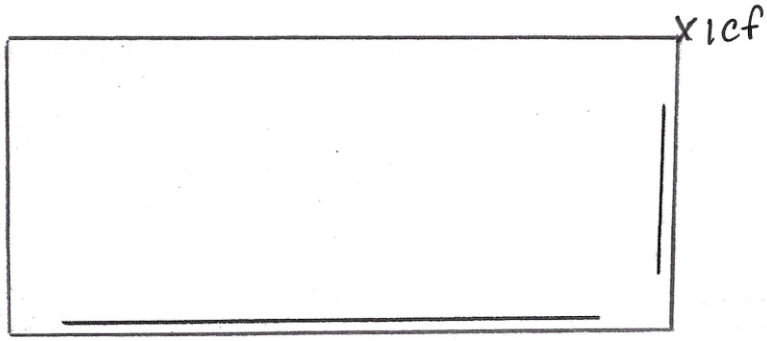
Replace LR Slider / MBR - is serviceable

Corroded conduit fasteners

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV

Unit: 505



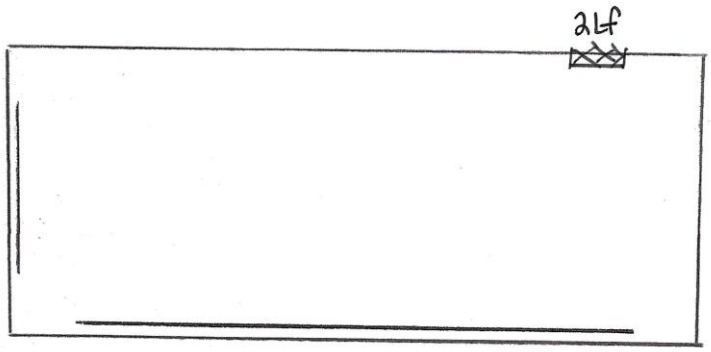
Shutter

Seal Light

SGD's wet zone unsealed & fasteners corroded

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV
Unit: 506



Shutter

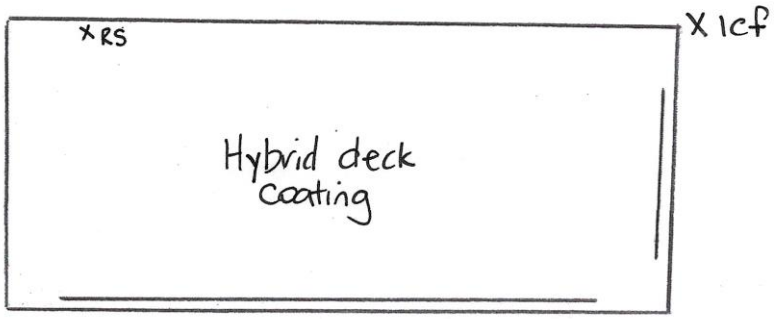
SGD's Wet zone unsealed

Missing/failed Sealant around LR Window

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV

Unit: 507



Shutter

Seal wet zone SGD MBR

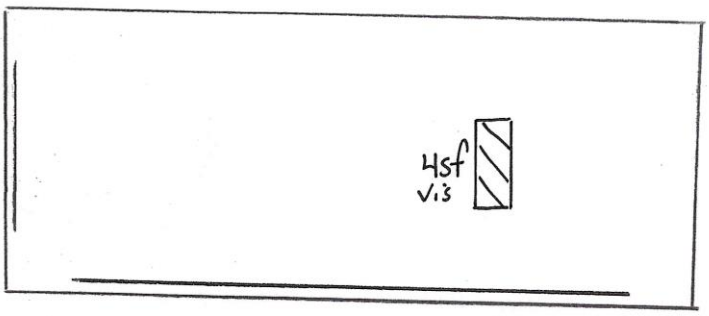
LR Window - Seal wet zone

Panels above doors oxidizing

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV
Unit: 508

x
RS above MBL Window

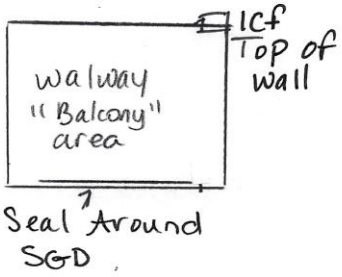


Shutter

Seal light / receptacle

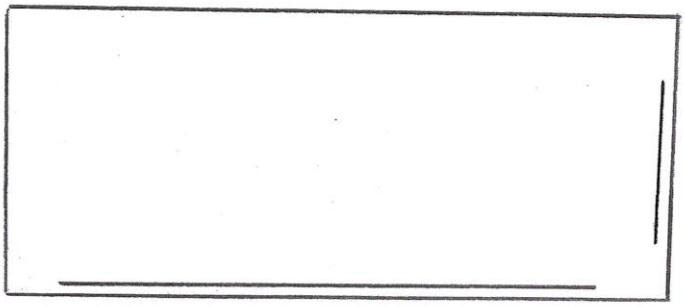
Newer PGT SGD's - wet zone unsealed

missing Sealant around doors



KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV
Unit: 401

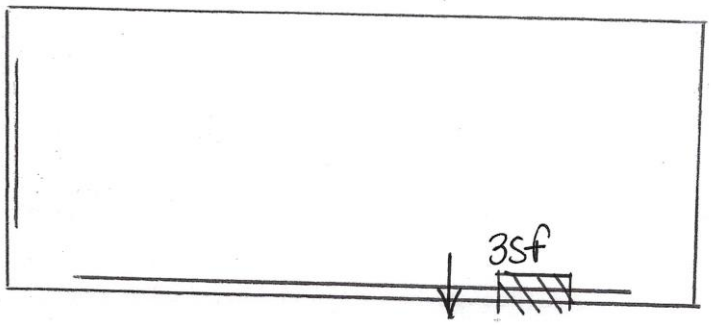


Shutter

Seal Light/receptacle

KEYSTONE
ENGINEERING &
CONSULTING, INC.

Sand Dollar IV
Unit: 402



Shutter

* Possible Encroachment *

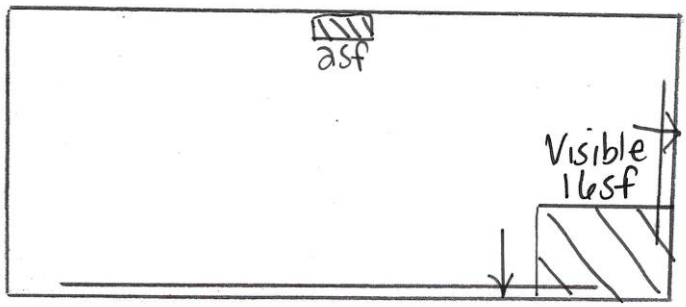
Seal Light / receptacle

Newer SGD's

LR Window wet zone unsealed / seal around Window

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV
Unit: 403



Shutter

Seal wet zone & Around SGD's

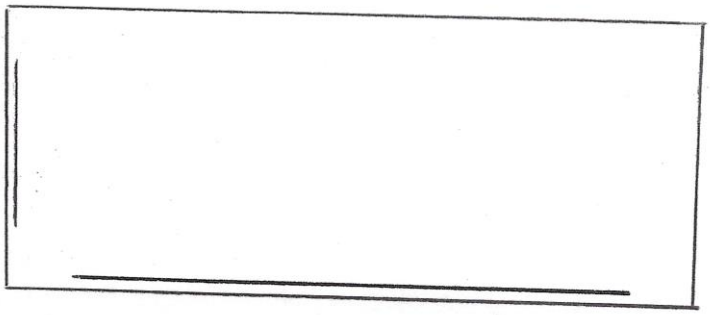
Cracked tile inside

* Possible Encroachment *

Seal Light

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV
Unit: 404



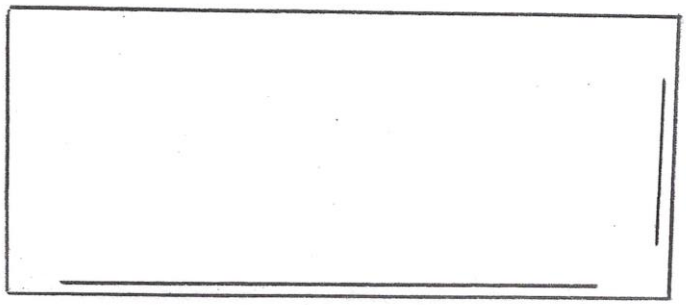
Shutter

Seal wet zone on LR SGD

Seal Light / receptacle

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV
Unit: 405

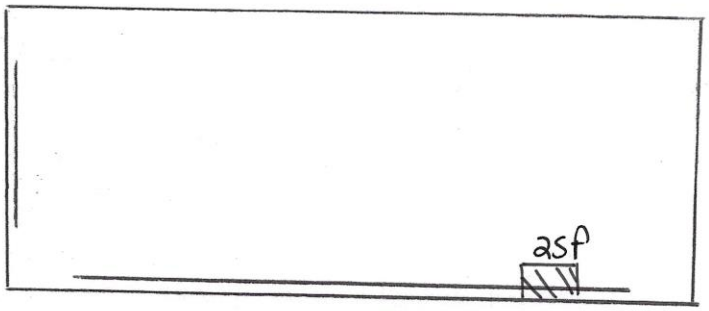


Newer Vinyl SGD's

Seal Light / receptacle

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV
Unit: 406



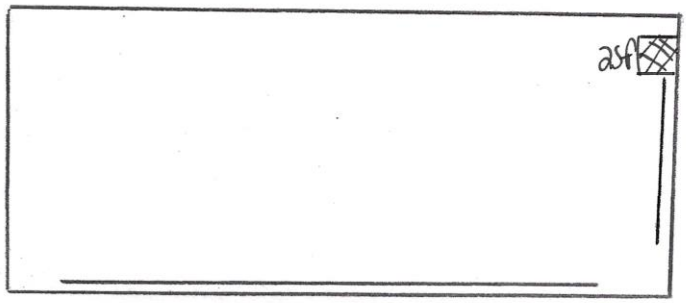
Shutter

LR- Vinyl SGD + Window

MBR- original SGD unsealed wet zone

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV
Unit: 407



Shutter

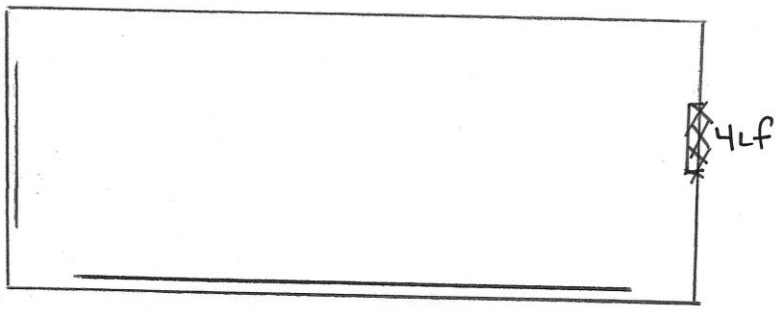
Newer Vinyl SGD's

CWS Vinyl Window missing pushplugs

Seal Loose light

KEYSTONE ENGINEERING & CONSULTING, INC.

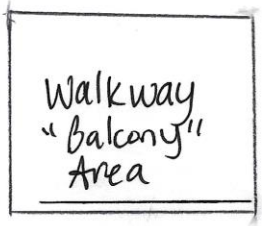
Sand Dollar IV
Unit: 408



Shutter

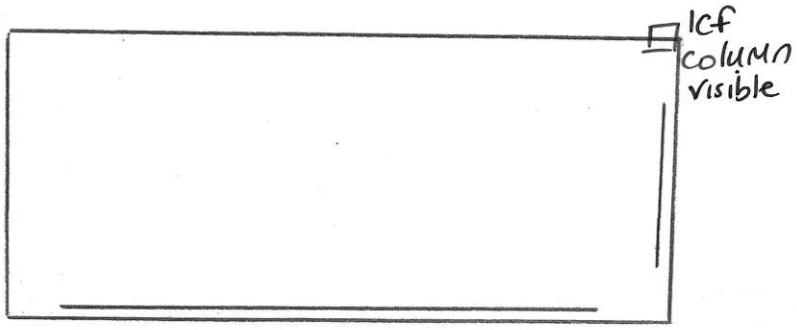
Aluminum SGD's wet zone unsealed and missing fasteners

Seal Light / receptacle



KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV
Unit: 301



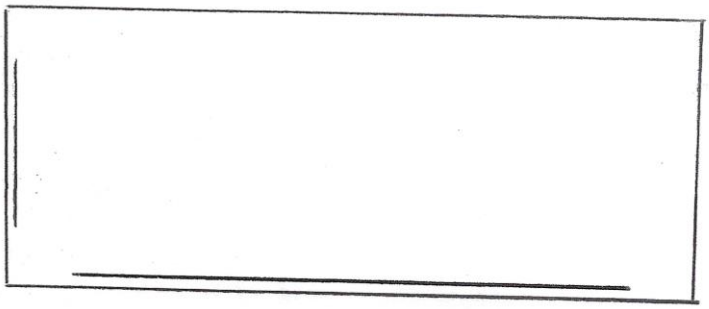
Shutter

SGD's Vinyl

Seal Light/receptacle

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV
Unit: 302



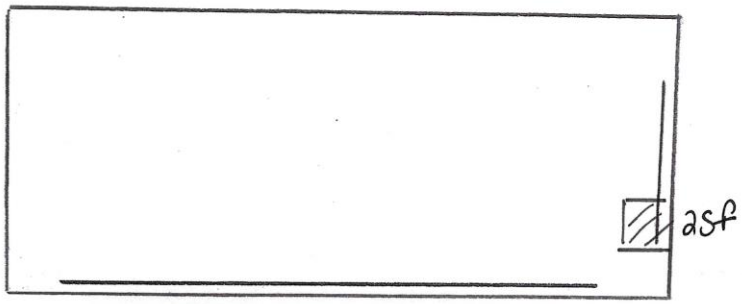
Shutter

SGD's Vinyl Silicone Around doors - LR Window - Window World

Light /receptacle not Sealed

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV
Unit: 303



Shutter

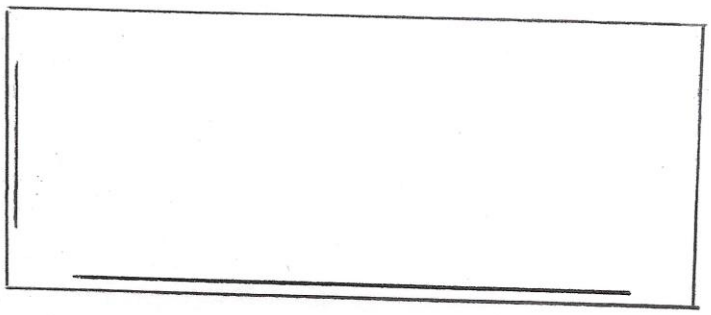
Newer Vinyl SGD's wet zone unsealed

Reseal receptacle & Light

LR Window - Window World missing sealant around frame, missing push plugs.

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV
Unit: 304



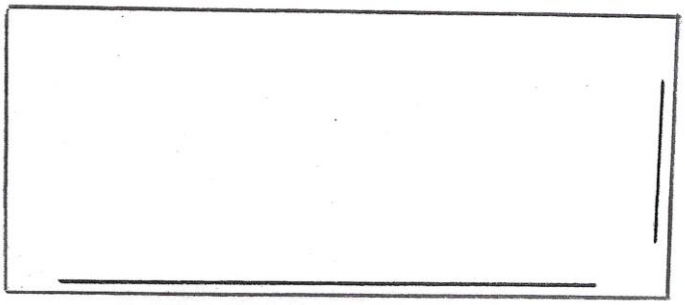
Shutter

SGD's Aluminum

Seal Light & Receptacle

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV
Unit: 305



Shutter

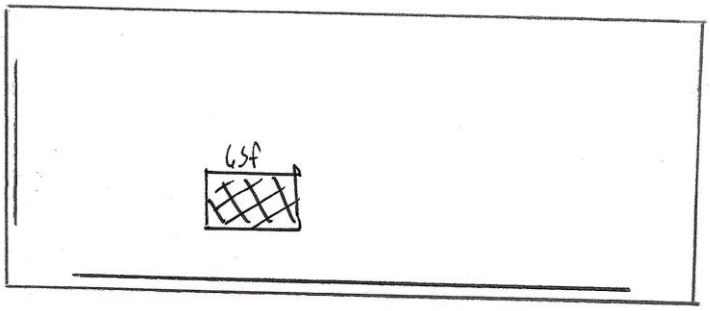
Vinyl SGD's

LR Window Vinyl PGT unsealed or failed Sealant & missing push Plugs

Seal Light / receptacle

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV
Unit: 306



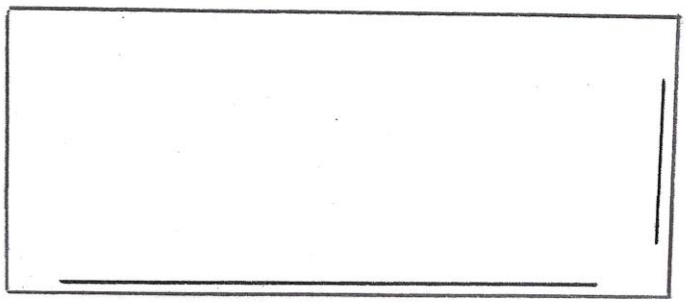
Shutter

SGD's original wet zone not sealed

LR Window PGT Vinyl

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV
Unit: 307



Shutter

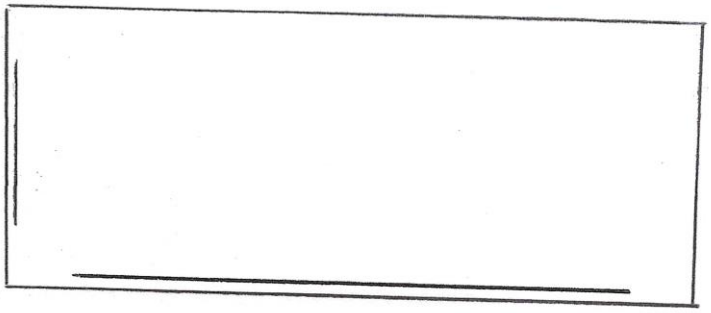
Original SGD's holes in threshold + wet zone unsealed

LR Window PGT Missing Push Plugs +

Sealant around perimeter

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV
Unit: 308

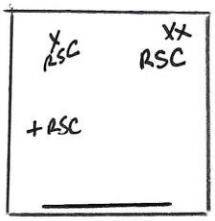


Shutter

SGD's Vinyl

MBR Window Vinyl - Seal around perimeter

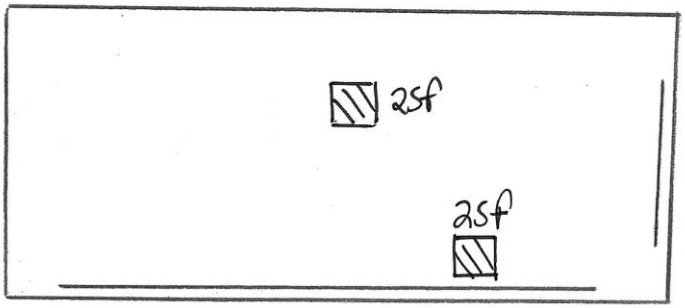
Seal Light / Receptacle



Vinyl SGD

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV
Unit: 201

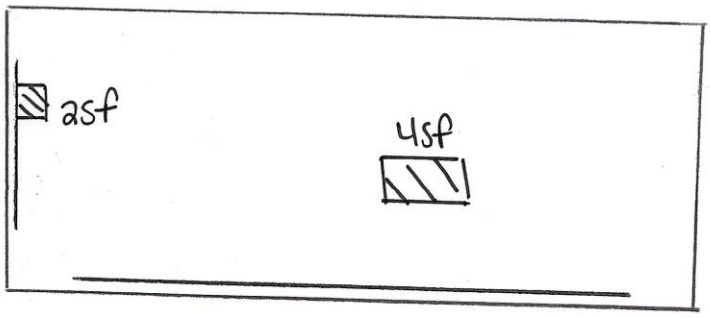


Shutter

SGD's Aluminum - Wet zone unsealed

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV
Unit: 202



Shutter

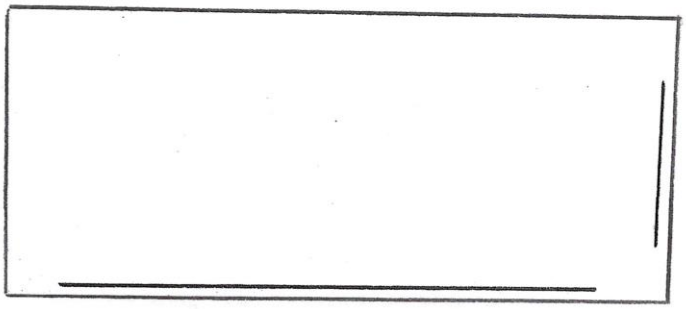
SGD's Vinyl Appear LR Wall has water intrusion (Drywall out)

LR Vinyl Window missing push plugs

Seal Light / receptacle

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV
Unit: 203



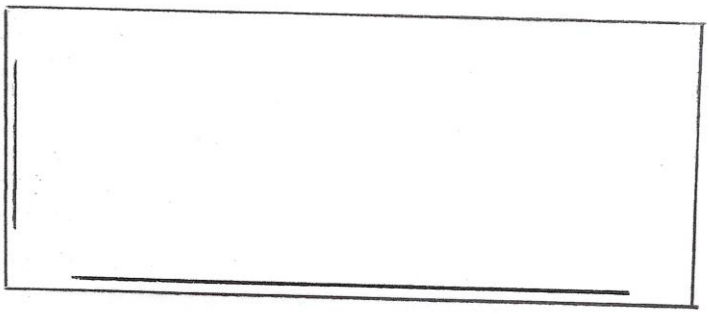
Shutter

SGD's - Vinyl

Seal Light / receptacle

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV
Unit: 204



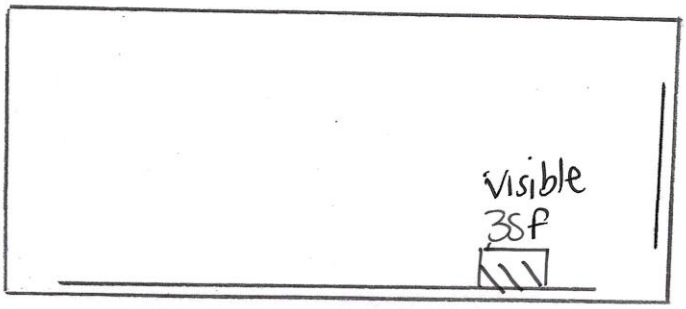
Shutter

SGD - Vinyl Missing Push Plugs / Perimeter Sealant

Window LB Vinyl Missing Push Plugs / Perimeter sealant

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV
Unit: 205



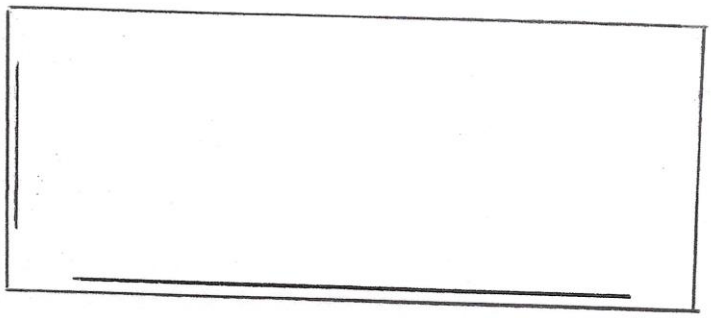
Shutter

Original SGD's Wet zone unsealed - both thresholds are oxidized and have holes

LR has signs of water damage in Corner (east ceiling)

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV
Unit: 206



Shutter

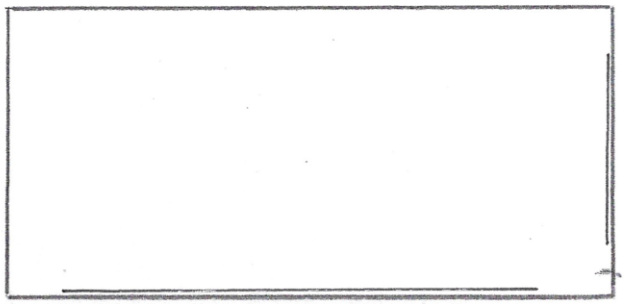
SGD's Vinyl

LR Window Push Plugs Missing & unsealed

Seal Light/receptacle

Sand Dollar IV

Unit: 207

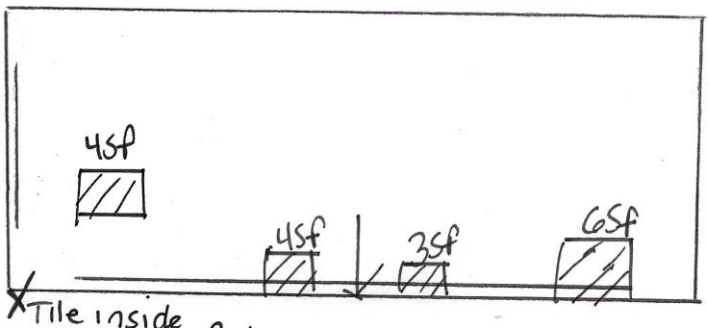


Shutter

Original SGD's - holes in threshold

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV
Unit: 208



Shutters

SGD's Vinyl

LR window missing push plugs

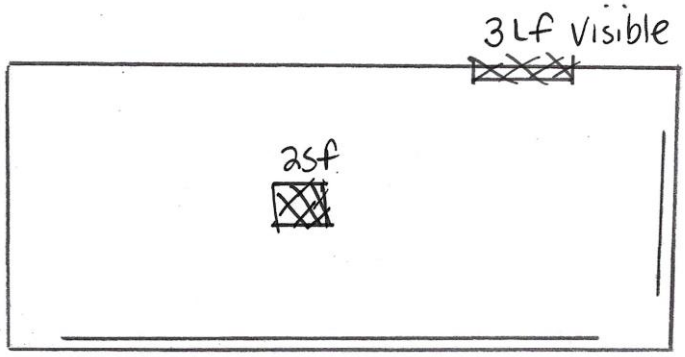
Seal light/Receptacle

* Possible Encroachment *

Vinyl SGD Sealant Alligatored - replace

KEYSTONE ENGINEERING & CONSULTING, INC.

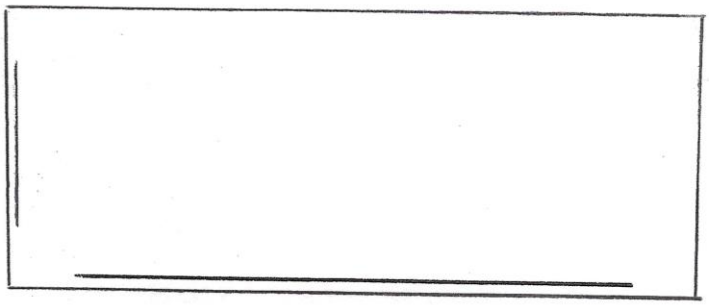
Sand Dollar IV
Unit: 101



Tile on deck
original SGD's wet zone unsealed

KEYSTONE ENGINEERING & CONSULTING, INC.

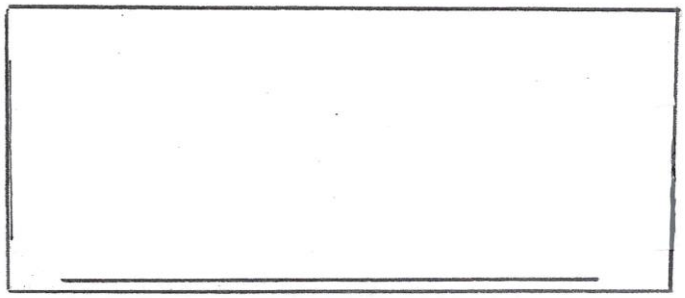
Sand Dollar IV
Unit: 102



original SGD's wet zone unsealed
(Bed room Slider has holes in threshold)

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV
Unit: 103

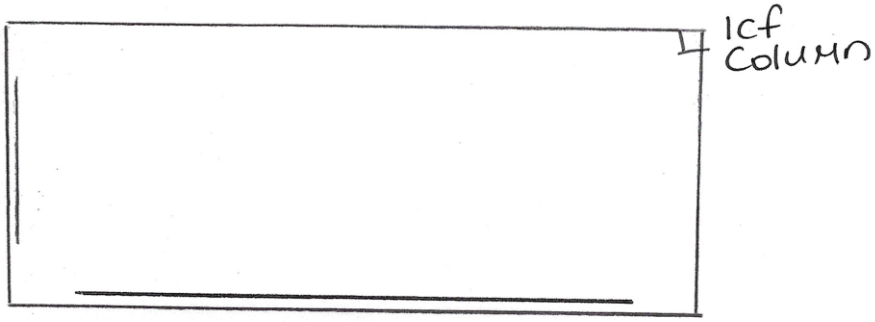


Newer SGD's

LR Window Wet zone unsealed

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV
Unit: 104

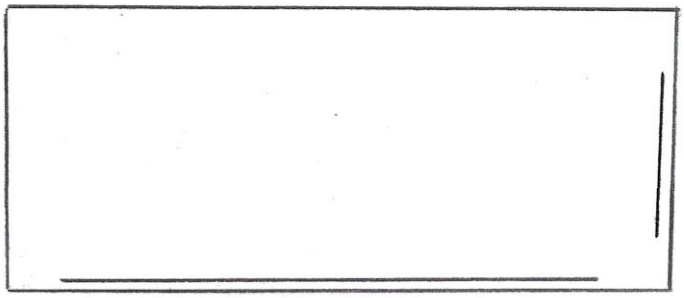


Shutters

SGD's original Wet zone unsealed

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV
Unit: 105

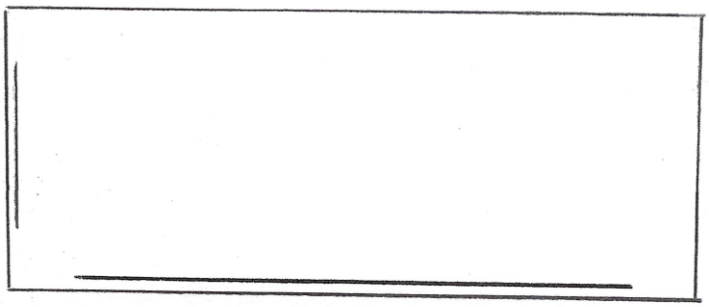


LR SGD original holes in threshold & Unsealed Wet zone

MBR SGD Vinyl Shutters

KEYSTONE ENGINEERING & CONSULTING, INC.

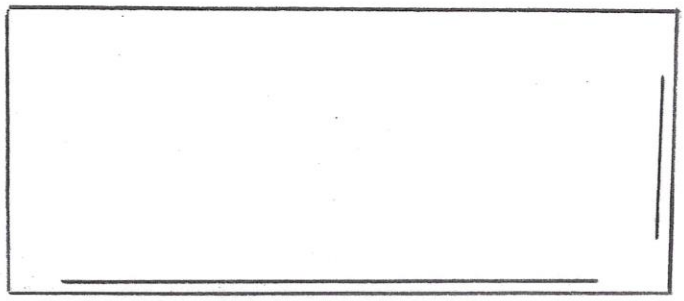
Sand Dollar IV
Unit: 106



SGD's Vinyl

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV
Unit: 107



Shutters

SGD LR Vinyl

SGD MBR Aluminum wet zone unsealed

KEYSTONE ENGINEERING & CONSULTING, INC.

Sand Dollar IV
Unit: 108

Tile

Shutters

SGD's Vinyl

Sand Dollar IV

Walkways/Exterior Walls of Inspection

5th floor

- South end at elevator lobby 1cf column

4th floor

- Entry door of Unit 404 1 minimum overhead concrete repair
- Entry door of Unit 406 (2) 2sf each visible surface spalls

3rd floor

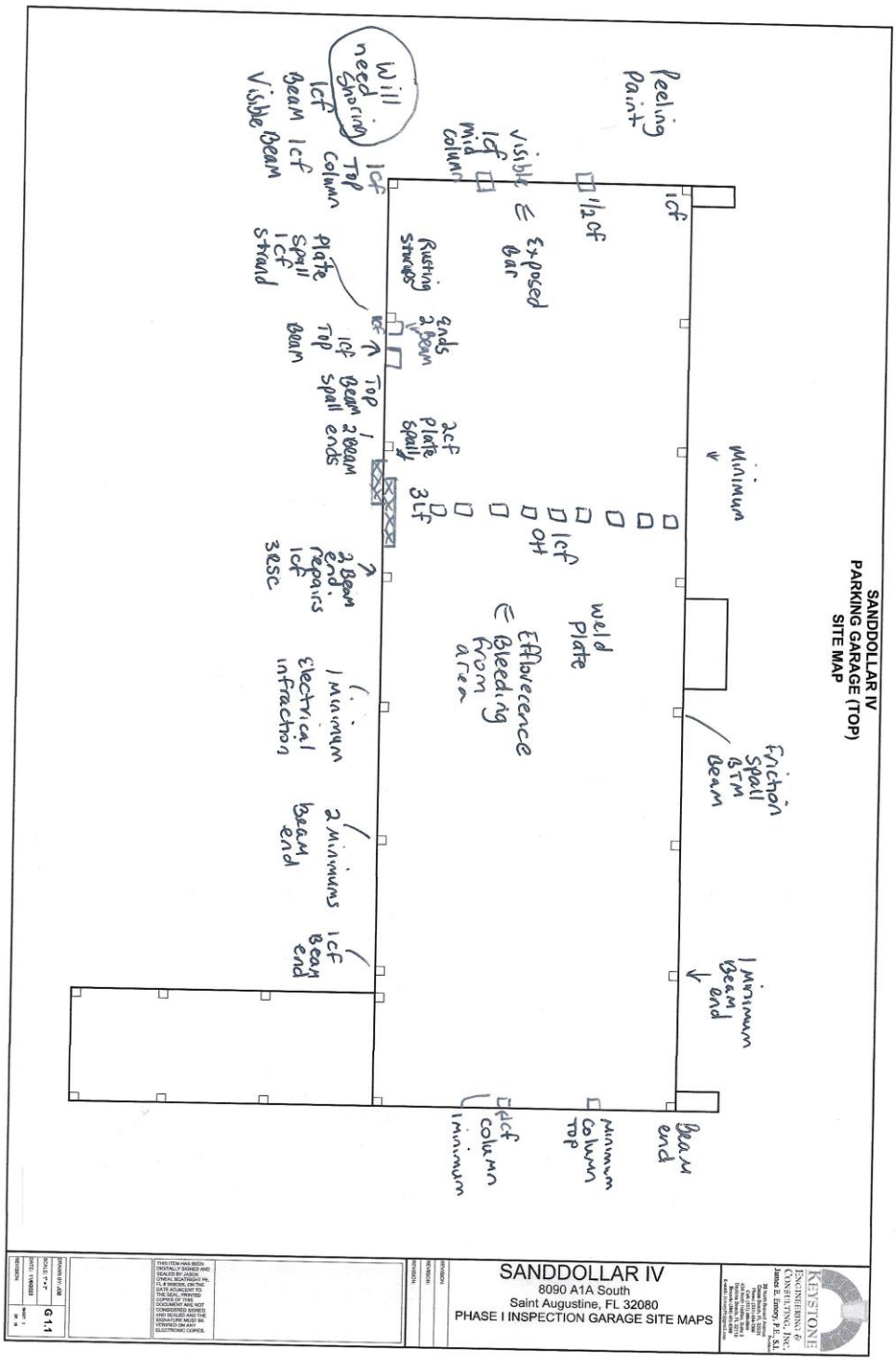
- In front of Unit 304 (1) 4sf visible surface spall
- Unit 305 seal break metal, mullions and perimeter of windows
- In front of Unit 306 entry door 1sf overhead spall
- Unit 306 perimeter around windows is unsealed
- Elevator/storage 2lf overhead spall at edge in previous repair

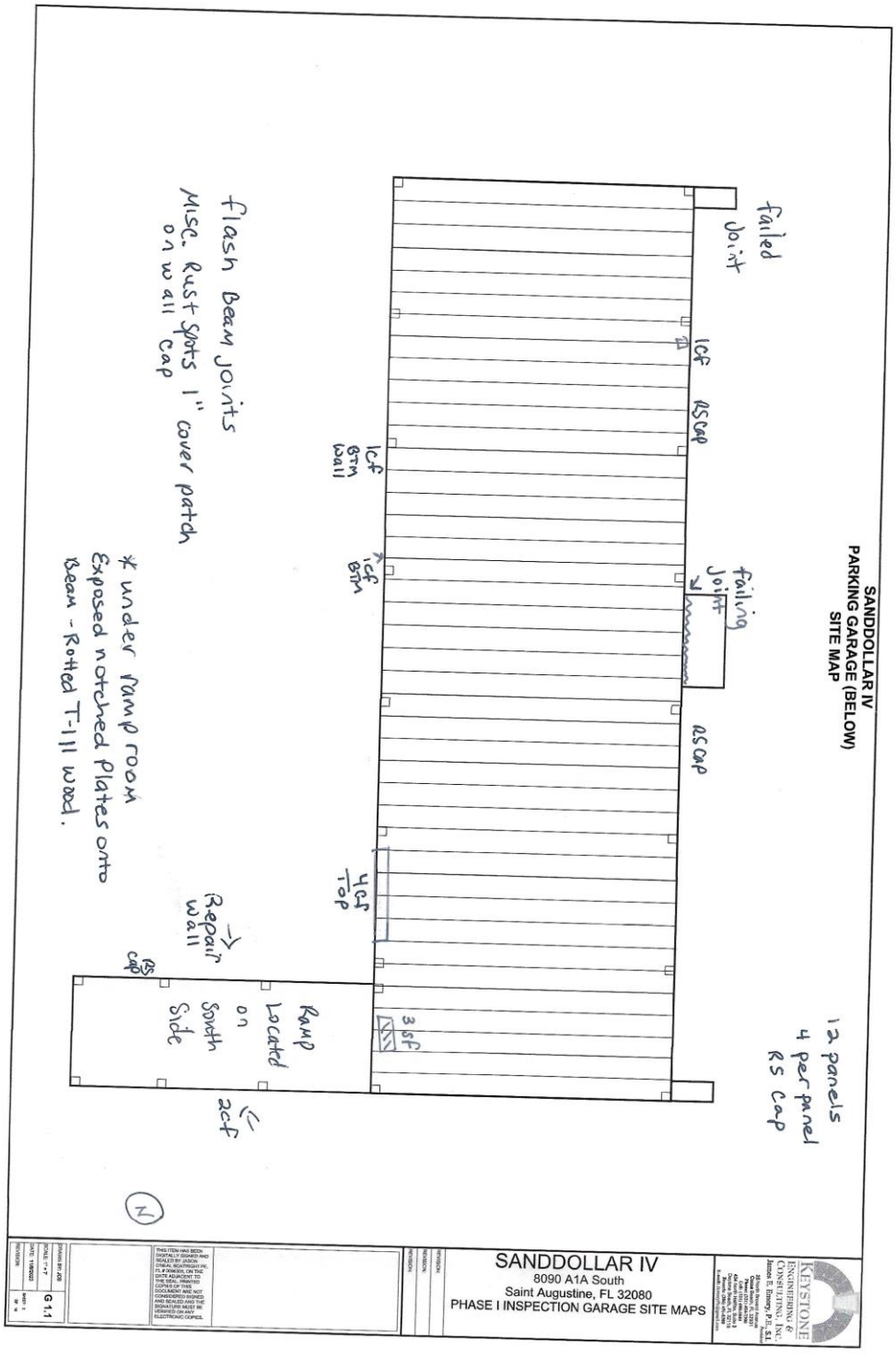
2nd floor

- Unit 203 near entry door 2sf surface spall visible
- Under Unit 203 north window 4sf visible surface spall
- Under Unit 203 south window 4sf visible surface spall
- Between Unit 203 south window & Unit 204 north window (2) 2sf each visible surface spalls
- At edge of walkway, across from Unit 204 south window 3lf overhead visible spall
- In front of Unit 207 (2) visible surface spalls- 3sf and 4sf

1st floor

- At elevator lobby area 2cf visible at the bottom of the wall
- At the elevator lobby 2lf of overhead visible edge spall
- At Unit 108 south window 2sf surface


SANDDOLLAR IV
PARKING GARAGE (TOP)
SITE MAP
Peeling Paint
Will need Spalling
ICF Top Column
ICF Beam ICF
Visible Beam
Visible ICF Mid Column
1/2 of ICF
Exposed Bar
Rusting Stirrups
Ends 2 Beam
ICF Top Beam
Plate Spall ICF Strand
Top Beam 2 Beam ends
2CF Plate Spall
3LF
Minimum
ICF OH
Weld Plate
Efflorescence Bleeding From area
2 Beam end repairs ICF 30SC
1 Minimum Electrical Infraction
2 Minimums Beam end
ICF Beam End
Friction Spall BTM Beam
1 Minimum Beam End
Beam end
Minimum Column Top
1 Minimum
SANDDOLLAR IV
8090 A1A South
Saint Augustine, FL 32080
PHASE I INSPECTION GARAGE SITE MAPS
KEYSTONE ENGINEERING & CONSULTING, INC.
James E. Linsey, P.E., S.I.
G1.1


SANDDOLLAR IV
PARKING GARAGE (BELOW)
SITE MAP
failed Joint
ICF RS Cap
ICF BTM wall
ICF BTM
failing Joint
RS Cap
ICF TOP
flash Beam Joints
Misc. Rust Spots 1" cover patch on wall Cap
* under ramp room Exposed notched plates onto Beam - Rotted T-111 wood.
Repair wall
RS Cap
Ramp Located on South Side
3SF
2CF
12 panels 4 per panel RS Cap
SANDDOLLAR IV
8090 A1A South
Saint Augustine, FL 32080
PHASE I INSPECTION GARAGE SITE MAPS
KEYSTONE ENGINEERING GROUP CONSULTING, INC.
G 1.1

CONCEPTUAL BUDGET

5/11/2024	Sand Dollar IV *Single Phase Full Cycle				
	Bid Item	Estimates	Unit Cost		Extended Cost
Unit Rate Repairs*Includes all Structures of the Facility					
1a	Minimum Concrete	105	$ 425.00	EA	$ 44,625.00
1b	Edge Spall Repair	90	$ 240.00	LF	$ 21,600.00
1c	Surface Spall Repair	160	$ 210.00	SF	$ 33,600.00
1d	Overhead Spall Repair	80	$ 450.00	SF	$ 36,000.00
1e	Column, Beam, Wall Spall Repairs	45	$ 525.00	CF	$ 23,625.00
1f	Full Depth Spall Repair	30	$ 450.00	SF	$ 13,500.00
1g	Rust Spot Repair	75	$ 38.00	EA	$ 2,850.00
1h	Stucco Replacement Masonry Miscellaneous	750	$ 30.00	SF	$ 22,500.00
1i	Stucco Replacement Lath Miscellaneous	400	$ 75.00	SF	$ 30,000.00
1j	Rout/Seal Crack Treatment Building	300	$ 20.00	LF	$ 6,000.00
1k	Hardwall Barricade *Interior 14LF	3	$ 1,600.00	EA	$ 4,800.00
1l	Exterior Barricade *Windowsill Repair	2	$ 900.00	EA	$ 1,800.00
1m	Softwall Barricade	3	$ 400.00	EA	$ 1,200.00
1n	Profiling/Leveling for Ponding	250	$ 35.00	SF	$ 8,750.00
1o	Strip/Cleanup Loose Paint/20MIL	400	$ 5.50	SF	$ 2,200.00
1p	Miscellaneous Fasteners	75	$ 28.00	EA	$ 2,100.00
1q	Miscellaneous Sealant Polyurethance	900	$ 11.00	LF	$ 9,900.00
1r	Polyurethane Build Coat at Deck Repairs	250	$ 8.50	SF	$ 2,125.00
1s	Windowsill Spall Repair	50	$ 135.00	LF	$ 6,750.00
1t	Steel Framing Replacement *8' Minimum	20	$ 135.00	LF	$ 2,700.00
Fixed Cost					
2	Mobilization & General Conditions	1	$ 125,000.00	LS	$ 125,000.00
3	Prepare/Paint all Exterior Surfaces of the Main Building, Parking Structure, Three Bridges, Attached Walls and Curbs, Concrete, Stucco, of the all Structures of the Facility with One Coat Sherwin Williams Guidecoat Conditioner and One Coat SuperPaint 100% Satin Acrylic. Provide 7-year Manufacturer's Warranty *Excludes all Sliding Glass Doors, Unit Entry Doors and Windows, Prefinished Products, Lighting, Aluminum or Steel Elements.	1	$ 155,000.00	LS	$ 155,000.00
4	Prepare all Elevated Walkway, Bridges, & Balcony Surfaces and Apply Two Coats Non-skid Acrylic to Match Existing Color.	1	$ 89,000.00	LS	$ 89,000.00
5	Prepare all On-Grade Lower Level Walkway & Patio Surfaces and Apply Two Coats Non-skid Acrylic.	1	$ 16,500.00	LS	$ 16,500.00
Allowances					
6	Guard Rail Maintenance Allowance	1	$ 9,000.00	LS	$ 9,000.00
7	Spandral, Tee and Bridge Angle Allowance	1	$ 45,000.00	LS	$ 45,000.00
8	Electrical Allowance	1	$ 2,000.00	LS	$ 2,000.00
9	Lawn, Landscape, Irrigation Allowance	1	$ 2,500.00	LS	$ 2,500.00
	CONCEPTUAL BUDGET		**$**		**720,625.00**
	CF = Cubic Foot; LF - Linear Foot; SF = Square Foot; EA = Each; LS = Lump Sum				

Understand this budget is intended for discussion and planning purposes only and not for budgeting. Keystone recommends the association not secure funds until the costs are finalized from soliciting formal proposals from pre-approved general contractors based upon the timing and the scope of work decided upon.
We also suggest a contingency of 10% or $72,000 for hidden and unknown conditions.