



Office of the Commissioners

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For Immediate Release
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PNC Field Stadium Study Released

Scranton, PA – Today the Lackawanna County Commissioners released a Facility Assessment Report of PNC Field prepared by Ewing Cole, a well-known stadium architectural firm who was retained as a subcontractor by the County's baseball negotiating team to complete the structural component of a stadium study.

The report by Ewing Cole assessed the stadium's general structure and the mechanical, electrical, plumbing and fire protection systems. Ewing Cole also conducted assessments of the stadium in 1994 and 1997. The 2009 report found few serious infrastructure and/or building system problems that were obvious, aside from the need to begin replacement of the aging MEP (mechanical, electrical, plumbing) equipment, much of which is approaching, or has already reached, the end of its service life.

The most notable issue was damage due to moisture and water infiltration, which was evident throughout the facility and is common in outdoor stadiums. SWB Yankees currently spends much time and money addressing the issues caused by water. The report notes that many of the stadium's ongoing maintenance issues will disappear if effective measures are taken to remedy the moisture and infiltration issues. The other significant issue found was concrete deterioration, particularly around railings. Many of the recommended immediate and short term repairs address the concrete deterioration issue.

While Ewing Cole recommends improvements totaling approximately \$13 million over the long-term, Craig J. Schmitt of Ewing Cole said that "the stadium is in relatively good and safe condition considering its age of 20 years." The \$13 million does not include: 1) an assessment of the playing surface; 2) soft costs that typically average between 8 percent and 10 percent of the total project cost; or 3) potential fan experience enhancements.

The Commissioners have requested that the Lackawanna County Multi-Purpose Stadium Authority fund the immediate recommended repairs totaling approximately \$157,200 this year out of the Authority's operating budget. The Authority was also urged by the Commissioners to place the project out to bid as soon as possible so that the repairs can be completed in a timely fashion.

The Commissioners will discuss the remaining three phases of capital improvements with SWB Yankees, LLC, a joint venture between Mandalay Baseball Properties and the New York Yankees. "We remain committed to two core principles. We are committed to keeping baseball in Lackawanna County forever. We maintain that the current economic conditions preclude construction of a new stadium at this time," Commissioners O'Brien and Washo said.

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INTRODUCTION

Purpose of the Assessment Report

EwingCole was engaged to prepare a written report assessing the existing conditions of the multi-purpose stadium facility. Specifically, EwingCole was asked to assess the general structure and the mechanical, electrical, plumbing and fire protection systems. We were not asked to review the conditions of the interior spaces; however, we included a partial condition assessment of the suite and press interior finishes (only) because of the extensive deterioration and damage due to water infiltration from above.

Prior Condition Assessments

In 1994, EwingCole was engaged to provide a report addressing the general conditions of the facility in response to the minimum baseball facility requirements as set forth in the Professional Baseball Agreement (PBA) then recently established by the Major League Baseball and the National Association of Baseball Leagues. The report also addressed general facility maintenance needs in order to provide for continued safe and cost-effective operations of the facility.

In 1997, EwingCole was again engaged to provide an update to the 1994 assessment report. A team of Architects and Engineers toured the facility in October 1997 and met with county representatives to review the status of conditions.

Our findings in the 1997 visit indicated that all of the recommended repairs, noted as **Immediate and Near Term**, had been addressed, with one exception. The report from 1994 indicated several issues related to the stadium expansion joints. The two most severe concerns were corrected, where broken concrete below the expansion was observed to be loose; however, our then recommendation that a more extensive study be undertaken to review all expansion joints to assess their condition and proper function was never done.



Contents of this Report

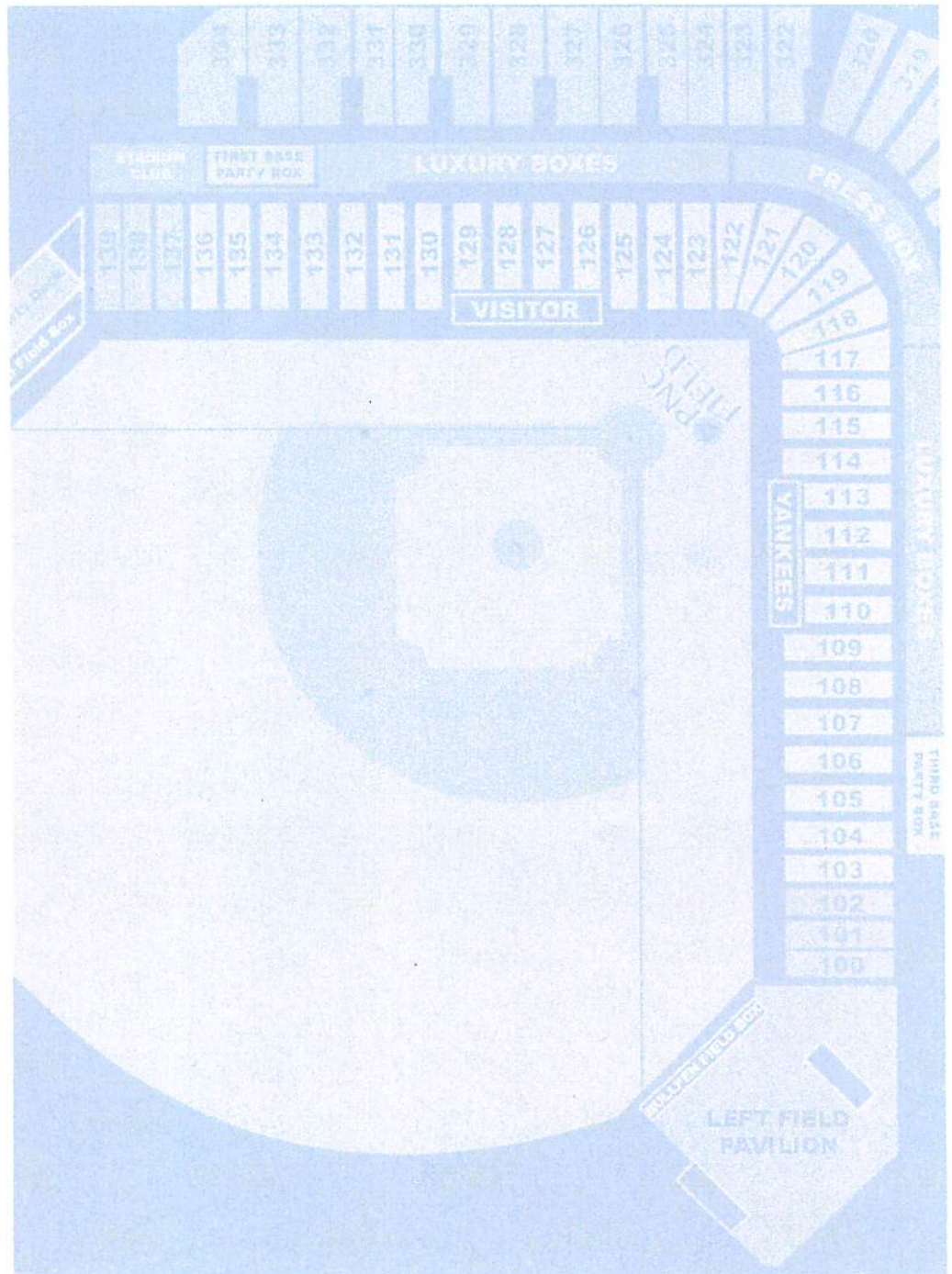
An **Executive Summary** is included at the beginning of this report which highlights the team's findings and recommendations for the architectural, structural, mechanical, electrical and plumbing systems repair and/or maintenance.

Following the **Executive Summary** is a section titled **Present Conditions**. That section generally describes each of the building systems based on our observations, on our review of the available record drawings, and on information provided directly from the engineering and maintenance personnel, and includes an assessment of its present condition. Representative photographs are included within the body of this section to better illustrate many of the conditions observed. **It should be noted that the photographs do not fully document each condition observed. They are not intended to be a complete record for the recommended repairs; rather, a thorough investigation is warranted for each condition cited in the report prior to establishing the full extent of the remediation procedures, especially if the remedial work is to be bid.** The recommendations made are categorized by level of importance, the definitions of which are described at the beginning of that Section.

Lastly, the report also includes sections titled **Maintenance of Capital Equipment** and **Capital Improvement Budget**. These sections include charts, by discipline, listing the major building systems found in the stadium facility. The charts list the quantity of the system components, the life expectancy of the component and the remaining service life left. These sections are intended to assist the Stadium Authority in understanding the capital costs associated with the long term care of the facility. These sections are particularly important now that the facility is 20 years old and many of the building systems are nearing the end of their service life. The estimated budget costs are in 2009 dollars.



The estimated costs provided include construction costs only. Soft costs, such as design and/consultant fees, construction staging (i.e. temporary utilities and moving), insurance, and financing are not included. The costs should be considered an estimated "order of magnitude" for budgeting purposes. Actual costs will be contingent on the final work scope, including actual equipment specifications, as well as the method of acquisition of construction services, size of the project, and bidding climate.



EXECUTIVE SUMMARY

In general, the stadium is in relatively good condition considering its age of 20 years. There appear to be few serious infrastructure and/or building system problems that were obvious, aside from the need to begin replacement of the aging MEP equipment, a lot of which is approaching, or has already reached, the end of its service life.

Moisture and Water Infiltration

The most notable issue observed, which was widespread throughout the facility, was that of damage due to moisture and water infiltration.

Water infiltration is a common nemesis in outdoor stadia due to their inherent designs whereby indoor spaces are often located below outdoor concourses or the seating bowl. In essence, the concourse or seating bowl becomes the roof of the indoor space. If the sealed joints in the concrete slabs and precast seating tiers are not maintained, they will leak. There can be literally miles of caulk joints in outdoor stadia, so it is no easy task to maintain them free of leaks.

The typical culprits for water infiltration in outdoor stadia are: failure of the concourse and seating bowl sealant joints (including the expansion joints), an inadequate number of concourse drains and lack of positive slope to concourse and/or bowl drains. All three of these conditions were observed at Lackawanna County stadium.

The signs of water damage and deterioration were evident throughout the facility. The building engineering staff reportedly spend a lot of time and money addressing the various issues caused by water. For example, they said they maintain stockpiles of ceiling tiles for the suites because they have to replace water-damaged ceiling tiles before nearly every game during the season.



The damage caused by moisture and water infiltration is cited throughout the assessment report. If effective measures are taken to remedy the moisture and infiltration issues alone, many of the ongoing maintenance issues will go away.

Concrete Deterioration

Beyond the issues associated with moisture and water infiltration, there is one issue observed that is an unsafe condition for occupants, that of cracked and spalled concrete at the base of railing posts. This issue was cited in our 1994 report, and continues to be an ongoing maintenance issue. Some of the railings are loose, and efforts over the years to properly patch the deteriorated concrete have had only limited success. This issue is more fully described in the **Structural** section of the **Present Conditions** part of this report. Consideration should be given to changing the railing anchor detail if there is any hope of permanently fixing this problem.

In addition to the need to begin replacement of the aging MEP systems, and the need to address the two prevalent issues described above, the following list highlights our observations that require either Immediate or Short-term attention:

- Removal and replacement of steel pipe guardrails along right field party deck.
- Investigate and/or remove loose concrete.
- Inspection of sports light pole masts and base plates.
- Replacement of wooden stair rail to the roof of the right field bullpen.
- Remediation of exposed concrete reinforcement at isolated locations within the precast concrete seating tiers.
- Removal of stored materials in the Main Electrical and Emergency Generator Rooms.
- Replacement of water-damaged electrical panelboards serving the outfield sports lighting and scoreboards.
- Replacement of water-damaged electrical conduit, feeders and devices in locations noted as having significant water damage.



- Replacement of outdoor receptacles with code compliant GFCI rated devices and covers.
- Replacement of water-damaged light fixtures in Press area.
- Redirection of storm water in vicinity of dugouts.
- Addition of condensate collection system for through-wall heat pumps serving the suites.
- Increase central water heating recovery capacity.
- Addition of backflow prevention devices on the domestic water system.
- Addition of an expansion tank for central water heating system.
- Addition of grease interceptors at pot sinks and pre-rinse sinks in the Commissaries, Kitchens and Concession stands.
- Changing of the prep sink drain configuration from direct-waste to indirect-waste.
- Testing of dry sprinkler system piping for Microbial Induced Corrosion.
- Replacement/Addition of pressure/flow switches on each fire sprinkler protection service line.

A description of the stadium systems and observations of existing conditions follows in the section titled, **Present Conditions**.

LACKAWANNA COUNTY STADIUM CAPITAL IMPROVEMENT BUDGET

SUMMARY OF ESTIMATES

(Totals for Immediate, Short-term, Near-term and Long-term Improvements)

| | |
|---|----------------------|
| Architectural and General Facilities..... | \$ 5,054,310 |
| Structural..... | \$ 1,228,900 |
| Electrical..... | \$ 6,227,380 |
| Mechanical..... | \$ 535,380 |
| Plumbing and Fire Protection | \$ 216,560 |
| <hr/> | |
| TOTAL | \$ 13,262,500 |

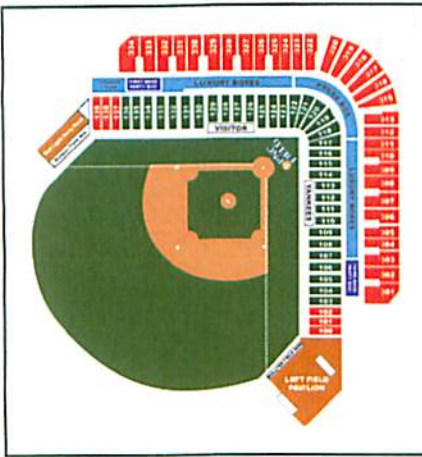
Note: All totals include a 25% contingency for unforeseen conditions, market fluctuation and construction schedule.



BACKGROUND AND METHODS

Background

The Lackawanna County Multi-Purpose stadium opened in April, 1989 and is now 20 years old. The Class AAA facility has a seating capacity of +/-10,500 seats. The stadium's design mimics that of Philadelphia's multi-purpose Veterans Stadium, circa 1970, only to a smaller scale and capacity.



The facility is comprised of the main grandstand structure, and several smaller, independent structures added after 1989. The structures are more fully described in the **Architectural** section of this report. The scoreboard and display structures and outfield wall are independent structures.

The team's administrative and operations offices are located on the ground floor of the stadium.

An addition completed in 2005 provided new locker room facilities for the home team. The visiting team now uses the former home team locker room facilities. Consequently, the home and visitor's team locker room facilities are better than comparable facilities.

The site is comprised of asphalt paved and gravel parking lots with concrete curbing and sidewalks, and small masonry entrance/toll structures. The parking lots have lighting and are adequately graded for drainage.

The stadium is currently home to the AAA Scranton Wilkes-Barre Yankees. The facility is owned by the Lackawanna County Stadium Authority and operated by the current tenant.

Methods Used to Develop This Report

A team comprised of Architects and Structural, Mechanical, Electrical and Plumbing Engineers from EwingCole toured the facility 3 times in January, February and April 2009. The first 2 tours were aided by several maintenance and facilities representatives of the current facility operator, including Jeremy Ruby and Curt Camoni of Scranton Wilkes-Barre Yankees, LLC.

Note that the EwingCole team requested record drawings and specifications of the existing facility as an aid to better understanding the facility, but only a limited amount of documentation was available. We were told most of the record documents were badly damaged by water and were no longer available. We were also told the City had no available permit records on file. Without record drawings and specifications, a complete understanding of the building systems is impossible.



PRESENT CONDITIONS (INTRO)

To better serve Lackawanna County in the planning and implementation of the recommendations contained within this report, the assessment of existing conditions observed have each been evaluated and assigned a level of priority. The priority levels are defined as follows:

Immediate:

- (I) Describes a condition which currently poses an increased risk of liability. This priority level also includes areas of concern which require more extensive investigation; and based on our general observations, could possibly result in system failure, if not addressed during the current (2009) baseball season.

Short-term:

- (ST) Describes a condition which, if not addressed within the next 12 months, has a high potential of becoming an Immediate condition. The remediation implementation program for these items should be in place, and work ready to commence, immediately following the 2009 baseball season.

Near-term:

- (NT) Describes a condition which is recommended to be addressed within the next 12 to 18 months in order to prevent existing system deficiencies from advancing to an Short-term level.

Long-term:

- (LT) Describes a condition which needs to be addressed, but does not present an operational problem in the short term. These conditions are low risk, but if the facility is to remain viable beyond the end of the 2011 baseball season, they should be addressed for continuous, long-term use of the facility for the benefit of the tenant and the public.



STRUCTURAL SYSTEMS

General Description

The existing structural framing system of the main building is a combination of precast and cast-in-place concrete, reinforced masonry, and structural steel. The structural elements are an integral part of the architectural design. They are left exposed in many areas and in conjunction with the various finish materials become part of the aesthetic fabric of the facility.

Main Structure

The foundation system includes spread footings at the columns, continuous wall footings and both cast-in-place concrete and reinforced masonry walls. These elements were to be founded on bearing material capable of supporting a minimum of two tons per square foot (4000 psf).

The first level, which includes the main entrance, administrative offices, team locker rooms, a concourse area with concessions and rest rooms, along with the stadium restaurant, is constructed on a 6-inch thick slab-on-grade placed on a 4-inch crushed stone base and vapor barrier. The seating tiers of the first level are constructed of 6-inch thick precast concrete multiple-tier units which typically span to and bear on 12-inch thick reinforced concrete block bearing walls. The bearing walls are founded on continuous wall footings which step down to the field level which is approximately twenty feet below the first level. At each end of the first tier seating, along the first and third base lines, the tiers are supported on steel framing to allow for space for mechanical and electrical equipment rooms. Also access passageways which connect the locker rooms to their respective dugouts are located below the tiers. The passageways continue as tunnels below the first level concourse and concessions where the roofs of the tunnels are constructed of concrete slabs-on-metal deck spanning between tunnel walls and/or steel framing beams.

The second level which houses luxury box suites and their support facilities are supported on a framing system of 10-inch precast prestressed hollow-core concrete plank with a minimum



two-inch concrete topping. These precast prestressed concrete elements span to steel framing beams and girders. The field side of the luxury box suites includes 6-inch thick precast concrete tiers which also span to steel framing. At this level there are also a number of low roof areas which are typically framed with open-web steel joist and rolled steel members. The roofing systems include standing seam metal roofing and a limited amount of membrane roofing, which are supported on 1-1/2-inch steel roof deck. There is also a relatively limited area of metal deck supported slabs constructed of 3-inch metal deck supporting 3-inch normal-weight concrete slab (total thickness is 6 inches).

The third level concourse, concessions and support facilities are supported on a framing system similar to the second level, and is also constructed of 10-inch precast prestressed hollow-core concrete plank with a minimum two-inch concrete topping. These precast concrete elements span to supporting steel framing beams, as is the case at the second level.

The construction of the upper level seating area comprises 6-inch thick precast concrete multiple-tier units which span to steel framing. The lower horizontal connecting aisle has been coated with a protective coating. Along the upper horizontal connecting aisle the back wall is constructed with light-gauge metal louver system which spans between main columns.

The canopy roof, above the upper level seating area, is framed with plate girders which cantilever from the main building columns on line "C". Roof purlins of rolled steel sections span between the plate spans approximately 11'-8" to supporting steel beams. The ramp also includes 6-inch thick x 3'-0" high cast-in-place side walls which form side rails.

Miscellaneous Structures

There are a number of auxiliary elements which are separate structural systems. The first of these include the perimeter fence and bull pen areas which are constructed of pressure treated lumber and painted plywood. Second, there are the sign supports beyond the outfield fence in center field. These message and score boards are supported on steel angle truss frames which

are bolted to concrete piers. The electrical equipment which serves the boards is enclosed in masonry walls supporting wood truss framing and plywood roof deck. Finally, just beyond the driveway, along the right field fence, a prefabricated metal building houses a "batting tunnel". It is approximately 80 feet by 24 feet in plan dimension and 16 to 20 feet in height and had been added to the original facility prior to the 1993 baseball season.

Observations and Recommendations

Immediate Structural Work

- 1) The right field party deck is a wood deck surface built over a concrete slab on metal deck structure supported by steel bar joists. The perimeter of the concrete slab on metal deck edge is formed by an exposed bent steel plate. Perimeter painted steel guardrail posts are set in sleeves within the slab on metal deck directly against the perimeter bent plate. The bases of the perimeter rails are extremely corroded (See Photo S-1). It appears that the corrosion has initiated scaling of the steel material. Visual observation does not allow a determination of the full extent of the corrosion because the rails are set in sleeves within the concrete. The immediate concern is that the corrosion has advanced to an extent where loss of the section has occurred. Section loss results in reduction of the structural capacity of the vertical posts. This is considered a safety concern and should be addressed immediately. It is recommended that the steel rails be removed and replaced. Upon removal of the rails, inspection of the surrounding concrete will be required to determine if additional remedial work is required prior to setting new rails.



Photo S-1



The tent structure above the party deck is attached to the vertical posts of the guardrail, so the tent structure will need to be removed to replace the vertical posts of the guardrail. The wood deck also obstructs access to the base of the vertical posts and areas of decking may need to be removed to replace the posts.



2) Concrete spalls were observed in several locations where the surrounding concrete is actually loose and could be dislodged. These conditions were observed in four areas - the concrete parapet wall at the outer perimeter of the upper concourse, at rail locations within the Suites, within the upper bowl at rail locations and within the lower bowl at aisle step locations. A thorough review of the concrete surrounding guardrail base locations should be conducted and any conditions with loose concrete should be repaired immediately.



3) Several of the outfield single mast signage and light pole structures require remediation of the anchorage connection at the base of the mast. The following conditions were observed:

- a. Some anchor rods have double nuts. This is considered good detailing practice to prohibit loosening of the lowest nut. In several locations, the upper nut has been loosened (or was never tightened). In these conditions, the upper nuts should be tightened onto the lower nut.
- b. Some anchor rods are missing washers and the nut is bearing directly against the base plate. This is considered poor detailing practice as the washer bridges the distance between oversized holes in the base plate and the bearing surface of the nut on the anchor rod. In these locations, the nut should be removed and a washer added. This work should be performed on one anchor rod at a time in a sequential nature.
- c. Some anchor rods only have single nuts and it was observed that some of these conditions had loosened such that there was a gap between the nut and the washer on the base plate. All anchor rods with single nuts should be retightened and a second nut should be added where there is sufficient anchor rod projection to engage the second nut. At conditions where there is not sufficient anchor rod projection to engage a second nut, the threads above the single nut should be distressed to prevent loosening of the nut.





Photo S-2

- d. The bases of several masts are covered by earth (See Photo S-2). If the steel surfaces are buried directly below grade, they are more susceptible to corrosion due to prolonged moisture exposure. Localized regrading should be undertaken such that the base plates and anchor rods are exposed and water does not collect at the base.

Single mast signage and light pole structures experience continuous load reversals with changing wind direction. The base connections of the mast have historically been susceptible to failure and recent reports of light pole failures for light poles manufactured by a Texas based company have re-heightened awareness of the sensitivity of this connection. As described above, we observed several conditions where the anchorage connections are in question. Given these conditions, there is an increased likelihood that the base connections have experienced greater stress conditions than originally designed for. We recommend that a specialty inspection agency be hired to perform a comprehensive inspection of the base of each single mast structure. This inspection should include:

- Evaluation of welds at base plate to mast connection
- Evaluation of interior of bottom portion of mast for degradation due to corrosion
- Evaluation of exterior of bottom portion of mast for degradation due to corrosion and for any cracks in material
- Identify all missing washers and nuts that require tightening



Photo S-3

- 4) There is a wooden stair that allows access to the roof of the bullpen behind the right field wall. This stair exhibits movement as a single person walks the stair and overall is in poor condition (See Photos S-3, S-4). The handrail is also insufficiently attached to the stair. This stair is considered unsafe and should be removed and replaced with a properly engineered stair.



Photo S-4

Short-term Structural Work

- 1) **Spalled Concrete:** Structural remediation is required at locations where concrete has cracked and spalled at guardrail post locations and at cast-in-place concrete treads on precast tiers (see Photo S-5 to S-8). These conditions occur at various locations throughout the lower and upper seating bowls. The cracked and spalled concrete present safety and liability concerns due to potential of falling loose concrete, potential tripping hazards and compromised integrity of the rail anchorage.

The typical rail to concrete connection is a vertical post set in a cored hole in the concrete and packed with a cementitious material. In many cases the packing material is recessed relative to the surrounding concrete creating an area for water to collect (see Photos S-9 to S-12). Water penetrates the concrete and expands during freezing cycles resulting in concrete spalls between the vertical post and concrete edge. Many of these conditions appear to have been previously patched and are cracking and spalling once again. Repair of these conditions requires the removal of the loose material down to sound substrate along with concrete replacement through development of appropriate repair details. Proper detailing and installation of the cementitious packing material and cove sealant around the vertical post base to create positive drainage away from the post will be critical to maintaining the future integrity of the repair. Consideration should be given to surface mounting vertical rail posts to eliminate the cored hole condition that is currently creating a source of water penetration.





DAMAGED PRECAST
CONCRETE AT LOWER BOWL AISLE

Photo S-5



SPALLED CONCRETE
AT RIGHT FIELD
LOWER BOWL RAIL POST

Photo S-6



TYPICAL SPALLED CONCRETE
AT RAIL POST IN LOWER BOWL

Photo S-7



DAMAGED CONCRETE AT
SUITE LEVEL SEATING

Photo S-8



Photo S-9



Photo S-10

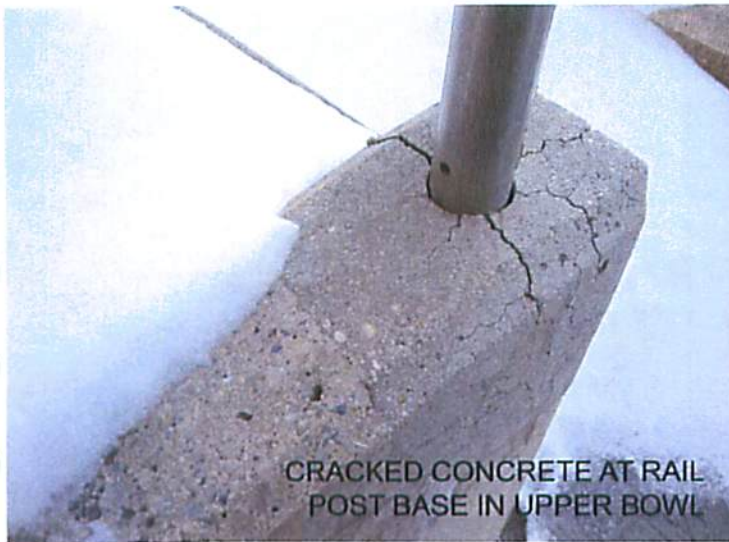


Photo S-11



Photo S-12



Photo S-13

- 2) **Rusted Reinforcing Steel:** Rusting of concrete reinforcement is evident at various locations throughout the upper and lower seating bowls where concrete spalls have occurred (see Photo S-13). At these conditions, the exposed reinforcing bars should be evaluated to determine if the corrosion has advanced such that loss of section has occurred. Where loss of section has occurred, remedial details will need to be developed to replace the damaged reinforcement. Where corrosion is limited to surface rusting, the exposed reinforcing bars should be cleaned and coated with a high quality corrosion protection product. The surrounding concrete should be cleaned and coated with a bonding agent and patched with an appropriate repair mortar. Reinforcing bars that are left untreated will continue the corrosion process resulting in continued expansion of the reinforcing material, loss of section and spalling of adjacent concrete elements.

- 3) **Concrete Cracking At Concrete Slabs:** Structural remediation is recommended at exposed horizontal and vertical concrete surfaces that exhibit surface cracking (see Photo S-14). Exterior temperature variations result in shrinkage and expansion of the concrete material. This shrinkage and expansion creates stresses in the concrete that are relieved by the formation of cracks. Cracks in exposed concrete present a path for water to access the reinforcement within the concrete and will induce corrosion of the reinforcement. As the reinforcement corrodes, it expands resulting in spalling of surrounding concrete surfaces as well as unsightly corrosion staining of the concrete surface. Cracks should be routed, cleaned and filled with a flexible sealant to prohibit water penetration into the concrete.

- 4) **Concrete Cracking At Ramp Guardrails:** There are long lengths of continuous guardrails along the top of the ramp walls. Concrete cracking at the base of the rail is evident at the landing locations where the rails change direction (see Photo S-15). The guardrails in these locations run approximately 100 feet continuously (see Photo S-16). Changes in temperature cause expansion and contraction of the rail at different rates than the concrete that the rails are set in. This differential movement, over this length, results in stresses on the concrete at



Photo S-14



Photo S-15



Photo S-16



Photo S-17



the rail to concrete interface resulting in concrete cracking. Consideration should be given to introducing joints within the guardrail that will allow for thermal expansion and contraction without inducing cracking level stresses on the concrete. These cracks present the same concerns for long-term corrosion of reinforcement and degradation of the surrounding concrete as described above. These cracks should be routed, cleaned and filled with a flexible sealant to prohibit water penetration into the concrete.

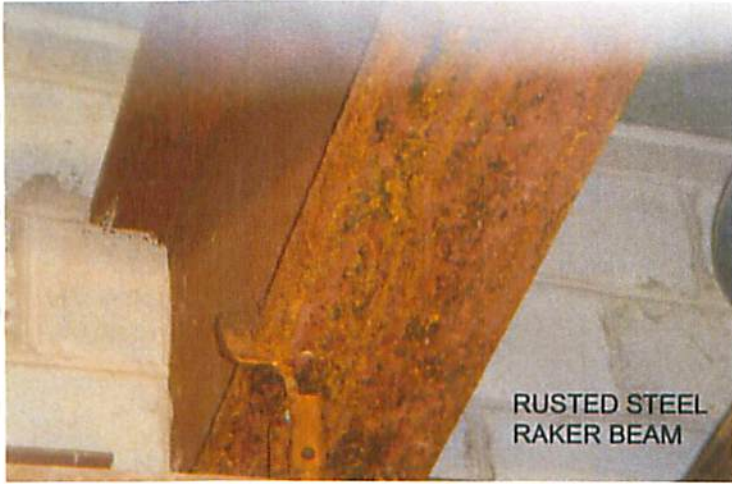
- 5) **Cracking Precast Concrete:** Cracking is evident where the back of the precast tub meets the risers at the Suite Level behind the first base dugout (see Photo S-22). The crack is visible from the underside of the unit and runs longitudinally along the precast member and appears to be related to the location of a drainage pipe at the back of the precast section. Further investigation of this crack is required to see if the crack extends through the thickness of the tub and is evident from the top side. This crack should be repaired with a structural repair adhesive. The width of the crack will need to be evaluated to determine if a gravity fed adhesive or an injection adhesive is appropriate. This condition was evident in several locations; therefore, a thorough review of the bowl should be conducted to confirm that this condition does not occur in other locations.



Photo S-18

Near-term Structural Work

- 1) **Corroded Steel:** Steel members throughout the stadium exhibit various levels of corrosion. In the majority of the conditions the corrosion is limited to local surface rusting. These conditions occur at the base of columns in concourse areas (see Photo S-18) and at exposed steel supporting the Suite Level. The rusting associated with these members appears to be the result of sustained exposure to water through localized pooling or leaking of joints in precast above (see Photo S-17). At the column base conditions, removal of the concrete surrounding the steel will be required to allow full cleaning of the steel prior to coating with a high quality corrosion protective paint system. The area surrounding the base of the column should be filled with a repair mortar and built up to



RUSTED STEEL
RAKER BEAM

Photo S-20



Photo S-21



Photo S-22

provide a wash that creates positive drainage away from the surface of the column. A concrete plinth could also be provided and designed as an architectural feature. The joint between the repair mortar and the steel columns should be filled with a high quality flexible sealant. At the exposed steel supporting the Suite Level, local surface rusting should be cleaned to bare steel and be coated with a high quality corrosion protective paint system. Further investigation is warranted to determine the source of the water at this location and develop appropriate repairs to eliminate the corrosion source.



Photo S-19

Surface rusting is prevalent along the length of some of the steel members at the outfield structures supporting the scoreboards and various signs (see Photo S-19). The rusting associated with these members appears to be the result of deteriorated paint surfaces and direct exposure to the elements. These members should be cleaned to bare steel and coated with a high quality corrosion protective paint system.

There are also limited areas where surface rusting is severe and further investigation is warranted to determine if there has been a loss of structural section properties. These conditions occur at overhead sloped steel members in the structure enclosing the generator behind left field (see Photo S-20) and at steel framing supporting the upper deck vomitories above the finished spaces at the third level (see Photo S-21). These conditions will require inspection to determine if the extent of corrosion has resulted in the loss of structural section thickness. Rusted areas will need to be cleaned bare steel and localized reinforcement of these members may be required. Cleaned and repaired surfaces should be coated with a high quality corrosion protective paint system. Further investigation is warranted to determine the source of the water and develop appropriate repair details to eliminate the corrosion source.

2) **Receiving Platform:** The receiving platform located in the outfield at the dumpster is constructed with cmu bearing walls and a concrete slab. The cmu bearing walls are severely cracked and portions of the wall have rotated such that they are no longer plumb (See Photo S-23). The concrete slab exhibits cracks and spalls. The wooden access stair does not have a handrail. Repair of this structure is certainly possible; however, given the small size of this structure, it is recommended that this structure be demolished and replaced.

3) **Steel Painting at Party Deck:** Exposed painted steel supporting the right field party deck shows signs of paint failure and resulting surface corrosion from exposure to the elements (See Photo S-24). These members should be cleaned to bare steel and coated with a high quality corrosion protective paint system.



Photo S-23

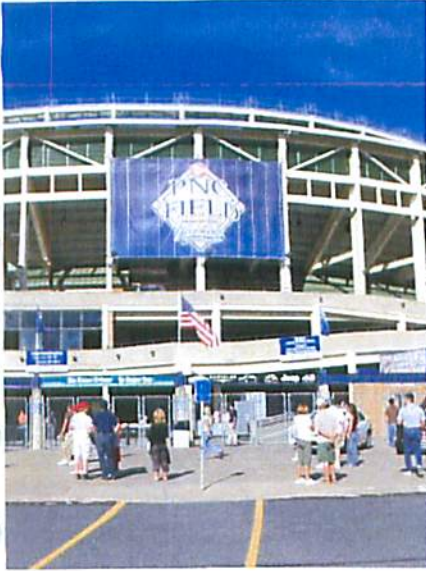


Photo S-24

- 4) **Peeling Paint:** The existing building structural frame exhibits some minor localized coating failure characterized by peeling paint on the column bases, beams, rakers and precast seats and some light rust at the column bases, particularly at the open air concourses (See Photo S-25). The coating system needs to be recoated to alleviate rusting and corrosion to the structure commensurate with the other identified work at the facility relative to the moisture issues.



Photo S-25



ARCHITECTURE

General Facility Description

The Lackawanna County Multi-Purpose stadium opened in April, 1989 and is now 20 years old. The facility has a seating capacity of +/-10,500 seats. The stadium's design mimics that of Philadelphia's multi-purpose Veterans Stadium, circa 1970, only to a smaller scale and capacity. There are three levels of seating - lower bowl, mid bowl and upper bowl. The lower bowl and upper bowl are for general admission seating. The mid-bowl is comprised of luxury suites with outdoor seating and the press/radio/TV broadcast facilities. The last 5 rows of seating in the upper bowl have been removed, and the area is covered with a tarp featuring advertising.

Over the years, several additions and upgrades have been added. These include a freestanding, one-story, prefabricated metal building housing a Batting Tunnel (in 1993) in right field, a freestanding three-story Picnic Pavilion in left field (in 2002), and a one-story Home Team Clubhouse addition (in 2005) located behind the third base side, and connected to Administration office area.

The main structural elements are described in the Structural Section of this report. The original stadium architectural exterior is comprised mainly of single-wythe, split-face concrete block (CMU) construction, which includes the walls of the concession and restroom structures along the Main and Upper Concourses as well as the walls of the Suite level. The roofs of the various architectural components are mansard-style standing seam metal.

Record drawings of the Picnic pavilion were unavailable. The exterior of the Picnic Pavilion is plaster and the roof is standing seam metal. The program and construction for the pavilion was never fully realized. The elevator that was planned was never installed and only a single stair was constructed. Permanent concessions were never built, however, portable concessions are set-up on the upper level.

The Home Clubhouse addition is a conventional steel framed structure. The exterior walls are split-faced, masonry cavity wall construction, and the roof is mansard-style standing seam metal with a single-ply rubber membrane used in the roof-top equipment well.

The stadium seating, which is original, consists of riser mounted aluminum standards with plastic seats and backs on all levels, including the mid-bowl level.

The stadium railings are a combination of painted steel, unpainted, mill-finish aluminum and unpainted galvanized steel.

There are painted aluminum louvers behind the last row of seats in the upper bowl, which act as a wind screen and guardrail.

There is one passenger elevator located behind home plate (on the 3rd base side) that travels from ground level to the upper concourse.



Observations and Recommendations

Immediate Architectural Repairs

The following 4 Immediate conditions were observed that we would expect to be addressed as part of the routine maintenance program for the facility. As such, these maintenance repair items have not been given budget costs in the capital improvement budget section of the report as it is our understanding the labor and materials will be a part of the ongoing stadium maintenance budget.

- 1) **Stadium Seating:** Several fixed stadium seats have been noted to be loose. It is recommended to have a comprehensive check of every stadium seat performed and to have all loose anchorages secured. In addition, several of the spring mechanisms that allow the seat bottoms to rise have failed. This condition restricts the exit width of the row. The springs for these seats should be repaired or replaced immediately.
- 2) **Railings:** Due to the standard deteriorated condition of the concrete at the base of the stadium's railings, it is recommended to have a comprehensive check of every stadium rail performed and to have all loose railings properly secured. In addition to the rail bases, several locations around the upper bowl vomitories were noted to have missing anchors at rail to rail connections (See Photo A-1). There is also a large plexiglass divider rail separating the 1st and 3rd base party suites from the adjacent suites. This divider rail is noted to require a more secure anchorage system.
- 3) **Loose Material in Bowl / Concourse:** Areas containing tripping hazards were noted in the lower bowl, i.e., loose metal in a right field bowl aisle and loose caulking material at the right field expansion joint (See Photos A-2, A-3). Additionally, in the upper concourse near right field, the existing deck coating is delaminating and poses a tripping hazard. These conditions should be immediately remedied.



Photo A-1



Photo A-2



Photo A-3



- 4) **Fire Extinguisher Cabinets:** Several fire extinguisher cabinets in the lower bowl cross aisle and main concourse were noted to be open without a latch and the fire extinguisher inside was loose. It is recommended that a latch be installed and the extinguisher be secured within the cabinet to help prevent unintended use.

Immediate Capital Improvement Repairs

- 1) **Fire-rated Wall Penetration:** In the main substation room under the left field lower grandstand, a large opening was observed in the west masonry wall through which piping is installed. It is presumed that this wall requires a fire-rating by code; therefore, the opening should be properly sealed with a UL listed fire stopping system.

Short-term Architectural Work

- 1) **Sealant Joints:** The sealant joints between the precast tiers in the seating bowl are in need of replacement. The sealant material has exceeded its service life and is now failing (See Photos A4 - A7). There is evidence of water infiltration occurring at every level throughout the seating bowl. The failed sealant joints are the primary cause of water damage below the seating tiers, in some cases significant, such as above the suites and press areas. Depending on the severity of the annual weather exposure and the type and frequency of the seating bowl cleaning practices (i.e. power washing), sealant materials typically have a service life of 5-7 years. We recommend replacement of all sealant in the joints in the entire seating bowl with either a urethane or silicone product.



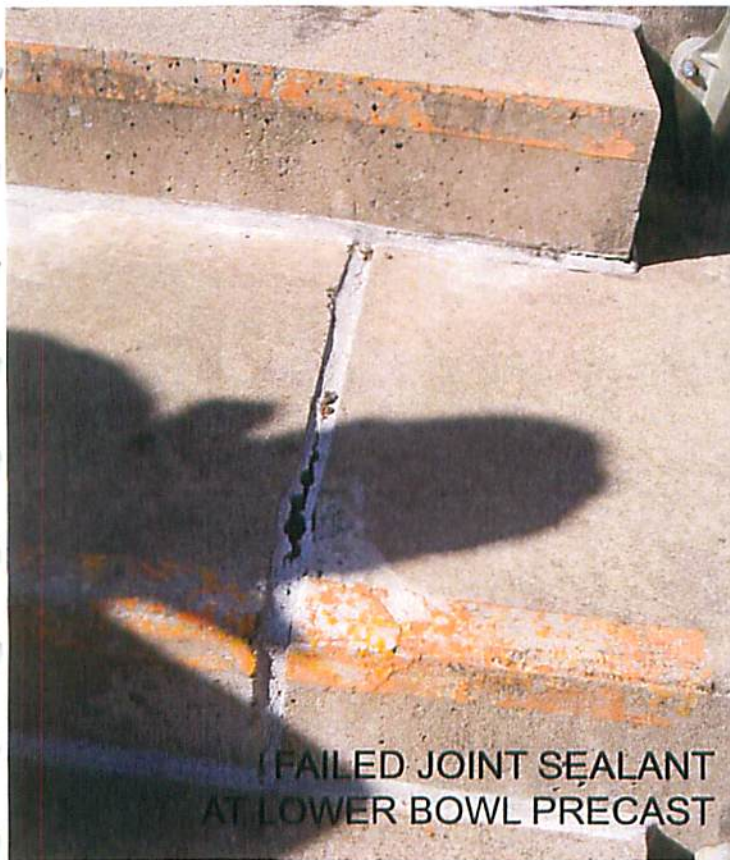
FAILED JOINT SEALANT /
SPALLED CONCRETE NOSING
AT LOWER BOWL AISLE

A4



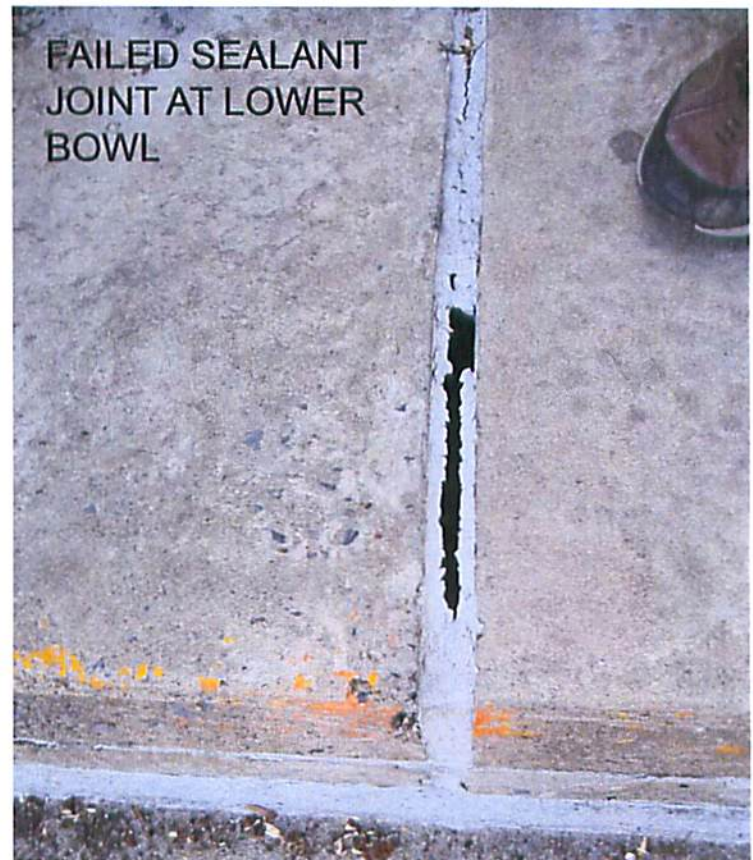
FAILED SEALANT JOINT AT LOWER BOWL

A5



FAILED JOINT SEALANT
AT LOWER BOWL PRECAST

A6



FAILED SEALANT
JOINT AT LOWER
BOWL

A7

- 2) **Expansion Joints:** The building consists of two expansion joints which dissect the structure at all levels, one at column line 107 and one at column line 307. Just as with the sealant joints, the expansion joints appear to have failed with signs of deteriorated sealant at the wall and floor slab locations, resulting in weather exposure and moisture infiltration (See Photos A8 - A9). We recommend that new expansion joint systems be installed, with special attention to providing watertight transitions.

As was noted in the Introduction, there were conditions where broken and/or loose concrete was observed at the expansion joints in our 1994 report. At that time, we recommended that a more extensive study be undertaken to review all expansion joints, particularly those overhead, to assess their condition. In our 1997 report, we noted that the broken or loose concrete had been repaired, but that the study we recommended had not been done. No one we talked to can remember if a study of the expansion joints has ever been performed to date. According to the engineering staff, they have encountered loose concrete in the past while making repairs to the expansion joint systems. Additionally, the staff reported that some broken concrete fell from overhead on the Upper Concourse, third base side, which we presume to have come from the expansion joint at column line 307. The event of fallen concrete happened on its own, not while the expansion joints were being repaired.

Our review of the expansion joints was limited to just those portions that we could readily see from the adjacent walking surfaces. For the seating bowl expansion joints, we could only observe the topside condition. We were not able to review the underside of the joint which would have required a special lift. For this reason, and based on the information above, we recommend (again) that a specialty subcontractor be hired to examine all expansion joints, especially those overhead.



A8



A9



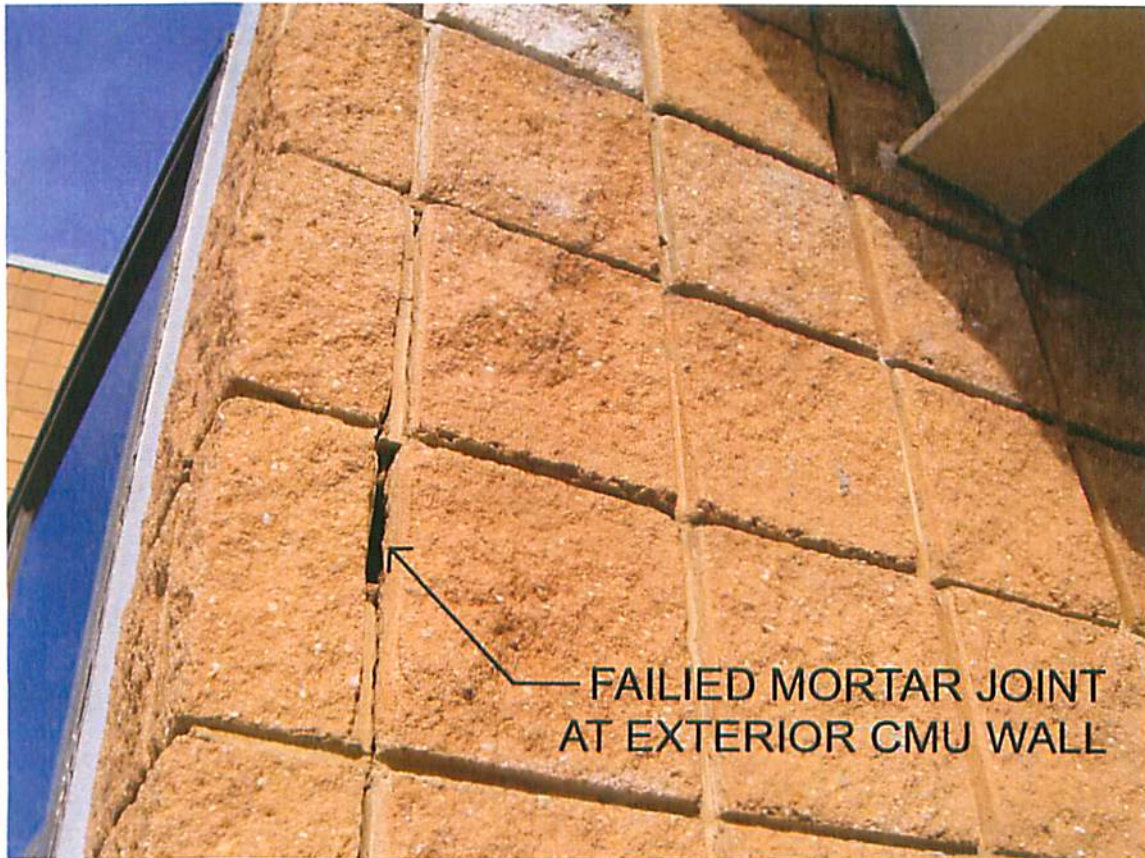
A10

3) **Elevator Shaft/Entrance:** Reportedly, there is a recurring problem of water infiltration at the elevator entrance at the upper concourse level. Water is able to enter the shaft through the doorway and has resulted in efflorescence of the masonry, damaged interior finishes and damaged electrical gear on the levels below. The small roof canopy above the elevator entrance is inadequate in size to protect the entrance from direct exposure to wind-driven rain (See Photo A10). To exacerbate the problem, the adjacent concourse surfaces are sloped toward the entrance and there is no local floor drain. At a minimum, we recommend a floor drain be added in close proximity to the elevator entrance and a concrete or waterproof topping be added to provide positive slope toward the drain and away from the elevator entrance. A more effective solution would be to build a watertight elevator vestibule. The material construction of the vestibule could vary depending on the capital funds available.

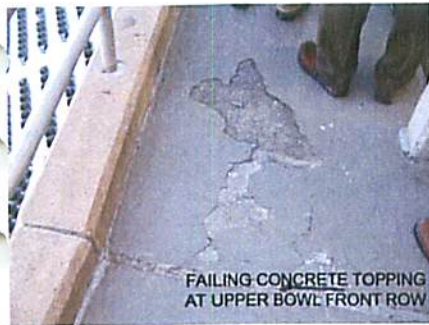
4) **Exterior CMU Walls:** In some locations, the exterior CMU walls have been observed to have efflorescence, which is characterized by a white chalky residue from the salts leaching out of the mortar. In a few locations the mortar joints are beginning to fail, with cracked and loose mortar being observed. Both conditions are a result water infiltration into the wall, which is not designed with a cavity to allow the moisture to escape. In one particular location, near the elevator adjacent to the main entrance, several masonry units appear to be loose due to near complete deterioration of the mortar joints (See Photos A11 - A12). This particular condition seems to be caused by the lack of cap flashing at the top of the wall and/or lack of control joints near the corner of the wall. We recommend the immediate remediation of the loose masonry units due to the potential life safety hazard this condition presents. The failed mortar joints should be repointed once a metal cap flashing is installed at the top of the wall. In the near-term, we recommend all areas of masonry efflorescence be cleaned and a clear silane/siloxane type topical sealer be applied to help prevent future water infiltration into the single wythe walls.



A11



A12



A13

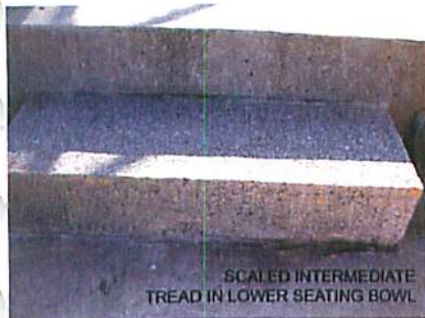
Near-term Work

- 1) **Concrete Coating:** Generally, the surface condition of the seating bowl concrete appears to be in fair to good condition considering its age. There is some localized scaling and spalling which is to be expected. There is evidence of a deck coating system applied at several locations: on the lower-bowl rear cross aisle and the front aisle of the upper-deck. The areas with the deck coating all exhibit wear and/or failure of the materials; specifically, on the upper bowl aisles where there appears to be near complete failure with de-bonding and pop-outs observed (See Photo A13). The coating failure on the upper deck aisles may also be contributing to the water infiltration issues to the suites below, in addition to the failed sealant joints described above.

Prolonged exposure to weather over the years will slowly deteriorate uncoated concrete (See Photos A14 - A15), which will eventually lead to structural failure if left unchecked. The seating bowl is beginning to show the first signs of deterioration, that of exposed aggregate and scaling concrete. The concrete surface is at a point where it should be protected before more serious deterioration occurs.

We recommend an application of a waterproof deck coating system be applied to all levels of the seating bowl, on both the horizontal and vertical surfaces. This, of course, should be done after all visible repairs are made to the concrete, which would normally be done by the same specialty subcontractor so that the system is warranted. The seats would be removed during installation of the coating system, and then replaced afterward. The waterproof deck coating system will effectively protect the surface of the concrete, and prolong the life of the concrete structure.

- 2) **Surface Drainage:** In general, the exterior masonry walls of the building envelope, and those along the open concourses, appear to be sound except for a few locations where



A14



A15

dampness at the base was observed. Primarily, the dampness appears to be due to an insufficient number of area drains and inadequate slope of portions of the concourses.

There are no drains on the Main Concourse. Even though the Main Concourse is covered and fairly well protected from direct exposure to rain, the open stair towers provide an accessible pathway for water flow on to the concourses at the bottom. The walls near the bottom of the stairs showed signs of dampness at the base. The engineering staff report using squeegees to push ponding water through the vomitories to drains located at the bottom of the seating bowl because there are no drains available. As a result, there are also signs of dampness at the base of the walls in the vomitories too.

The Upper Concourse has area drains; however, they are inadequate in quantity and there is very little slope to the drains. In numerous places, areas of ponding water were indicated to be present. Although the concourse is covered by the seating bowl above, water is easily able to collect on the concourses by wind driven rain. Also, the floor surface of the vomitories to the seating bowl are sloped toward the concourse, which also seems to contribute to the water problem. On this level too, the engineering staff report using squeegees to manually move water to the drains.



A16

The standing water and moisture has lead to efflorescence in the base course of the masonry walls, corrosion at the steel column bases and severe corrosion at the base of certain metal doors and frames, on both levels, which were mentioned above (See Photo A16). While adding a concrete topping and waterproofing system could mitigate the negative effects of standing water, we recommend relocating and/or adding area drains in the upper and lower concourses. The quantity and locations of the area drains required to address this issue, and the recommended slope configuration of the concourses, would be dependent on a more complete survey of the concourse slopes.



A17



A18



A19



A20

3) **Bowl Railings:** It was generally observed that some of the railings in the seating bowl do not meet current building code standards. As one example, there are no center-aisle railings in the upper bowl (See Photo A17). As another example, the front guardrail at the upper bowl does not comply with the 4" maximum gap criteria required (See Photo A18). The current railings may be permitted to be left as is, as long as remedial work in the seating bowl doesn't trigger the need to upgrade the railings to current codes; however, from an Owner liability standpoint, consideration should be given to modifying the railings to meet the current adopted codes. At that time, we would recommend a thorough assessment of all bowl railings be performed to assure code compliance.

4) **Hollow Metal Doors & Frames:** Several hollow metal doors and frames on the Main concourse in the vomitories and along the upper concourse are exhibiting varying degrees of rust and deterioration at the bottom due to prolonged exposure to water (See Photo A19). The exposure to water is due to an insufficient number of concourse floor drains and/or lack of proper slope to the drains, and away from door openings. We recommend the corroded frames be repaired or replaced. It is possible to cut off the bottom of the hollow metal frames and a new piece welded on. Whether a new piece is added, or all new frames are installed, we recommend the frames be grouted solid to help prevent future deterioration from moisture. All corroded doors should be replaced and new thresholds added to prevent water infiltration under the door. Ideally, a solution should be sought to provide positive drainage away from the doors and vomitories.

5) **Upper Bowl Louvers:** There are aluminum louver assemblies which provide a screen behind the last row of seats in the upper bowl. Reportedly, the anchors of some louvers have failed during high winds (See Photo A20). Some blades were missing and/or were observed to have been dislodged from the frame. The engineering staff has repaired the loose or failed anchorages, but we would recommend further evaluation of the louver anchoring system to assure the assembly is secure and does not pose a life safety threat.



A21



A22



A23

6) **Toilet Room Vestibules:** The doors and frames to the toilet rooms on the upper concourse are exhibiting varying degrees of rust and deterioration at the bottom due to prolonged exposure to water. Also, the base course of the CMU walls is showing signs of moisture infiltration. This is due to the fact that there are no floor drains in the vestibules leading to the toilet rooms and the vestibules are exposed to rain (See Photo A21 - A22). The problem is exacerbated by the fact that the adjacent concourse is sloped toward the vestibules. Covering the vestibules with a roof and adding a concrete topping to provide positive slope away from the vestibules is one way to remedy the problem. Another way, which may be less expensive, would be to add floor drains in the vestibules. Once the drainage issue is addressed, repair of the doors, frames and CMU should be undertaken.

7) **Bird Roost:** Extensive bird roost waste was observed throughout the stadium. The most severe locations were observed on the outer structural ring above the upper concourse (See Photo A23); however, there was waste observed at many locations throughout the stadium. At best, bird waste will permanently damage paint and other material finishes. At worst, bird waste can pose a health hazard to the stadium occupants. Reportedly, the maintenance staff regularly has to shovel the bird waste from the concourse floor surfaces in the more severe locations.

Bird roosting is common for outdoor stadia because of the plethora of available roosting ledges and the abundant presence of food. There are a variety of bird deterrent systems available on the market; however, the success of such systems varies. While we have seen some success in other stadiums with the installation of netting to prohibit access to the roosting areas, we recommend a specialty subcontractor be consulted to offer remedies to this particular issue. For the roosting areas above or near food service areas of the stadium, consideration should be given to making this an immediate priority due to the potential for health risks.

8) **Interior Finishes:** Due to severe water infiltration from the seating tiers above the suites, the finishes in the suites and press box areas have been damaged by moisture. Particularly, leaks have severely damaged the acoustical tile ceilings with extensive staining, bowing and breakage / fallout being observed (See Photos A24 - A25). The carpets are also badly stained from water. It is reported that ceiling tile replacement is a near constant requirement occurring before almost every game. Previous attempts to remediate this problem by installing corrugated plastic panels as a "subroof" above the acoustical tile in the suites has had only marginal success. Once replacement of the seating bowl sealant joints had been done (and following suggested plumbing heating system modifications) we recommend that the ceilings in the suites and press box be replaced in their entirety, including the tile and suspension system. At that time, testing and remediation for mold and mildew should also be performed at the Suite/Press Level.

The plastic laminate tops at the press work area and counters in the press box were observed to be peeling due to moisture and humidity. The engineering staff reported the suites are not provided with climate control in the winter or offseason periods. Generally, interior finishes will not last when subjected to oscillating temperature and humidity cycles. Millwork will warp or swell and other finishes will prematurely deteriorate or fail. To help mitigate premature failure of the interior finishes, it is recommended that the suites and press area be heated to at least 50-55 degrees in the off-season.





A24



A25



Long-term Work

1) **Stadium Seating:** Generally, the stadium seats are in satisfactory condition considering their age. Based on a cursory review, some seat standard anchors were observed to be rusted; however, they appear to provide secure anchorage. The seat parts are no longer manufactured so spare parts are becoming scarce. The engineering staff reportedly spends a considerable amount of money each year maintaining an inventory of spare parts from whatever source they can find. The current inventory of spare parts is said to run out before year's end. While it is conceivable that a sufficient amount of spare parts can be found for a few more years, we recommend that capital funds be allocated for replacement of the seats.

2) **Left Field Picnic Pavilion:** The plaster walls of the left field picnic pavilion were constructed without a durable base material at the floor line of the party deck. Plaster construction should not be exposed to prolonged contact with water, especially high-pressure power washing. Plaster construction is also vulnerable to damage by contact with people and equipment. It is generally good practice to provide a durable, non-moisture sensitive base at the bottom of plaster walls, such as concrete block or tile. The party deck has poor drainage which is exposing the plaster walls to prolonged contact with water. In time, this condition will allow water to infiltrate the base of the wall and deteriorate the plaster system, including corrosion of the metal stud backup. We recommend the plaster system be cut off at the bottom of the wall a minimum 8" high, and a durable, water resistant base be installed.



A26

3) **Roof Construction:** Existing roof construction consists of metal standing seam at the outer peripheral areas and a metal panel system at the upper deck which are original. Later additions and infill construction, at the stair towers and home team locker room / clubhouse consist of adhered singly ply membrane. Portions of these roofs, where visible from the concourse, appear to be coated to match the standing seam. It was observed at a few stair locations that the coating is peeling off and debonding from the original black EPDM

roof (See Photo A26). Even though there does not appear to be any evidence of membrane deterioration, the roof areas should be inspected periodically, as part of the maintenance program.

- 4) **Visitor's Dugout Tunnel:** The corridor walls under the seating bowl between the Visitor's dugout and clubhouse consist of simple plywood construction. The corridors are not conditioned or ventilated. The wood construction is beginning to show signs of deterioration due to constant exposure to humidity and temperature fluctuation, and also due to water infiltration from the leaks in the seating bowl sealant joints above. Consideration should be given to replacing these walls in the future. The replacement walls should be constructed with materials that are tolerant of these environmental conditions, unless mechanical systems are added to control these conditions.

- 5) **Regrading Outfield Area:** The grading and drainage around the perimeter of the outfield wall appears to be inadequate. (See Photo A27). There are only 2-3 catch basins observed in an area approximately 700 feet long. This seems inadequate given the steep terrain beyond the outfield wall. There are signs of ponding water and soil erosion. In the long-term, the area behind the outfield fence should be evaluated. The area could be re-grading and additional catch basins added to better channel the runoff and curtail further erosion. Vegetation and/or reseeding the steep grades should also be considered to further stabilize the slopes.



A27

MECHANICAL SYSTEMS

General System Description

The stadium is 20 years old. Most of the mechanical equipment is original, except a ductless, split air conditioning system in the Public Address Room, new rooftop air conditioning units serving the recently expanded and renovated Home Team Clubhouse and three through-the-wall heat pumps which have been installed as replacements for failed units serving the Suites.

The stadium is electrically heated with an assortment of electric baseboard heaters, heating and ventilating units, cabinet and propeller unit heaters, radiant panel heaters, heat pumps and supplementary electric heating coils in air handling units. The heaters require little maintenance other than cleaning and/or filter replacement on units with filters. Fan powered units require periodic lubrication.

The air conditioned areas of the stadium are cooled with an assortment of split systems, packaged rooftop units, through-the-wall air conditioning units and self-contained heat pumps.

The exhaust systems serving the facility utilize a variety of types of fans, including small, ceiling-mounted centrifugal, wall-mounted propeller, and larger power roof ventilators. The smaller fans are typically ceiling-mounted centrifugal fans or wall-mounted propeller fans. The larger fans are typically power roof ventilators.

The automatic temperature control system is electric. It was originally installed by Robertshaw. A central occupied/unoccupied control panel located in the ground floor maintenance room contains a programmable time clock which indexes the local controls to the occupied or unoccupied mode of operation.

There is adequate heating and cooling capacity for the present use of the stadium. It is noted, however, that nearly all of the mechanical systems are original and most of the equipment has exceeded its service life. A program of phased replacements is recommended with priority being placed on the automatic temperature controls, air handling units and condensing units.

Two issues related to the mechanical system that are recommended as needing near-term attention are the lack of individual control for the luxury box suites and control of condensation from the mechanical units. It is recommended that this work be started as soon as possible to deter further deterioration, improve occupant comfort, and promote energy efficiency. These two issues were cited in our previous assessment reports in 1994 and 1997.

Observations and Recommendations

Short-term Mechanical Work

- 1) **Condensate Drainage:** A reported operational problem is the lack of a condensate collection system for the through-the-wall heat pumps serving the Suites. At present, condensate spills on the concourse. The installation of a condensate drainage system is recommended. We recommend this issue be addressed immediately, since the wet floor surface could pose a slip hazard to the occupants.

Near-term Mechanical Work

- 1) **Temperature Control System:** The automatic temperature control system has been reported to be less responsive than desired to meet operational needs. Presently, there is no individual room override for individual systems. This has contributed to dissatisfaction by suite tenants since a tenant cannot individually energize their dedicated heat pump unit unless all of the other units are set to the occupied mode. In addition to the dissatisfaction by the premium customer, this also contributes to energy waste.



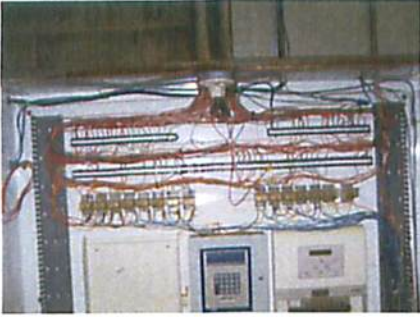


Photo M1

Further, the system is subject to failure due to condensation within the control panel. Currently, a light bulb is utilized for heat in the panel to prevent condensation (See Photo M1). This must be regularly monitored by operational staff. At the time of our visit the light bulb was burned out. Ideally, a new Direct Digital Control System should be installed. This would provide programmable, centralized control of all of the mechanical systems with such enhancements as individual customization of operating schedules for all equipment. As a temporary improvement to satisfy suite tenants, the existing system could be upgraded with the addition of occupied/unoccupied override switches in each luxury suite, but the system is functionally obsolete and should ultimately be replaced.

Near-to-Long-term Mechanical Work

- 1) **Mechanical Equipment:** Most of the mechanical equipment serving the stadium has exceeded its' service life. Further, replacement parts for repairs are increasingly harder to find due to obsolescence of the equipment. Frequent equipment failures can now be expected; therefore, a program of phased replacement of mechanical equipment is recommended.

The electric heating elements have exceeded their expected service life of 15 years. The original air conditioning system equipment has exceeded their expected service life of 10-15 years. The newer rooftop units serving the Home Team Clubhouse are only two years old, but reportedly, they have been problematic and a local mechanical contractor is currently investigating operational problems with the units. The exhaust system equipment has exceeded their expected service life of 15-20 years.

The phasing of equipment replacement should be prioritized such that air handlers and condensing units are replaced first, either all at once or over a period of two or three years with the units in the worst condition or requiring the most attention by maintenance staff being replaced first. Due to the age of the air handlers and condensing units, an emergency fund should be maintained for emergency repair or

replacement of equipment if the replacement program is extended over a period of years. Replacements should be scheduled for the off season period to avoid impacting the readiness of the stadium during the season.

A lower priority of replacement may be placed on exhaust fans, electric heating elements, and suite heat pumps. Generally, this equipment is relatively inexpensive, availability is good and replacement is not complicated. For these reasons this equipment may be replaced as the equipment fails, however phased replacement is recommended after the first priority replacements are completed.



ELECTRICAL SYSTEMS

General System Description

The multipurpose stadium derives its secondary 480Y/277 Volt, 3 phase, 4 wire service from a PP&L pad-mounted transformer located in close proximity of the Main Electrical Room that feeds the main distribution switchboard located in the Main Electrical Room on the Main Concourse Level.

There are two service disconnects for the facility, one for the main distribution switchboard and one for equipment that we were not able to identify.

The main distribution switchboard consists of a main service entrance bolted pressure fused switch which is equipped with single phase protection and blown fuse indication. The feeder protective devices consist of fusible-interrupter switch units equipped with current limiting fuses. The main distribution switchboard supplies power to distribution, lighting and appliance panelboards. All distribution, lighting and appliance panelboards are generally located within in designated electrical closets.

The main distribution switchboard, distribution and branch panelboards were manufactured by General Electric. Remote dry type transformers have been replaced in the last several years and are manufactured by Square D.

There is electrical equipment - disconnect switches, panelboards, etc. - serving the scoreboard and message boards that are located outdoors behind the center field fence.

There is one 150 kW, 188 kVA at 0.8 PF, 480Y/277 volt, 3 phase, 4 wire diesel fuel emergency generator which provides standby power for lighting and essential equipment. The generator is located in the Emergency Generator Room on the field level of the grandstand

at the third base end. The generator is air-cooled with a mounted radiator and includes a duct collar, fan and pump.

There is a 225 ampere, 3 pole, Onan Manufactured, automatic transfer switch (ATS) located in the Emergency Generator Room.

Metal Halide lighting luminaires are utilized in general stadium areas, and fluorescent lighting fixtures are used in office areas. Most luminaires appear to be original. Remote control lighting contactors are installed in the panelboards to control lighting in general areas.

The sports lighting for the facility is original. The system is comprised of 1500 watt metal halide luminaires. For the infield lighting, the luminaires are installed on steel framing on top of the canopy structure. For the outfield, the luminaires are pole-mounted. The building engineering staff report that the lighting levels still meet minimum lighting requirements for Minor League Baseball.

Observations and Recommendations

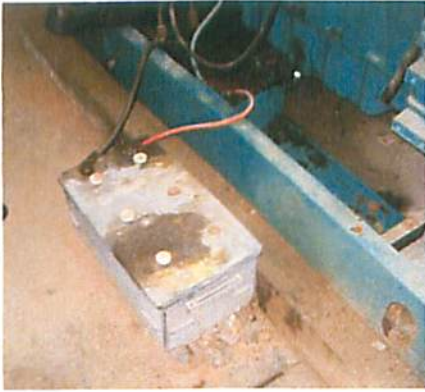
Immediate Electrical Work

1) **Emergency Systems Test:** Due to the age of the building and the relatively small size of the emergency generator we recommend that an emergency systems test be performed where all systems are on, at night, and a simulated normal power failure occurs. During this test, we would recommend conducting light level readings throughout the seating bowl, concourses and other exit pathways in the building. From this test, deficiencies in the emergency lighting system can be identified and corrective measures can be determined if necessary. In addition, the timing sequence of the emergency generator system can be measured and loading of the emergency generator can be quantified.



E1

2) **Storage in Electrical Rooms:** It was observed that the Main Electrical Room and Emergency Generator Rooms are being used for storage of materials. Further, a basketball hoop is installed on the wall near the emergency generator (See Photo E1).



E2



E3

These conditions are in direct violation of the National Electrical Code and pose a serious fire and safety hazard. All stored material should be removed immediately and the basketball hoop taken down.

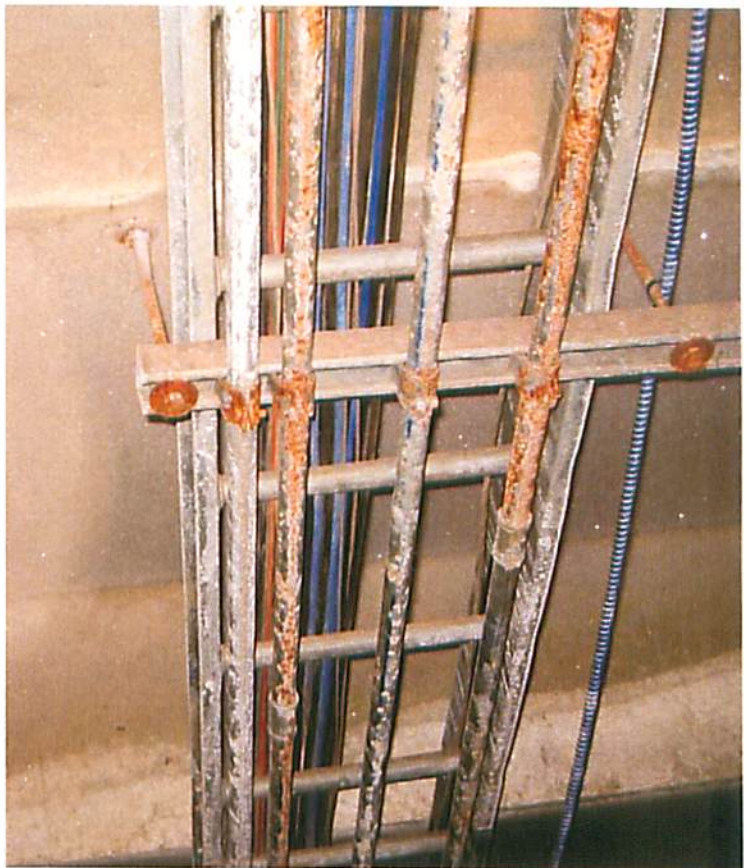
- 3) **Emergency Generator Batteries:** The emergency generator and ATS appear to be in adequate condition; however, the batteries appear that they need to be replaced as an emergency priority (See Photo E2).
- 4) **GFCI Receptacles:** It was observed that receptacles exposed to weather were not provided with outdoor damp-location or outdoor wet-location while-in-use covers nor are they GFCI in accordance with the requirements of the latest edition of the National Electrical Code. We recommend new GFCI receptacles with new cover plates be provided on a location-by-location basis as an emergency priority.

Short-term Electrical Work

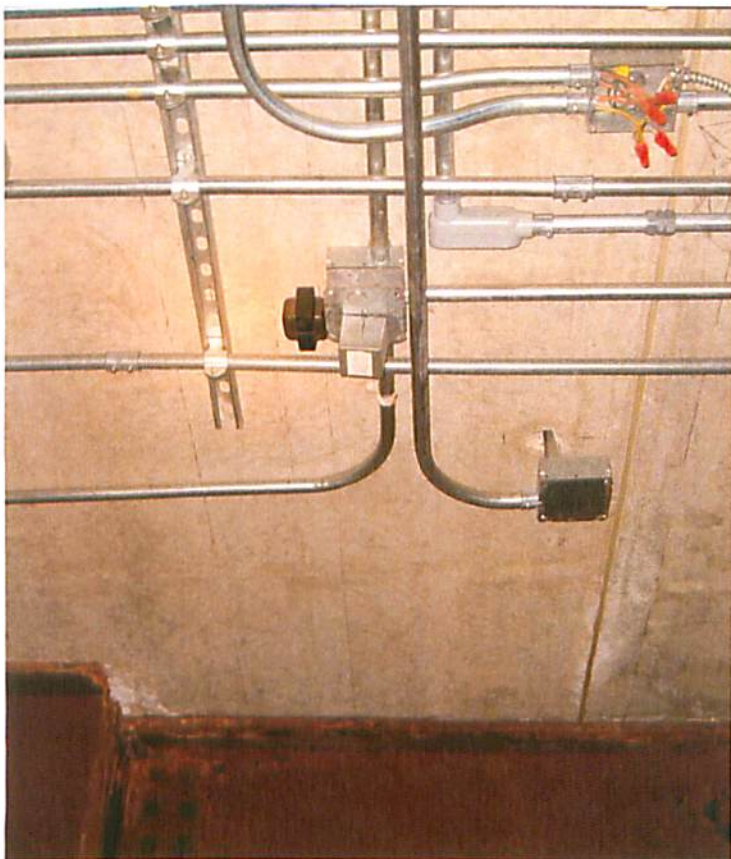
- 1) **Outfield Panelboards:** The panelboards and disconnects serving the sports lighting poles and outfield scoreboards are in poor condition. This equipment is showing signs of significant rust and deterioration due to weather exposure. In one notable case, at a sport lighting pole in left field, the outdoor rating of the equipment is no longer intact as the panelboard cover is missing leaving the equipment exposed to direct contact by rain (See Photo E3). We would recommend that these panels be replaced in full including all feeders as an immediate priority.
- 2) **Conduit:** In many locations along concourses, on the suite level and in the dug-out areas the conduits were observed to be in poor condition and rusting (See Photos E4 - E6). In some cases the conduit has deteriorated to the point of exposing the insulated electrical conductors (See Photo E7). Primarily, this is due to excessive exposure to moisture and water caused by the failure of caulk joints in the concourse slabs and seating bowl. In fact,



E4



E5



E6



E7



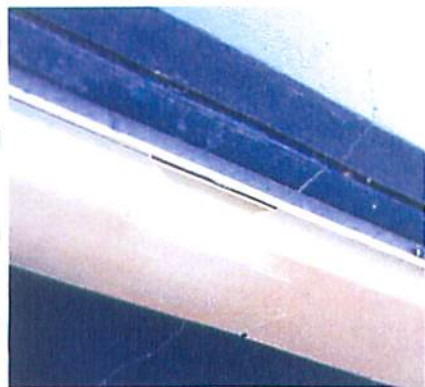
E8



E9



E10



E11

the maintenance staff has resorted to removing the junction box covers in certain locations in order to keep water from collecting inside. It is recommended that all of the badly deteriorated conduits and the circuits/feeders be replaced in full as an immediate priority as they pose both a fire hazard and a safety hazard to patrons, players and staff. In some locations, it may only be necessary to replace the junction box cover plate, once the water infiltration issues are remediated; however, we recommend evaluating the affected devices to determine whether the entire branch circuits needs to be replaced in full.

- 3) **Dugout Receptacle:** It was observed that a receptacle in the dug-out area was severely damaged by water (See Photo E8). The outlet box, receptacle and all branch circuit wiring shall be replaced in full. It is recommended that the receptacle be replaced with a GFCI and that the height of this receptacle be raised in order to avoid being submerged in water.
- 4) **Press Box Lights:** The press box lights were observed to have severe water damage (See Photos E9 -E11). These lights should be replaced immediately once the water infiltration issues above are remediated.
- 5) **Annual Maintenance and Testing:** The electrical equipment that is original to the facility has a life expectancy of 20 to 30 years. Being that this facility 20 years old, maintenance and testing should be performed annually to ensure systems are functioning properly. All maintenance and testing shall be performed by a NETA accredited firm. Maintenance and testing should be considered an immediate priority.
- 6) **Sports Lighting:** It was observed that some sports lighting luminaire lenses appeared to be in need of cleaning. The maintenance staff stated that they replace the sports lighting lamps when they fail. It is good practice to group re-lamp all sports lighting luminaires every five to ten years depending on their usage. We would recommend that

all the sports lights are re-lamped before the season and that these fixtures are thoroughly cleaned per manufactures instructions at that time.

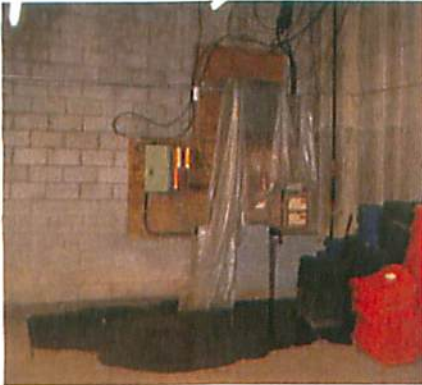
- 7) **Labeling:** Provide labeling on all service disconnects to identify what the electrical equipment serves. One service feeds the main switchboard and the other service was unable to be identified as to what it served.
- 8) **Luminaires:** Some luminaires were observed to be damaged or not in working condition. We would recommend that these luminaires be repaired and/or replaced.
- 9) **Lighting Receptacles:** In conjunction with the replacement of suite finishes new lighting receptacles shall be provided.

Near-term Electrical Work

- 1) **Emergency Generator Isolation:** It was observed that electrical equipment, such as normal power transformers and telecommunications equipment, is located in the Emergency Generator Room. Any equipment located in this room which is not directly related to the emergency generator is in violation of current codes. We recommend that the unrelated electrical equipment be removed; or if that is not an option, it should at least be isolated from the generator by the addition of a 2-hour rated wall. Note, it was unclear if the Emergency Generator Room itself carries a 2-hour fire rating, which is required by NFPA 110. This should be confirmed.
- 2) **System Studies:** It was observed that dry type transformers throughout the building were replaced. It is recommended that a short circuit study be performed, if not already done at the time of replacement, to ensure all downstream devices are adequately rated. It is also recommended to perform a coordination study to ensure the electrical system

is properly coordinated and an Architectural Flash Hazard Analysis for safety of personnel working near or on equipment. These studies should be performed by a registered engineer in the State of Pennsylvania as a near term priority.

- 3) **Safety Cables:** It was observed that the sports lights do not have safety cables. We recommend safety cables be installed on each luminaire as a precaution against accidental fall while being maintained or bolt failure due to high winds.



E12

- 4) **Fire Alarm Studies:** The stadium was constructed prior to the adoption of the ADA codes, so visual fire alarm strobes were not required at that time; however, it was observed that visual strobes have been used in recently renovated spaces. For sake of consistency in terms of public safety, we recommend upgrading the fire alarm system to be in compliance with the currently adopted codes. **It should be noted that this was recommended in our 1997 assessment report.**



E13

- 5) **Water Damage:** It was observed that some electrical and telecommunications equipment, for example in the emergency generator room, has plastic sheets over it to protect from water damage (See Photos E12 - E13). Once the water infiltration issue is resolved, the plastic can be removed. Afterward, all telecommunication systems should be tested, and any equipment that was damaged should be replaced in full.

Long-term Electrical Work

- 1) **Replacement of Equipment:** The electrical equipment that is original to the facility has a life expectancy of 20 to 30 years. A phased replacement of these major systems should be planned for in the next 10 years as replacement parts will become harder and more expensive to obtain.

- 2) **Branch Circuiting:** Due to the amount and severity of the water damage to the electrical systems and the age of the wiring, replacing all branch circuits throughout the building, including circuits that are installed below grade, should be planned in the next 5 years. In the future, this will help prevent the frequency of nuisance tripping of circuits which may be vital to game day operations of the facility.

- 3) **Outdoor Lighting:** Lighting installed outdoor and subject to all weather conditions can be expected to have a life expectancy of 15 to 20 years. The majority of lighting in the facility is original. Lighting in some locations had visible water damage and did not appear functional. It is our recommendation that all lighting be systematically replaced and rewired in the next 5 years. This replacement project should be used as an opportunity to save energy and operating costs by taking advantage of improved energy efficiency in lighting during the last 20 years.

- 4) **Sports Lighting:** The sports lighting is nearing the end of its life expectancy. We recommend the sports lighting be replaced within the next 5 years. This could be done during an off-season.

- 5) **Lighting Control System:** When the panelboards that serve the general lighting and sports lighting circuits are replaced we would further recommend that a new lighting control system be provided that would control all lighting circuits independently as a long term priority. This new system could be microprocessor based which could allow easy manipulation of the entire system from multiple locations which is now common in newer facilities. Newer lighting control systems are available that are web based, can communicate via the IT network, and are controlled primarily from a central work station in the building or remotely from the internet.

- 6) **Cable Supports:** It was observed that some telecommunications cabling is not properly supported. All communications wiring should be securely attached to structure in accordance with manufacturer's requirements and industry standards based on the type of cabling as a near term priority. This expense will help prevent unintentional damage to the cabling that could lead to downtime or increased error rates in the equipment it serves.

- 7) **Abandoned Cabeling:** Abandoned telecommunications wiring was observed in locations throughout the facility. All abandoned telecommunications cabling shall be removed in its entirety to comply with the latest edition of the National Electrical Code.

PLUMBING SYSTEMS

General System Description

The existing plumbing systems vary in terms of quality of the original installation, current condition due to system maintenance/replacement, and condition due to age.

The domestic water piping systems are generally in satisfactory condition. The domestic water system is supplied by a 6 inch water service that has sufficient pressure to operate the building fixtures without a booster pump. The original installation lacked valves for grouping of fixtures for ease of maintenance. Reportedly, the original heat taping for freeze protection failed and was only recently replaced. Prior to replacement, there were many pipe failures due to freezing, and repairs were made difficult due to lack of valving. These conditions appear to have been largely remedied by the engineering staff who has added valves for control and winterization - draining systems subject to freezing. The added valves are generally in good condition due to regular maintenance. Piping is in satisfactory condition; however, the piping has been patched numerous times due to leaks caused by freezing.

The domestic water piping systems are functional, except it was observed that backflow prevention devices are not installed as required on domestic water system branches that serve equipment or piping systems that could contaminate the potable water supply if backflow were to occur.

Water heating equipment has been replaced in some areas and is original to the building in others. The engineering staff has reported that the main water heaters serving the Team Lockers and Concourse 1 Concessions are unable keep-up with the load during events. Two existing electric storage water heaters with 1000 gallon tanks currently supply hot water to these areas. The tanks are in good condition and have approximately 10 years of remaining service life. There have been chronic failures of the electric heating elements. Reportedly, the

elements have been replaced several times. The Temperature pressure relief valves have been discharging because no expansion tank has been provide on the system.

The original Stadium Club water heater was replaced in 1996 and is at the end of its service life. The heater is a propane-fired 91 gallon glass lined storage heater.

The suite areas originally had been served by small electric water heaters located above the suite ceiling. The suite heaters failed some time ago and have been abandoned in place. Hot water to the suites has been extended from the water heaters that serve the Concourse 2 toilet rooms. The water heaters serving the Concourse 2 toilet rooms and suites were installed during the original construction, and are now beyond their useful life.

In general, sanitary piping systems are in satisfactory condition and should be serviceable for several years; however, there were two code violations observed. First, there are no grease interceptors provided at pot sinks and pre-rinse sinks in the Commissary, Stadium Club Kitchen and Concession stands. Currently, grease is discharged directly into the sanitary drainage system which is a code violation. Second, plumbing fixtures used for preparation of food or drink should be arranged to discharge to an indirect waste floor drain so that sewage cannot back up into the fixture. Prep sinks in the Stadium Club Kitchen should be changed from a direct waste connection to an indirect waste connection.

Storm drainage piping systems generally appear to be in satisfactory condition. In the seating bowl, the size and rusted condition of some storm drainage grates may be hindering the drainage flow.

The plumbing fixtures throughout the facility are generally in serviceable condition; however, the urinals throughout the facility are currently being replaced because the traps reportedly froze this winter and cracked the fixture.

There is a propane system for the Stadium Club cooking and water heating and also the Commissary cooking, which is located beyond the right field fence. The system appears to be in satisfactory condition.

The dugouts have drains that discharge to sump pumps. The tunnel leading to the locker areas also drains to the sump pits. Reportedly, the sump pumps fail often due to contaminate being washed down from the field and/or the seating bowl. As a result, the engineering staff has had to keep a constant vigilance on the pumps during rain periods. They have reportedly replaced the sump pumps numerous times over the years. There is evidence of corrosive water damage to adjacent finishes and electrical systems due to the pump failure. This is constant maintenance headache for the staff.

Fire Suppression

The fire suppression systems consist of an interconnected dry standpipe system and multiple dry sprinkler systems that provide partial suppression of the stadium. There is also a wet chemical suppression system provided at the main cooking equipment in the Stadium Club Kitchen and Commissary. There are several hazardous areas that currently do not have sprinkler protection.

Observations and Recommendations

Immediate Plumbing Work

- 1) **M.I.C. Testing:** The engineering staff has reported that pinhole leaks have developed in the dry sprinkler system. The leaks have caused destructive operation of some air compressors resulting in air compressor replacement. It is unusual for sprinkler systems to develop leaks. We suspect the piping failures may be due to M.I.C, Microbial Induced Corrosion. The piping system should be tested, and an M.I.C. inhibitor should be used, if test results indicate M.I.C. is present.

- 2) **Central Water Heater:** We recommend increasing the central water heating recovery capacity by adding a propane-fired, direct vent, copper tube boiler with a recirculation pump. The proposed propane boiler would be connected to the existing water heater tanks. Heated water from the boilers would be pumped into the existing tanks for storage. Propane could be supplied from the existing propane storage tank near the Stadium Club. Venting of the boilers and combustion air could be provided by a direct vent installation.

Short-term Plumbing Work

- 1) **Backflow Prevention:** Backflow prevention devices are required on domestic water system branches that serve equipment or piping systems that could contaminate the potable water supply if backflow were to occur. Backflow preventers were not provided on the water supply to soda equipment. If the carbon dioxide from the carbonating soda equipment flows into the copper water supply system a toxic chemical can be formed that will contaminate the domestic water system. Backflow preventers should be installed to meet current code requirements. Backflow preventer installation is a high priority because of the potential for contamination of the potable water supply.
- 2) **Expansion Tank:** An expansion tank should be provided to prevent the safety relief valves from operating in non-emergency situations. Repeated non-emergency discharge of the safety relief valves could lead to a more dangerous condition whereby the expansion tank could explode. The existing central water heater room appears to have sufficient space to add the boiler and expansion tank.
- 3) **Grease Interceptors:** Add grease interceptors at pot sinks and pre-rinse sinks in the Commissary, Stadium Club Kitchen and Concession stands. The local codes will dictate the minimum size of the grease interceptors required.

- 4) **Indirect Waste Connection:** Change the prep sinks in the Stadium Club Kitchen from a direct waste connection to an indirect waste connection as per code.

- 5) **Stadium Club Water Heater:** Replace the hot water heater in the Stadium Club kitchen. The heater is a propane-fired 91 gallon glass lined storage heater. The heater could be replaced with a similar model in the same location.

- 6) **Concourse 2 Water Heaters:** Replace the water heaters serving the Concourse 2 toilet rooms and suites. Note: the size of the replacement system should be evaluated due to the increased load from the suites.

- 7) **Drainage Systems:** Revise the drainage system in the dugouts and tunnel areas.

- 8) **Sprinkler System Alarms:** The engineering staff has reported that the sprinkler system alarm devices failed to annunciate during a recent sprinkler discharge. The failure of the annunciation resulted in substantial flooding of the New Home Team lockers, as the discharge went unnoticed. We recommend that new pressure switches / flow switches be provided on each fire service with wiring arranged to annunciate at the attended locations and/or notify remote staff by telephone.

Near-term Work

- 1) **Backflow Prevention:** Backflow prevention devices are required on domestic water system branches that serve equipment. It was observed that backflow preventers had not been provided for the field irrigation system.

- 2) **Sprinkler Protection:** There are several hazardous areas that currently do not have sprinkler protection. The code requirement for providing sprinklers or fire-rated enclosures for hazardous spaces has existed for many years. It is recommended that sprinkler protection be provided in hazardous areas, especially where the hazardous area is not enclosed by appropriate fire-rated construction. In most cases, the dry sprinkler bulk mains to protect these areas are in close proximity to the hazardous spaces. The hazardous spaces we recommend are:
 - The Stadium Club Kitchen;
 - The Commissary;
 - The Visiting Team Locker Room and Laundry;
 - The Emergency Generator and Main Electrical Rooms;
 - Areas below exit ramps used for storage.

Long-Term Work

- 1) **Drain Grates:** Replacement of select seating bowl drainage grates is recommended to improve surface drainage.

MAINTENANCE OF CAPITAL EQUIPMENT

MEP equipment and system components commonly have a life expectancy that is shorter than the life of the facility as a whole. The following charts list the major equipment and systems of the stadium - Mechanical, Electrical and Plumbing - which can be expected to require replacement due to normal use and physical deterioration.

This information should be considered as a general guide. The actual life of the MEP equipment and systems depends on a variety of factors, including the quality of the original component, the frequency of use, the degree of maintenance, atmospheric conditions and availability of parts.

Items that would be replaced through normal maintenance programs are not included, nor are items that are likely to become obsolete due to changing functional requirements. Also, it should be anticipated that some components with an indefinite life expectancy may experience premature failure due to latent manufacturing or construction defects, damage sustained during use, changes required for marketing reasons or changes required by authorities having jurisdiction (code).



HVAC Systems / Equipment

| Description | Estimated Life (years) | Life Remaining (years) | Quantity | Remarks |
|---------------------------------|------------------------|------------------------|----------|-------------------|
| Split Air Conditioning Systems | 15 | 0 | 2 | |
| Ductless Split Systems | 10 | 7 | 1 | |
| Through the Wall Heat Pumps | 10 | 0 | 16 | |
| Through the Wall Heat Pumps | 10 | 7 | 3 | Replacement Units |
| Rooftop AC Units | 15 | 0 | 1 | |
| Rooftop AC Units | 15 | 12 | 3 | Home Clubhouse |
| Indoor Package AC Units | 10 | 0 | 3 | |
| Exhaust Fans | 15-20 | 0 | 46 | |
| Electric Baseboard | 15 | 0 | 46 | |
| Electric Propeller Unit Heaters | 15 | 0 | 6 | |
| Electric Cabinet Unit Heaters | 15 | 0 | 6 | |
| Electric Radiant Heaters | 15 | 0 | 10 | |
| Electric Radiant Heaters | 15 | 12 | 1 | |
| ATC System | 16 | 0 | 1 | |
| Total | | | | |

Electrical Systems / Equipment

| Description | Estimated Life (years) | Life Remaining (years) | Quantity | Remarks |
|---|------------------------|------------------------|------------|---------|
| Main Switchboard | 20 to 30 | up to 10 | 1 | |
| Distribution Panelboards | 20 to 30 | up to 10 | Approx. 11 | |
| Appliance Panelboards | 20 to 30 | up to 10 | See Note 1 | |
| Lighting Panelboards | 20 to 30 | up to 10 | See Note 1 | |
| Lighting Control System | 20 to 30 | up to 10 | 1 | |
| Emergency Generator | 20 to 30 | up to 10 | 1 | |
| Automatic Transfer Switch | 20 to 30 | up to 10 | 1 | |
| Metal Halide Luminaires (Installed Outdoors) | 15 to 20 | 0 | See Note 2 | |
| Flourescent Luminaires (Installed Indoors) | 20 to 25 | up to 5 | See Note 3 | |
| Sports Lighting Luminaires (Installed Outdoors) | 15 to 20 | 0 | 250 | |
| | | | | |
| | | | | |
| Total | | | | |

Note 1: Panelboards are located in local electrical closets and various rooms throughout the building. The exact quantity is unknown.

Note 2: Outdoor Lumianires are installed throughout all concourses, ramps, canopies, etc.of the facility. The exact quantity is unknown.

Note 3: Indoor Lumianires are installed throughout all indoor spaces on all levels of the facility. The exact quantity is unknown.

Plumbing and Fire Protection Systems / Equipment

| Description | Estimated Life (years) | Life Remaining (years) | Quantity | Remarks |
|---|------------------------|------------------------|------------|--------------------------------|
| Central Domestic Water Heaters | 10 to 15 | up to 8 | 2 | See Note 4 |
| Stadium Club Kitchen Water Heater | 5 to 12 | 0 | 1 | Water Heater is 13 years old |
| Central Domestic Water Heater Recirc. Pumps | 10 | 5 | 1 | |
| Field Trench Drain Grates | See Note 1 | | See Note 2 | Grates are rusted and dented |
| Upper Bowl Drain Strainers | See Note 1 | | See Note 2 | |
| Sump Pump and Controls (dugout tunnels) | 10 | 0 | 2 | |
| Local Electric Water Heaters | 5 to 12 | 0 | See Note 2 | |
| Sprinkler System Air Compressors | 15 to 20 | See Note 3 | See Note 2 | |
| Sprinkler System Alarm Switches | 15 | 0 | See Note 2 | Alarms have failed in the past |
| | | | | |
| | | | | |
| | | | | |
| Total | | | | |

Note 1: Drain grate or strainer life expectancy varies with installation conditions.

Note 2: The exact quantity is unknown.

Note 3: Several Compressors have been replaced life expectancy varies with length of service.

Note 4: Electric heating Elements have failed several times /add copper tube boiler and expansion tank.

LACKAWANNA COUNTY STADIUM CAPITAL IMPROVEMENT BUDGET

SUMMARY OF ESTIMATES

(TOTALS FOR IMMEDIATE, SHORT-TERM, NEAR-TERM AND LONG-TERM IMPROVEMENTS)

| | |
|--------------------------------------|---------------------|
| Architectural and General Facilities | \$5,054,310 |
| Structural | \$1,228,900 |
| Electrical | \$6,227,380 |
| Mechanical | \$535,380 |
| Plumbing and Fire Protection | \$216,560 |
| TOTAL | \$13,262,500 |

Note: All totals include a 25% contingency for unforeseen conditions, market fluctuation and construction schedule

LACKAWANNA COUNTY STADIUM CAPITAL IMPROVEMENT BUDGET SUMMARY OF ESTIMATES

SUMMARY OF IMMEDIATE CAPITAL IMPROVEMENTS

| | |
|--------------------------------------|------------------|
| Architectural and General Facilities | \$630 |
| Structural | \$56,250 |
| Electrical | \$47,500 |
| Mechanical | \$0 |
| Plumbing and Fire Protection | \$52,810 |
| TOTAL | \$157,200 |

SUMMARY OF SHORT-TERM CAPITAL IMPROVEMENTS

| | |
|--------------------------------------|--------------------|
| Architectural and General Facilities | \$810,130 |
| Structural | \$1,051,900 |
| Electrical | \$936,880 |
| Mechanical | \$35,630 |
| Plumbing and Fire Protection | \$116,250 |
| TOTAL | \$2,950,800 |

SUMMARY OF NEAR-TERM CAPITAL IMPROVEMENTS

| | |
|--------------------------------------|--------------------|
| Architectural and General Facilities | \$2,696,250 |
| Structural | \$120,750 |
| Electrical | \$649,380 |
| Mechanical | \$499,750 |
| Plumbing and Fire Protection | \$35,000 |
| TOTAL | \$4,001,100 |

SUMMARY OF LONG-TERM CAPITAL IMPROVEMENTS

| | |
|--------------------------------------|--------------------|
| Architectural and General Facilities | \$1,547,310 |
| Structural | \$0 |
| Electrical | \$4,593,630 |
| Mechanical | \$0 |
| Plumbing and Fire Protection | \$12,500 |
| TOTAL | \$6,153,400 |

Note: All totals include a 25% contingency for unforeseen conditions, market fluctuation and construction schedule

**LACKAWANNA COUNTY STADIUM
CAPITAL IMPROVEMENT BUDGET
TOTAL ARCHITECTURAL AND GENERAL FACILITY**

| PRIORITY LEVEL | ITEM | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|--------------------------------------|------|--|----------|------|-------------|--|
| IMMEDIATE MAINTENANCE REPAIRS | | | | | | |
| I | A-A | Repair loose / non-functioning stadium seating | | | | Maintenance repair items have not been given budget costs as it is our understanding the labor and materials will be a part of the ongoing stadium maintenance budget. |
| I | A-B | Repair loose railings | | | | |
| I | A-C | Remediate tripping hazards in bowl / concourses | | | | |
| I | A-D | Secure fire extinguishers / cabinets | | | | |
| FIRE RATED WALL PENETRATION | | | | | | |
| I | A-01 | Sealing of fire-rated wall in main substation room | 5 | SF | \$100.00 | \$500 |
| SEALANT JOINTS | | | | | | |
| ST | A-02 | Replace all sealant joints in the lower bowl including lower bowl cross aisle _{1 3} | 9,300 | LF | \$20.00 | \$186,000 |
| ST | A-03 | Replace all sealant joints in the Suite / Club level bowl ₁ | 800 | LF | \$20.00 | \$16,000 |
| ST | A-04 | Replace all sealant joints in the upper bowl. _{1 3} | 14,000 | LF | \$20.00 | \$280,000 |
| NT | A-05 | Repair control joints in exterior CMU walls | 800 | LF | \$10.00 | \$8,000 |
| NT | A-06 | Install Cove Sealant at rail post bases | 150 | EA | \$25.00 | \$3,750 |
| EXPANSION JOINTS | | | | | | |
| NT | A-07 | Replace expansion joint system in the lower bowl ₇ | 150 | LF | \$150.00 | \$22,500 |
| NT | A-08 | Replace expansion joint system in the Suite / Club level bowl ₇ | 30 | LF | \$150.00 | \$4,500 |
| NT | A-09 | Replace expansion joint system in the upper bowl. ₇ | 180 | LF | \$150.00 | \$27,000 |
| NT | A-10 | Replace expansion joint system in the main concourse deck | 90 | LF | \$125.00 | \$11,250 |
| NT | A-11 | Replace expansion joint system in the main concourse walls | 10 | LF | \$125.00 | \$1,250 |
| NT | A-12 | Replace expansion joint system in the upper concourse deck | 90 | LF | \$125.00 | \$11,250 |
| INTERIOR FINISHES | | | | | | |
| ST | A-13 | Replace damaged acoustical ceiling tile and grid in Suites / Clubs / Press Box ₅ | 9,000 | SF | \$5.00 | \$45,000 |
| ST | A-14 | Remove subroof system above suite ceiling | 1 | LS | \$10,000.00 | \$10,000 |

**LACKAWANNA COUNTY STADIUM
CAPITAL IMPROVEMENT BUDGET
TOTAL ARCHITECTURAL AND GENERAL FACILITY**

| PRIORITY LEVEL | ITEM | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|----------------------------------|------|---|----------|------|-------------|-----------|
| ST | A-15 | Replace damaged carpets in Suites / Clubs / Press Box ₅ | 9,000 | SF | \$5.00 | \$45,000 |
| ST | A-16 | Repair / Replace Millwork in Suites / Clubs / Press Box ₉ | 1 | LS | \$40,000.00 | \$40,000 |
| SITE PARKING / WALKS | | | | | | |
| ST | A-17 | Repair spalled concrete at main entrance curbs and replace failed sealant | 5 | EA | \$1,500.00 | \$7,500 |
| ELEVATOR SHAFT / ENTRANCE | | | | | | |
| ST | A-18 | Repair water damaged GWB walls in stair tower adjacent to elevator shaft | 160 | SF | \$10.00 | \$1,600 |
| ST | A-19 | Construction of new storefront elevator vestibule on upper concourse level | 1 | LS | \$15,000.00 | \$15,000 |
| EXTERIOR CMU WALLS | | | | | | |
| ST | A-20 | Repair and Repoint masonry walls | 100 | SF | \$10.00 | \$1,000 |
| ST | A-21 | Install metal cap flashing at masonry walls | 10 | SF | \$100.00 | \$1,000 |
| NT | A-22 | Clean efflorescence at masonry walls | 2,500 | SF | \$5.00 | \$12,500 |
| NT | A-23 | Apply clear silane / siloxane topical sealer at exterior perimeter walls ₂ | 10,000 | SF | \$2.00 | \$20,000 |
| CONCRETE COATING | | | | | | |
| NT | A-24 | Install MMA coating in lower bowl ₁ | 50,000 | SF | \$12.00 | \$600,000 |
| NT | A-25 | Install MMA coating in Suites / Club level bowl ₁ | 3,300 | SF | \$12.00 | \$39,600 |
| NT | A-26 | Install MMA coating in upper bowl ₁ | 50,000 | SF | \$12.00 | \$600,000 |
| NT | A-27 | Install MMA coating on Main Concourse ₁₀ | 20,000 | SF | \$8.00 | \$160,000 |
| NT | A-28 | Install MMA coating on Suite Level Concourse | 11,000 | SF | \$12.00 | \$132,000 |
| NT | A-29 | Install MMA coating on Upper Concourse ₁₀ | 20,000 | SF | \$8.00 | \$160,000 |
| NT | A-30 | Install MMA coating on ramp | 15,000 | SF | \$6.00 | \$90,000 |
| CONCOURSE DRAINAGE | | | | | | |
| NT | A-31 | Install drains and piping in Upper Concourse | 6 | EA | \$5,000.00 | \$30,000 |
| NT | A-32 | Repitch main concourse to slope to drain, include clean and paint at base of columns | 6,000 | SF | \$12.00 | \$72,000 |

**LACKAWANNA COUNTY STADIUM
CAPITAL IMPROVEMENT BUDGET
TOTAL ARCHITECTURAL AND GENERAL FACILITY**

| PRIORITY LEVEL | ITEM | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|-------------------------------|------|---|----------|------|---|-----------|
| NT | A-33 | Repitch upper concourse to slope to drain, include clean and paint at base of columns | 3,600 | SF | \$12.00 | \$43,200 |
| BOWL RAILINGS | | | | | | |
| NT | A-34 | Install railings in upper bowl aisles | 260 | LF | \$150.00 | \$39,000 |
| HOLLOW METAL DOORS | | | | | | |
| NT | A-35 | Repair / replace water damaged hollow metal door frames on the main concourse | 10 | EA | \$200.00 | \$2,000 |
| NT | A-36 | Repair / replace water damaged hollow metal door frames on the upper concourse | 10 | EA | \$200.00 | \$2,000 |
| NT | A-37 | Replace water damaged hollow metal doors / hardware on the lower concourse | 10 | EA | \$1,000.00 | \$10,000 |
| NT | A-38 | Replace water damaged hollow metal doors / hardware on the upper concourse | 4 | EA | \$1,000.00 | \$4,000 |
| UPPER BOWL LOUVERS | | | | | | |
| NT | A-39 | Provide new anchoring system for upper bowl louvers. | 26 | EA | \$1,200.00 | \$31,200 |
| BIRD ROOST | | | | | | |
| NT | A-40 | Provide bird deterrent system as recommended by specialty subcontractor | | | Capital Improvement estimate to be determined by Owner's budget and | |
| TOILET ROOM VESTIBULES | | | | | | |
| NT | A-41 | Provide standing seam metal roof above upper concourse toilet room vestibules | 2 | LS | \$10,000.00 | \$20,000 |
| STADIUM SEATING | | | | | | |
| LT | A-42 | Replace stadium seating in the lower bowl | 5,286 | EA | \$125.00 | \$660,750 |
| LT | A-43 | Replace stadium seating in the suites / club | 220 | EA | \$130.00 | \$28,600 |
| LT | A-44 | Replace stadium seating in the upper bowl | 3,420 | EA | \$125.00 | \$427,500 |

LEFT FIELD PICNIC PAVILLION

**LACKAWANNA COUNTY STADIUM
CAPITAL IMPROVEMENT BUDGET
TOTAL ARCHITECTURAL AND GENERAL FACILITY**

| PRIORITY LEVEL | ITEM | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|--|------|---|----------|------|-------------|--------------------|
| LT | A-45 | Provide 8" CMU base at left field picnic pavilion plaster walls | 160 | LF | \$75.00 | \$12,000 |
| LT | A-46 | Install drains at left field picnic pavilion | 2 | EA | \$5,000.00 | \$10,000 |
| REGRADING OUTFIELD AREA | | | | | | |
| LT | A-47 | Regrade area beyond outfield fence, install new catch basins, reseed / install landscaping to stabilize slope | 1 | LS | \$75,000.00 | \$75,000 |
| VISITOR'S DUGOUT TUNNEL | | | | | | |
| LT | A-48 | Provide CMU closure wall at visitor's dugout tunnel | 800 | SF | \$20.00 | \$16,000 |
| EXTERIOR STAIR ROOFS | | | | | | |
| LT | A-49 | Replace damaged areas of EPDM exterior stair roofs | 400 | SF | \$20.00 | \$8,000 |
| SUBTOTAL ARCHITECTURAL AND GENERAL FACILITY | | | | | | \$4,043,450 |
| 25% CONTINGENCY | | | | | | \$1,010,860 |
| TOTAL ARCHITECTURAL AND GENERAL FACILITY CAPITAL IMPROVEMENTS | | | | | | \$5,054,310 |

**LACKAWANNA COUNTY STADIUM
CAPITAL IMPROVEMENT BUDGET
TOTAL ARCHITECTURAL AND GENERAL FACILITY**

| PRIORITY ITEM LEVEL | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|------------------------|-------------|----------|------|------|--------|
|------------------------|-------------|----------|------|------|--------|

Notes

- 1 Includes seat removal and reinstallation
- 2 Includes single wythe masonry on the outer periphery
- 3 Quantities based on precast triple tiers, per construction drawings
- 4 Control joint has been assumed to be at each column line in exterior walls
- 5 Based on area take-offs from plans assuming approximately 75% of areas
- 6 Based on seating manifest provided by building maintenance staff. Seat
- 7 Includes removal and reinstallation of existing cover plates on horizontal
- 8 Quantity indicates estimated percentage of louver sections. Remediation to
- 9 Based on condition of suites observed during spring 2009 walkthrough.
- 10 Includes removal of existing failed coating system

Note: 25% contingency for unforeseen conditions, market fluctuation and construction schedule

LACKAWANNA COUNTY STADIUM CAPITAL IMPROVEMENT BUDGET TOTAL STRUCTURAL

| PRIORITY LEVEL | ITEM | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|--------------------------------------|------|--|----------|------|-------------|--|
| IMMEDIATE MAINTENANCE REPAIRS | | | | | | |
| I | S-A | Conduct comprehensive check of concrete surrounding bowl railing posts, fix areas of loose concrete. | | | | Maintenance repair items have not been given budget costs as it is our understanding the labor and materials will be a part of the ongoing stadium maintenance budget. |
| I | S-B | Conduct comprehensive check of light pole bases and interior corrosion | | | | Capital improvement estimate to be determined by specialty testing agency |
| CONCRETE SPALLS | | | | | | |
| ST | S-01 | Repair concrete spalls at rail bases at top of lower bowl at handicap platforms | 12 | EA | \$1,200.00 | \$14,400 |
| ST | S-02 | Repair concrete spalls at rail bases at lower bowl field wall | 120 | EA | \$1,200.00 | \$144,000 |
| ST | S-03 | Repair concrete spalls at rail bases at upper bowl vomitories | 185 | EA | \$1,200.00 | \$222,000 |
| ST | S-04 | Repair concrete spalls at rail base at ramp landing corners | 15 | EA | \$1,200.00 | \$18,000 |
| ST | S-05 | Repair concrete spalls at removed rail locations in lower bowl | 36 | EA | \$1,200.00 | \$43,200 |
| ST | S-06 | Repair concrete spalls at lower bowl steps | 60 | EA | \$1,200.00 | \$72,000 |
| ST | S-07 | Repair concrete spalls at precast riser to tread shim locations at lower bowl | 36 | EA | \$1,200.00 | \$43,200 |
| ST | S-08 | Upper Concourse outboard parapet wall rail post concrete spalls | 40 | EA | \$1,200.00 | \$48,000 |
| ST | S-09 | Suite Tub concrete spalls | 20 | EA | \$1,200.00 | \$24,000 |
| ST | S-10 | Repair Lower Bowl End Wall concrete Spalls | 16 | EA | \$1,200.00 | \$19,200 |
| ST | S-11 | Remove and replace rail post anchorage grout including cove sealant | 400 | EA | \$200.00 | \$80,000 |
| STEEL CORROSION | | | | | | |
| NT | S-12 | Clean and paint corroded steel supporting upper bowl vomitories | 12 | EA | \$2,500.00 | \$30,000 |
| NT | S-13 | Clean and paint corroded steel in generator room | 1 | EA | \$7,500.00 | \$7,500 |
| NT | S-14 | Clean and paint corroded steel at outfield structures | 1 | LS | \$12,500.00 | \$12,500 |
| NT | S-15 | Clean and paint corroded steel at right field party deck access stair | 1 | LS | \$2,000.00 | \$2,000 |
| NT | S-16 | Clean and paint corroded steel supporting suite level | 1 | LS | \$20,000.00 | \$20,000 |

LACKAWANNA COUNTY STADIUM CAPITAL IMPROVEMENT BUDGET TOTAL STRUCTURAL

| PRIORITY LEVEL | ITEM | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|---|------|--|----------|------|-------------|--------------------|
| NT | S-17 | Clean and paint with high performance paint corroded steel base plates at exit stair | 8 | EA | \$1,200.00 | \$9,600 |
| CONCRETE CRACKS | | | | | | |
| ST | S-18 | Rout and seal concrete cracks at vertical surfaces of upper bowl vomitories | 720 | LF | \$6.00 | \$4,320 |
| ST | S-19 | Rout and seal concrete cracks at main concourse | 4000 | LF | \$6.00 | \$24,000 |
| ST | S-20 | Rout and seal concrete cracks at suite level concourse | 6700 | LF | \$6.00 | \$40,200 |
| ST | S-21 | Rout and seal concrete cracks at upper concourse | 500 | LF | \$6.00 | \$3,000 |
| ST | S-22 | Rout and seal concrete cracks at lower bowl | 250 | LF | \$6.00 | \$1,500 |
| ST | S-23 | Rout and seal concrete cracks at suite bowl | 350 | LF | \$6.00 | \$2,100 |
| ST | S-23 | Rout and seal concrete cracks at upper bowl | 400 | LF | \$6.00 | \$2,400 |
| ST | S-24 | Inject concrete cracks at precast tub units at Suite Level | 120 | LF | \$20.00 | \$2,400 |
| ST | S-25 | Rout and seal concrete cracks at ramps | 2000 | LF | \$6.00 | \$12,000 |
| ST | S-26 | Patch and repair damaged concrete at ramp landings | 1800 | SF | \$12.00 | \$21,600 |
| MISCELLANEOUS STRUCTURAL REPAIRS | | | | | | |
| I | S-27 | Repair right field party deck structure, including replacement of rusted rails, painting steel structure and replacement of rotting / warped wood fascia | 1 | LS | \$40,000.00 | \$40,000 |
| I | S-28 | Replace stair at right field bullpen | 1 | LS | \$5,000.00 | \$5,000 |
| NT | S-29 | Replace outfield dumpster concrete / CMU platform | 1 | LS | \$15,000.00 | \$15,000 |
| SUBTOTAL STRUCTURAL | | | | | | \$983,120 |
| 25% CONTINGENCY | | | | | | \$245,780 |
| TOTAL STRUCTURAL | | | | | | \$1,228,900 |

Note: 25% contingency for unforeseen conditions, market fluctuation and construction schedule

**LACKAWANNA COUNTY STADIUM
CAPITAL IMPROVEMENT BUDGET
TOTAL ELECTRICAL**

| PRIORITY LEVEL | ITEM | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|----------------|------|--|----------|------|--------------|-----------|
| I | E-01 | Testing of Emergency System including life safety lighting levels | 1 | LS | \$5,000.00 | \$5,000 |
| I | E-02 | Emergency Generator Battery Replacement | 2 | EA | \$2,000.00 | \$4,000 |
| I | E-03 | Replace outdoor receptacles with GFCI Receptacles with weather tight in use enclosures | 60 | EA | \$150.00 | \$9,000 |
| I | E-04 | Electrical Testing, Cleaning and Inspection of Main Service Switchboard, Generator, Automatic Transfer Switch and Distribution Panelboards including labeling of electrical services | 1 | LS | \$20,000.00 | \$20,000 |
| ST | E-05 | Replace Outfield Exterior Panelboard and Disconnect Switch | 13 | LS | \$40,000.00 | \$40,000 |
| ST | E-06 | Replace deteriorated conduits, branch wiring and junction boxes | 50 | EA | \$10,000.00 | \$500,000 |
| ST | E-07 | Replace Dugout Corridor Receptacle including new branch circuit | 2 | EA | \$1,000.00 | \$2,000 |
| ST | E-08 | Replace Press Box and Associated Area Lighting | 50 | EA | \$250.00 | \$12,500 |
| ST | E-09 | Clean and Replamp Sports Lighting including adding safety cable | 250 | EA | \$300.00 | \$75,000 |
| ST | E-10 | Luminaire Replacement/Repair | 100 | EA | \$250.00 | \$25,000 |
| ST | E-11 | Replace Suite Lighting | 19 | EA | \$5,000.00 | \$95,000 |
| NT | E-12 | Revisions to provide a dedicated 2HR room for the Emergency Generator | 1 | LS | \$20,000.00 | \$20,000 |
| NT | E-13 | Short Circuit, Coordination and Arch Flash Hazard Study | 1 | LS | \$40,000.00 | \$40,000 |
| NT | E-14 | Upgrade Fire Alarm System to meet current standards | 117,000 | SF | \$3.50 | \$409,500 |
| NT | E-15 | Testing of various electrical and telecommunications equipment that is currently being protected from water by plastic sheets | 10 | EA | \$5,000.00 | \$50,000 |
| LT | E-16 | Phased Replacement of Main Service Switchgear, Distribution Panelboards, Generator, Automatic Transfer Switches and Appliance Panelboards | | | | |
| | | Main service switchgear | 1 | EA | \$283,500.00 | \$283,500 |
| | | Distribution panels | 11 | EA | \$14,650.00 | \$161,150 |
| | | Generator | 1 | EA | \$400,000.00 | \$400,000 |
| | | ATS | 1 | EA | \$13,500.00 | \$13,500 |
| | | Appliance panels | 52 | EA | \$5,000.00 | \$260,000 |

**LACKAWANNA COUNTY STADIUM
CAPITAL IMPROVEMENT BUDGET
TOTAL ELECTRICAL**

| PRIORITY LEVEL | ITEM | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|--|------|--|----------|------|--------------|--------------------|
| LT | E-17 | Replacement of Branch Circuits and Feeders | | | | |
| | | 800Amp feeder 3sets of 4-500KCMIL | 2250 | LF | \$389.00 | \$875,250 |
| | | 600Amp feeder 2sets of 4-350KCMIL | 1225 | LF | \$194.00 | \$237,650 |
| | | 400Amp feeder 1set of 4-500KCMIL | 1050 | LF | \$127.00 | \$133,350 |
| | | 200Amp feeder 1set of 4-4/0 AWG | 2100 | LF | \$75.00 | \$157,500 |
| | | 100Amp feeder 1set of 4-2 AWG | 2100 | LF | \$60.00 | \$126,000 |
| | | Branch Circuits | 1 | LS | \$400,000.00 | \$400,000 |
| LT | E-18 | Phased Replacement of all Original Outdoor and Indoor Luminaires | 500 | EA | \$250.00 | \$125,000 |
| LT | E-19 | Replacement of 1500 watt Sports Lighting Luminaires including associated Branch Circuits, Feeders and Field Lighting Panelboards | 250 | EA | \$1,000.00 | \$250,000 |
| LT | E-20 | Replacement of Lighting Panelboards | 8 | EA | \$19,500.00 | \$156,000 |
| | | New lighting control system | 1 | LS | \$46,000.00 | \$46,000 |
| LT | E-21 | Resupport Low Voltage Cabling | 1 | LS | \$30,000.00 | \$30,000 |
| LT | E-22 | Remove all abandoned Low Voltage Cabling | 1 | LS | \$20,000.00 | \$20,000 |
| SUBTOTAL ELECTRICAL | | | | | | \$4,981,900 |
| 25% CONTINGENCY | | | | | | \$1,245,480 |
| TOTAL ELECTRICAL CAPITAL IMPROVEMENTS | | | | | | \$6,227,380 |

Note: 25% contingency for unforeseen conditions, market fluctuation and construction schedule

**LACKAWANNA COUNTY STADIUM
CAPITAL IMPROVEMENT BUDGET
TOTAL MECHANICAL**

| PRIORITY LEVEL | ITEM | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|--|------|--|----------|------|--------------|------------------|
| ST | H-1 | Install a condensate drainage collection system for Through-the-Wall Heat Pumps serving the suites | 19 | EA | \$1,500.00 | \$28,500 |
| NT | H-2 | Install new Direct Digital Control System | 1 | LS | \$175,000.00 | \$175,000 |
| NT | H-3 | Replace 10 ton Split Air Conditioning Unit serving Visitor's Locker Room | 1 | LS | \$15,000.00 | \$15,000 |
| NT | H-4 | Replace 10 ton Rooftop Air Conditioning Unit serving Administrative Offices | 1 | LS | \$15,000.00 | \$15,000 |
| NT | H-5 | Replace three Indoor Packaged Air Conditioning Units serving Private Lounges and the Club Suite | 3 | EA | \$15,000.00 | \$45,000 |
| NT | H-6 | Replace H&V Unit serving Employee Locker Room | 1 | EA | \$5,000.00 | \$5,000 |
| NT | H-7 | Replace exhaust fans (APPROX 20) | 1 | LS | \$65,000.00 | \$65,000 |
| NT | H-8 | Replace Electric Baseboard Heaters | 46 | EA | \$300.00 | \$13,800 |
| NT | H-9 | Replace Electric Propeller Unit Heaters | 6 | EA | \$1,000.00 | \$6,000 |
| NT | H-10 | Replace Electric Cabinet Unit Heaters | 6 | EA | \$1,000.00 | \$6,000 |
| NT | H-11 | Replace Electric Radiant Panel Heaters | 10 | EA | \$650.00 | \$6,500 |
| NT | H-12 | Replace Through-the-Wall Heat Pumps serving Luxury Suites | 19 | EA | \$2,500.00 | \$47,500 |
| SUBTOTAL MECHANICAL | | | | | | \$428,300 |
| 25% CONTINGENCY | | | | | | \$107,080 |
| TOTAL MECHANICAL CAPITAL IMPROVEMENTS | | | | | | \$535,380 |

Note: 25% contingency for unforeseen conditions, market fluctuation and construction schedule

**LACKAWANNA COUNTY STADIUM
CAPITAL IMPROVEMENT BUDGET
TOTAL PLUMBING AND FIRE-PROTECTION**

| PRIORITY LEVEL | ITEM | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|--|------|--|----------|------|-------------|----------|
| PLUMBING WATER HEATING | | | | | | |
| I | P-1 | Provide Central Water Heating Propane Boiler w/ PV&F | 1 | EA | \$30,000.00 | \$30,000 |
| | | Add recirc pump for boiler | 1 | EA | \$1,000.00 | \$1,000 |
| | | Extend propane piping to boiler | 350 | LF | \$25.00 | \$8,750 |
| | | Thru wall venting piping. | 1 | LS | \$1,000.00 | \$1,000 |
| ST | P-2 | Replace Stadium Club Propane Water Heater. | 1 | EA | \$7,000.00 | \$7,000 |
| ST | P-3 | Replace Concourse 2 Electric Water Heaters for toilet rooms. | 2 | EA | \$2,000.00 | \$4,000 |
| ST | P-4 | Provide expansion tank | 1 | EA | \$1,000.00 | \$1,000 |
| SUMP PUMPS | | | | | | |
| ST | P-5 | Replace sump pumps in dugout tunnels | 2 | EA | \$5,000.00 | \$10,000 |
| BACKFLOW PREVENTERS | | | | | | |
| ST | P-6 | Add Vacuum Breakers on Field Irrigation piping. | 2 | EA | \$2,000.00 | \$4,000 |
| ST | P-7 | Add Backflow preventers on soda machines | 32 | EA | \$250.00 | \$8,000 |
| GREASE INTERCEPTORS | | | | | | |
| ST | P-8 | Provide Grease Interceptors at Pot Sinks | 4 | EA | \$10,000.00 | \$40,000 |
| INDIRECT WASTE AT FOOD PREP AREAS | | | | | | |
| ST | P-9 | Provide Indirect Waste Connections | 5 | EA | \$1,000.00 | \$5,000 |
| CONCOURSE DRAINS | | | | | | |
| LT | P-10 | Replace concourse strainers with larger strainers | 20 | EA | \$500.00 | \$10,000 |
| FIRE PROTECTION SPRINKLER SYSTEMS | | | | | | |
| I | FP-1 | MIC corrosion testing | 1 | EA | \$1,500.00 | \$1,500 |
| ST | FP-2 | MIC corrosion treatment | 1 | EA | \$12,000.00 | \$12,000 |
| ST | FP-3 | Replace sprinkler system alarm devices | 4 | EA | \$500.00 | \$2,000 |
| NT | FP-4 | Provide sprinklers in hazardous spaces. | 7000 | SF | \$4.00 | \$28,000 |

**LACKAWANNA COUNTY STADIUM
CAPITAL IMPROVEMENT BUDGET
TOTAL PLUMBING AND FIRE-PROTECTION**

| | |
|--|------------------|
| SUBTOTAL PLUMBING AND FIRE PROTECTION | \$173,250 |
| 25% CONTINGENCY | \$43,310 |
| TOTAL PLUMBING AND FIRE PROTECTION | \$216,560 |

Note: 25% contingency for unforeseen conditions, market fluctuation and construction schedule

**LACKAWANNA COUNTY STADIUM
CAPITAL IMPROVEMENT BUDGET
IMMEDIATE ARCHITECTURAL AND GENERAL FACILITY**

| PRIORITY LEVEL | ITEM | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|--|------|--|----------|------|----------|--------------|
| IMMEDIATE MAINTENANCE REPAIRS | | | | | | |
| I | A-A | Repair loose / non-functioning stadium seating | | | | |
| I | A-B | Repair loose railings | | | | |
| I | A-C | Remediate tripping hazards in bowl / concourses | | | | |
| I | A-D | Secure fire extinguishers / cabinets | | | | |
| FIRE RATED WALL PENETRATION | | | | | | |
| I | A-01 | Sealing of fire-rated wall in main substation room | 5 | SF | \$100.00 | \$500 |
| SUBTOTAL IMMEDIATE ARCHITECTURAL AND GENERAL FACILITY | | | | | | \$500 |
| 25% CONTINGENCY | | | | | | \$130 |
| TOTAL IMMEDIATE ARCHITECTURAL AND GENERAL FACILITY | | | | | | \$630 |

LACKAWANNA COUNTY STADIUM CAPITAL IMPROVEMENT BUDGET IMMEDIATE STRUCTURAL

| PRIORITY LEVEL | ITEM | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|---|------|--|----------|------|-------------|--|
| IMMEDIATE MAINTENANCE REPAIRS | | | | | | |
| I | S-A | Conduct comprehensive check of concrete surrounding bowl railing posts, fix areas of loose concrete. | | | | Maintenance repair items have not been given budget costs as it is our understanding the labor and materials will be a part of the ongoing stadium maintenance budget. |
| I | S-B | Conduct comprehensive check of light pole bases and interior corrosion | | | | Capital improvement estimate to be determined by specialty testing agency |
| MISCELLANEOUS STRUCTURAL REPAIRS | | | | | | |
| I | S-27 | Repair right field party deck structure, including replacement of rusted rails, painting steel structure and replacement of rotting / warped wood fascia | 1 | LS | \$40,000.00 | \$40,000 |
| I | S-28 | Replace stair at right field bullpen | 1 | LS | \$5,000.00 | \$5,000 |
| SUBTOTAL IMMEDIATE STRUCTURAL | | | | | | \$45,000 |
| 25% CONTINGENCY | | | | | | \$11,250 |
| TOTAL IMMEDIATE STRUCTURAL | | | | | | \$56,250 |

Note: 25% contingency for unforeseen conditions, market fluctuation and construction schedule

**LACKAWANNA COUNTY STADIUM
CAPITAL IMPROVEMENT BUDGET
IMMEDIATE ELECTRICAL**

| PRIORITY LEVEL | ITEM | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|--|------|--|----------|------|-------------|-----------------|
| I | E-01 | Testing of Emergency System including life safety lighting levels | 1 | LS | \$5,000.00 | \$5,000 |
| I | E-02 | Emergency Generator Battery Replacement | 2 | EA | \$2,000.00 | \$4,000 |
| I | E-03 | Replace outdoor receptacles with GFCI Receptacles with weather tight in use enclosures | 60 | EA | \$150.00 | \$9,000 |
| I | E-04 | Electrical Testing, Cleaning and Inspection of Main Service Switchboard, Generator, Automatic Transfer Switch and Distribution Panelboards including labeling of electrical services | 1 | LS | \$20,000.00 | \$20,000 |
| SUBTOTAL IMMEDIATE ELECTRICAL | | | | | | \$38,000 |
| 25% CONTINGENCY | | | | | | \$9,500 |
| TOTAL IMMEDIATE ELECTRICAL CAPITAL IMPROVEMENTS | | | | | | \$47,500 |

Note: 25% contingency for unforeseen conditions, market fluctuation and construction schedule

**LACKAWANNA COUNTY STADIUM
CAPITAL IMPROVEMENT BUDGET
IMMEDIATE PLUMBING**

| PRIORITY LEVEL | ITEM | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|--|------|--|----------|------|-------------|-----------------|
| PLUMBING WATER HEATING | | | | | | |
| I | P-1 | Provide Central Water Heating Propane Boiler w/ PV&F | 1 | EA | \$30,000.00 | \$30,000 |
| | | Add recirc pump for boiler | 1 | EA | \$1,000.00 | \$1,000 |
| | | Extend propane piping to boiler | 350 | LF | \$25.00 | \$8,750 |
| | | Thru wall venting piping. | 1 | LS | \$1,000.00 | \$1,000 |
| FIRE PROTECTION SPRINKLER SYSTEMS | | | | | | |
| I | FP-1 | MIC corrosion testing | 1 | EA | \$1,500.00 | \$1,500 |
| SUBTOTAL IMMEDIATE PLUMBING | | | | | | \$42,250 |
| 25% CONTINGENCY | | | | | | \$10,560 |
| TOTAL IMMEDIATE PLUMBING CAPITAL IMPROVEMENTS | | | | | | \$52,810 |

Note: 25% contingency for unforeseen conditions, market fluctuation and construction schedule

**LACKAWANNA COUNTY STADIUM
CAPITAL IMPROVEMENT BUDGET
SHORT-TERM ARCHITECTURAL AND GENERAL FACILITY**

| PRIORITY LEVEL | ITEM | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|---|------|--|----------|------|-------------|------------------|
| SEALANT JOINTS | | | | | | |
| ST | A-02 | Replace all sealant joints in the lower bowl including lower bowl cross aisle ^{1 3} | 9,300 | LF | \$20.00 | \$186,000 |
| ST | A-03 | Replace all sealant joints in the Suite / Club level bowl ¹ | 800 | LF | \$20.00 | \$16,000 |
| ST | A-04 | Replace all sealant joints in the upper bowl. ^{1 3} | 14,000 | LF | \$20.00 | \$280,000 |
| INTERIOR FINISHES | | | | | | |
| ST | A-13 | Replace damaged acoustical ceiling tile and grid in Suites / Clubs / Press Box ⁵ | 9,000 | SF | \$5.00 | \$45,000 |
| ST | A-14 | Remove subroof system above suite ceiling | 1 | LS | \$10,000.00 | \$10,000 |
| ST | A-15 | Replace damaged carpets in Suites / Clubs / Press Box ⁵ | 9,000 | SF | \$5.00 | \$45,000 |
| ST | A-16 | Repair / Replace Millwork in Suites / Clubs / Press Box ⁹ | 1 | LS | \$40,000.00 | \$40,000 |
| SITE PARKING / WALKS | | | | | | |
| ST | A-17 | Repair spalled concrete at main entrance curbs and replace failed sealant | 5 | EA | \$1,500.00 | \$7,500 |
| ELEVATOR SHAFT / ENTRANCE | | | | | | |
| ST | A-18 | Repair water damaged GWB walls in stair tower adjacent to elevator shaft | 160 | SF | \$10.00 | \$1,600 |
| ST | A-19 | Construction of new storefront elevator vestibule on upper concourse level | 1 | LS | \$15,000.00 | \$15,000 |
| EXTERIOR CMU WALLS | | | | | | |
| ST | A-20 | Repair and Repoint masonry walls | 100 | SF | \$10.00 | \$1,000 |
| ST | A-21 | Install metal cap flashing at masonry walls | 10 | SF | \$100.00 | \$1,000 |
| SUBTOTAL SHORT-TERM ARCHITECTURAL AND GENERAL FACILITY | | | | | | \$648,100 |
| 25% CONTINGENCY | | | | | | \$162,030 |
| TOTAL SHORT-TERM ARCHITECTURAL AND GENERAL FACILITY | | | | | | \$810,130 |

Notes

- 1 Includes seat removal and reinstallation
- 2 Includes single wythe masonry on the outer periphery
- 3 Quantities based on precast triple tiers, per construction drawings
- 4 Control joint has been assumed to be at each column line in exterior walls

**LACKAWANNA COUNTY STADIUM
CAPITAL IMPROVEMENT BUDGET**
SHORT-TERM ARCHITECTURAL AND GENERAL FACILITY

| PRIORITY ITEM LEVEL | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|------------------------|---|---|------|------|--------|
| | 5 | Based on area take-offs from plans assuming approximately 75% of areas requiring full replacement | | | |
| | 6 | Based on seating manifest provided by building maintenance staff. Seat replacement is one for one | | | |
| | 7 | Includes removal and reinstallation of existing cover plates on horizontal surfaces | | | |
| | 8 | Quantity indicates estimated percentage of louver sections. Remediation to include louver blade and frame anchorage | | | |
| | 9 | Based on condition of suites observed during spring 2009 walkthrough. | | | |
| | 10 | Includes removal of existing failed coating system | | | |
| | Note: 25% contingency for unforeseen conditions, market fluctuation and construction schedule | | | | |

**LACKAWANNA COUNTY STADIUM
CAPITAL IMPROVEMENT BUDGET
SHORT-TERM STRUCTURAL**

| PRIORITY LEVEL | ITEM | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|------------------------|------|---|----------|------|------------|-----------|
| CONCRETE SPALLS | | | | | | |
| ST | S-01 | Repair concrete spalls at rail bases at top of lower bowl at handicap platforms | 12 | EA | \$1,200.00 | \$14,400 |
| ST | S-02 | Repair concrete spalls at rail bases at lower bowl field wall | 120 | EA | \$1,200.00 | \$144,000 |
| ST | S-03 | Repair concrete spalls at rail bases at upper bowl vomitories | 185 | EA | \$1,200.00 | \$222,000 |
| ST | S-04 | Repair concrete spalls at rail base at ramp landing corners | 15 | EA | \$1,200.00 | \$18,000 |
| ST | S-05 | Repair concrete spalls at removed rail locations in lower bowl | 36 | EA | \$1,200.00 | \$43,200 |
| ST | S-06 | Repair concrete spalls at lower bowl steps | 60 | EA | \$1,200.00 | \$72,000 |
| ST | S-07 | Repair concrete spalls at precast riser to tread shim locations at lower bowl | 36 | EA | \$1,200.00 | \$43,200 |
| ST | S-08 | Upper Concourse outboard parapet wall rail post concrete spalls | 40 | EA | \$1,200.00 | \$48,000 |
| ST | S-09 | Suite Tub concrete spalls | 20 | EA | \$1,200.00 | \$24,000 |
| ST | S-10 | Repair Lower Bowl End Wall concrete Spalls | 16 | EA | \$1,200.00 | \$19,200 |
| ST | S-11 | Remove and replace rail post anchorage grout including cove sealant | 400 | EA | \$200.00 | \$80,000 |
| CONCRETE CRACKS | | | | | | |
| ST | S-18 | Rout and seal concrete cracks at vertical surfaces of upper bowl vomitories | 720 | LF | \$6.00 | \$4,320 |
| ST | S-19 | Rout and seal concrete cracks at main concourse | 4,000 | LF | \$6.00 | \$24,000 |
| ST | S-20 | Rout and seal concrete cracks at suite level concourse | 6,700 | LF | \$6.00 | \$40,200 |
| ST | S-21 | Rout and seal concrete cracks at upper concourse | 500 | LF | \$6.00 | \$3,000 |
| ST | S-22 | Rout and seal concrete cracks at lower bowl | 250 | LF | \$6.00 | \$1,500 |
| ST | S-23 | Rout and seal concrete cracks at suite bowl | 350 | LF | \$6.00 | \$2,100 |
| ST | S-24 | Rout and seal concrete cracks at upper bowl | 400 | LF | \$6.00 | \$2,400 |
| ST | S-25 | Inject concrete cracks at precast tub units at Suite Level | 120 | LF | \$20.00 | \$2,400 |
| ST | S-26 | Rout and seal concrete cracks at ramps | 2,000 | LF | \$6.00 | \$12,000 |
| ST | S-27 | Patch and repair damaged concrete at ramp landings | 1,800 | SF | \$12.00 | \$21,600 |

**LACKAWANNA COUNTY STADIUM
CAPITAL IMPROVEMENT BUDGET
SHORT-TERM STRUCTURAL**

| | |
|--------------------------------|-------------|
| SUBTOTAL SHORT-TERM STRUCTURAL | \$841,520 |
| 25% CONTINGENCY | \$210,380 |
| <hr/> | |
| TOTAL SHORT-TERM STRUCTURAL | \$1,051,900 |

Note: 25% contingency for unforeseen conditions, market fluctuation and construction schedule

**LACKAWANNA COUNTY STADIUM
CAPITAL IMPROVEMENT BUDGET
SHORT-TERM ELECTRICAL**

| PRIORITY LEVEL | ITEM | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|---|------|---|----------|------|-------------|------------------|
| ST | E-05 | Replace Outfield Exterior Panelboard and Disconnect Switch | 13 | LS | \$40,000.00 | \$40,000 |
| ST | E-06 | Replace deteriorated conduits, branch wiring and junction boxes | 50 | EA | \$10,000.00 | \$500,000 |
| ST | E-07 | Replace Dugout Corridor Receptacle including new branch circuit | 2 | EA | \$1,000.00 | \$2,000 |
| ST | E-08 | Replace Press Box and Associated Area Lighting | 50 | EA | \$250.00 | \$12,500 |
| ST | E-09 | Clean and Replamp Sports Lighting including adding safety cable | 250 | EA | \$300.00 | \$75,000 |
| ST | E-10 | Luminaire Replacement/Repair | 100 | EA | \$250.00 | \$25,000 |
| ST | E-11 | Replace Suite Lighting | 19 | EA | \$5,000.00 | \$95,000 |
| SUBTOTAL SHORT-TERM ELECTRICAL | | | | | | \$749,500 |
| 25% CONTINGENCY | | | | | | \$187,380 |
| TOTAL SHORT-TERM ELECTRICAL CAPITAL IMPROVEMENTS | | | | | | \$936,880 |

Note: 25% contingency for unforeseen conditions, market fluctuation and construction schedule

**LACKAWANNA COUNTY STADIUM
CAPITAL IMPROVEMENT BUDGET
SHORT-TERM MECHANICAL**

| PRIORITY LEVEL | ITEM | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|---|------|--|----------|------|------------|-----------------|
| ST | H-1 | Install a condensate drainage collection system for Through-the-Wall Heat Pumps serving the suites | 19 | EA | \$1,500.00 | \$28,500 |
| SUBTOTAL SHORT-TERM MECHANICAL | | | | | | \$28,500 |
| 25% CONTINGENCY | | | | | | \$7,130 |
| TOTAL SHORT-TERM MECHANICAL CAPITAL IMPROVEMENTS | | | | | | \$35,630 |

Note: 25% contingency for unforeseen conditions, market fluctuation and construction schedule

**LACKAWANNA COUNTY STADIUM
CAPITAL IMPROVEMENT BUDGET
SHORT-TERM PLUMBING AND FIRE-PROTECTION**

| PRIORITY LEVEL | ITEM | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|---|------|--|----------|------|-------------|------------------|
| PLUMBING WATER HEATING | | | | | | |
| ST | P-2 | Replace Stadium Club Propane Water Heater. | 1 | EA | \$7,000.00 | \$7,000 |
| ST | P-3 | Replace Concourse 2 Electric Water Heaters for toilet rooms. | 2 | EA | \$2,000.00 | \$4,000 |
| ST | P-4 | Provide expansion tank | 1 | EA | \$1,000.00 | \$1,000 |
| SUMP PUMPS | | | | | | |
| ST | P-5 | Replace sump pumps in dugout tunnels | 2 | EA | \$5,000.00 | \$10,000 |
| BACKFLOW PREVENTERS | | | | | | |
| ST | P-6 | Add Vacuum Breakers on Field Irrigation piping. | 2 | EA | \$2,000.00 | \$4,000 |
| ST | P-7 | Add Backflow preventers on soda machines | 32 | EA | \$250.00 | \$8,000 |
| GREASE INTERCEPTORS | | | | | | |
| ST | P-8 | Provide Grease Interceptors at Pot Sinks | 4 | EA | \$10,000.00 | \$40,000 |
| INDIRECT WASTE AT FOOD PREP AREAS | | | | | | |
| ST | P-9 | Provide Indirect Waste Connections | 5 | EA | \$1,000.00 | \$5,000 |
| FIRE PROTECTION SPRINKLER SYSTEMS | | | | | | |
| ST | FP-2 | MIC corrosion treatment | 1 | EA | \$12,000.00 | \$12,000 |
| ST | FP-3 | Replace sprinkler system alarm devices | 4 | EA | \$500.00 | \$2,000 |
| SUBTOTAL SHORT-TERM PLUMBING AND FIRE PROTECTION | | | | | | \$93,000 |
| 25% CONTINGENCY | | | | | | \$23,250 |
| TOTAL SHORT-TERM PLUMBING AND FIRE PROTECTION | | | | | | \$116,250 |

Note: 25% contingency for unforeseen conditions, market fluctuation and construction schedule

**LACKAWANNA COUNTY STADIUM
CAPITAL IMPROVEMENT BUDGET**
TOTAL NEAR-TERM ARCHITECTURAL AND GENERAL FACILITY

| PRIORITY LEVEL | ITEM | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|---------------------------|------|--|----------|------|------------|-----------|
| SEALANT JOINTS | | | | | | |
| NT | A-05 | Repair control joints in exterior CMU walls | 800 | LF | \$10.00 | \$8,000 |
| NT | A-06 | Install Cove Sealant at rail post bases | 150 | EA | \$25.00 | \$3,750 |
| EXPANSION JOINTS | | | | | | |
| NT | A-07 | Replace expansion joint system in the lower bowl 7 | 150 | LF | \$150.00 | \$22,500 |
| NT | A-08 | Replace expansion joint system in the Suite / Club level bowl 7 | 30 | LF | \$150.00 | \$4,500 |
| NT | A-09 | Replace expansion joint system in the upper bowl. 7 | 180 | LF | \$150.00 | \$27,000 |
| NT | A-10 | Replace expansion joint system in the main concourse deck | 90 | LF | \$125.00 | \$11,250 |
| NT | A-11 | Replace expansion joint system in the main concourse walls | 10 | LF | \$125.00 | \$1,250 |
| NT | A-12 | Replace expansion joint system in the upper concourse deck | 90 | LF | \$125.00 | \$11,250 |
| EXTERIOR CMU WALLS | | | | | | |
| NT | A-22 | Clean efflorescence at masonry walls | 2,500 | SF | \$5.00 | \$12,500 |
| NT | A-23 | Apply clear silane / siloxane topical sealer at exterior perimeter walls 2 | 10,000 | SF | \$2.00 | \$20,000 |
| CONCRETE COATING | | | | | | |
| NT | A-24 | Install MMA coating in lower bowl 1 | 50,000 | SF | \$12.00 | \$600,000 |
| NT | A-25 | Install MMA coating in Suites / Club level bowl 1 | 3,300 | SF | \$12.00 | \$39,600 |
| NT | A-26 | Install MMA coating in upper bowl 1 | 50,000 | SF | \$12.00 | \$600,000 |
| NT | A-27 | Install MMA coating on Main Concourse 10 | 20,000 | SF | \$8.00 | \$160,000 |
| NT | A-28 | Install MMA coating on Suite Level Concourse | 11,000 | SF | \$12.00 | \$132,000 |
| NT | A-29 | Install MMA coating on Upper Concourse 10 | 20,000 | SF | \$8.00 | \$160,000 |
| NT | A-30 | Install MMA coating on ramp | 15,000 | SF | \$6.00 | \$90,000 |
| CONCOURSE DRAINAGE | | | | | | |
| NT | A-31 | Install drains and piping in Upper Concourse | 6 | EA | \$5,000.00 | \$30,000 |

**LACKAWANNA COUNTY STADIUM
CAPITAL IMPROVEMENT BUDGET**
TOTAL NEAR-TERM ARCHITECTURAL AND GENERAL FACILITY

| PRIORITY LEVEL | ITEM | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|--|------|---|----------|------|--|--------------------|
| NT | A-32 | Repitch main concourse to slope to drain, include clean and paint at base of columns | 6,000 | SF | \$12.00 | \$72,000 |
| NT | A-33 | Repitch upper concourse to slope to drain, include clean and paint at base of columns | 3,600 | SF | \$12.00 | \$43,200 |
| BOWL RAILINGS | | | | | | |
| NT | A-34 | Install railings in upper bowl aisles | 260 | LF | \$150.00 | \$39,000 |
| HOLLOW METAL DOORS | | | | | | |
| NT | A-35 | Repair / replace water damaged hollow metal door frames on the main concourse | 10 | EA | \$200.00 | \$2,000 |
| NT | A-36 | Repair / replace water damaged hollow metal door frames on the upper concourse | 10 | EA | \$200.00 | \$2,000 |
| NT | A-37 | Replace water damaged hollow metal doors / hardware on the lower concourse | 10 | EA | \$1,000.00 | \$10,000 |
| NT | A-38 | Replace water damaged hollow metal doors / hardware on the upper concourse | 4 | EA | \$1,000.00 | \$4,000 |
| UPPER BOWL LOUVERS | | | | | | |
| NT | A-39 | Provide new anchoring system for upper bowl louvers. 8 | 26 | EA | \$1,200.00 | \$31,200 |
| BIRD ROOST | | | | | | |
| NT | A-40 | Provide bird deterrent system as recommended by specialty subcontractor | | | Capital Improvement estimate to be determined by Owner's budget and consultation with a bird roost specialty | |
| TOILET ROOM VESTIBULES | | | | | | |
| NT | A-41 | Provide standing seam metal roof above upper concourse toilet room vestibules | 2 | LS | \$10,000.00 | \$20,000 |
| SUBTOTAL NEAR-TERM ARCHITECTURAL AND GENERAL FACILITY | | | | | | \$2,157,000 |
| 25% CONTINGENCY | | | | | | \$539,250 |
| TOTAL NEAR-TERM ARCHITECTURAL AND GENERAL FACILITY | | | | | | \$2,696,250 |

Notes

1 Includes seat removal and reinstallation

**LACKAWANNA COUNTY STADIUM
CAPITAL IMPROVEMENT BUDGET**
TOTAL NEAR-TERM ARCHITECTURAL AND GENERAL FACILITY

| PRIORITY ITEM LEVEL | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|------------------------|---|----------|------|------|--------|
| | 2 Includes single wythe masonry on the outer periphery | | | | |
| | 3 Quantities based on precast triple tiers, per construction drawings | | | | |
| | 4 Control joint has been assumed to be at each column line in exterior walls | | | | |
| | 5 Based on area take-offs from plans assuming approximately 75% of areas requiring full replacement | | | | |
| | 6 Based on seating manifest provided by building maintenance staff. Seat replacement is one for one | | | | |
| | 7 Includes removal and reinstallation of existing cover plates on horizontal surfaces | | | | |
| | 8 Quantity indicates estimated percentage of louver sections. Remediation to include louver blade and frame anchorage | | | | |
| | 9 Based on condition of suites observed during spring 2009 walkthrough. | | | | |
| | 10 Includes removal of existing failed coating system | | | | |
| | Note: 25% contingency for unforeseen conditions, market fluctuation and construction schedule | | | | |

LACKAWANNA COUNTY STADIUM CAPITAL IMPROVEMENT BUDGET NEAR-TERM STRUCTURAL

| PRIORITY LEVEL | ITEM | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|---|------|--|----------|------|-------------|------------------|
| STEEL CORROSION | | | | | | |
| NT | S-12 | Clean and paint corroded steel supporting upper bowl vomitories | 12 | EA | \$2,500.00 | \$30,000 |
| NT | S-13 | Clean and paint corroded steel in generator room | 1 | EA | \$7,500.00 | \$7,500 |
| NT | S-14 | Clean and paint corroded steel at outfield structures | 1 | LS | \$12,500.00 | \$12,500 |
| NT | S-15 | Clean and paint corroded steel at right field party deck access stair | 1 | LS | \$2,000.00 | \$2,000 |
| NT | S-16 | Clean and paint corroded steel supporting suite level | 1 | LS | \$20,000.00 | \$20,000 |
| NT | S-17 | Clean and paint with high performance paint corroded steel base plates at exit stair | 8 | EA | \$1,200.00 | \$9,600 |
| MISCELLANEOUS STRUCTURAL REPAIRS | | | | | | |
| NT | S-29 | Replace outfield dumpster concrete / CMU platform | 1 | LS | \$15,000.00 | \$15,000 |
| SUBTOTAL NEAR-TERM STRUCTURAL | | | | | | \$96,600 |
| 25% CONTINGENCY | | | | | | \$24,150 |
| TOTAL NEAR-TERM STRUCTURAL | | | | | | \$120,750 |

Note: 25% contingency for unforeseen conditions, market fluctuation and construction schedule

**LACKAWANNA COUNTY STADIUM
CAPITAL IMPROVEMENT BUDGET
NEAR-TERM ELECTRICAL**

| PRIORITY LEVEL | ITEM | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|--|------|---|----------|------|-------------|------------------|
| NT | E-12 | Revisions to provide a dedicated 2HR room for the Emergency Generator | 1 | LS | \$20,000.00 | \$20,000 |
| NT | E-13 | Short Circuit, Coordination and Arch Flash Hazard Study | 1 | LS | \$40,000.00 | \$40,000 |
| NT | E-14 | Upgrade Fire Alarm System to meet current standards | 117,000 | SF | \$3.50 | \$409,500 |
| NT | E-15 | Testing of various electrical and telecommunications equipment that is currently being protected from water by plastic sheets | 10 | EA | \$5,000.00 | \$50,000 |
| SUBTOTAL NEAR-TERM ELECTRICAL | | | | | | \$519,500 |
| 25% CONTINGENCY | | | | | | \$129,880 |
| TOTAL NEAR-TERM ELECTRICAL CAPITAL IMPROVEMENTS | | | | | | \$649,380 |

Note: 25% contingency for unforeseen conditions, market fluctuation and construction schedule

**LACKAWANNA COUNTY STADIUM
CAPITAL IMPROVEMENT BUDGET
NEAR-TERM MECHANICAL**

| PRIORITY LEVEL | ITEM | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|--|------|---|----------|------|--------------|------------------|
| NT | H-2 | Install new Direct Digital Control System | 1 | LS | \$175,000.00 | \$175,000 |
| NT | H-3 | Replace 10 ton Split Air Conditioning Unit serving Visitor's Locker Room | 1 | LS | \$15,000.00 | \$15,000 |
| NT | H-4 | Replace 10 ton Rooftop Air Conditioning Unit serving Administrative Offices | 1 | LS | \$15,000.00 | \$15,000 |
| NT | H-5 | Replace three Indoor Packaged Air Conditioning Units serving Private Lounges and the Club Suite | 3 | EA | \$15,000.00 | \$45,000 |
| NT | H-6 | Replace H&V Unit serving Employee Locker Room | 1 | EA | \$5,000.00 | \$5,000 |
| NT | H-7 | Replace exhaust fans (APPROX 20) | 1 | LS | \$65,000.00 | \$65,000 |
| NT | H-8 | Replace Electric Baseboard Heaters | 46 | EA | \$300.00 | \$13,800 |
| NT | H-9 | Replace Electric Propeller Unit Heaters | 6 | EA | \$1,000.00 | \$6,000 |
| NT | H-10 | Replace Electric Cabinet Unit Heaters | 6 | EA | \$1,000.00 | \$6,000 |
| NT | H-11 | Replace Electric Radiant Panel Heaters | 10 | EA | \$650.00 | \$6,500 |
| NT | H-12 | Replace Through-the-Wall Heat Pumps serving Luxury Suites | 19 | EA | \$2,500.00 | \$47,500 |
| SUBTOTAL NEAR-TERM MECHANICAL | | | | | | \$399,800 |
| 25% CONTINGENCY | | | | | | \$99,950 |
| TOTAL NEAR-TERM MECHANICAL CAPITAL IMPROVEMENTS | | | | | | \$499,750 |

Note: 25% contingency for unforeseen conditions, market fluctuation and construction schedule

**LACKAWANNA COUNTY STADIUM
CAPITAL IMPROVEMENT BUDGET
NEAR-TERM PLUMBING AND FIRE-PROTECTION**

| PRIORITY LEVEL | ITEM | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|--|------|---|----------|------|--------|-----------------|
| FIRE PROTECTION SPRINKLER SYSTEMS | | | | | | |
| NT | FP-4 | Provide sprinklers in hazardous spaces. | 7000 | SF | \$4.00 | \$28,000 |
| SUBTOTAL NEAR-TERM PLUMBING AND FIRE PROTECTION | | | | | | \$28,000 |
| 25% CONTINGENCY | | | | | | \$7,000 |
| TOTAL NEAR-TERM PLUMBING AND FIRE PROTECTION | | | | | | \$35,000 |

Note: 25% contingency for unforeseen conditions, market fluctuation and construction schedule

**LACKAWANNA COUNTY STADIUM
CAPITAL IMPROVEMENT BUDGET**
TOTAL LONG-TERM ARCHITECTURAL AND GENERAL FACILITY

| PRIORITY LEVEL | ITEM | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|--|------|---|----------|------|-------------|--------------------|
| STADIUM SEATING | | | | | | |
| LT | A-42 | Replace stadium seating in the lower bowl | 5,286 | EA | \$125.00 | \$660,750 |
| LT | A-43 | Replace stadium seating in the suites / club | 220 | EA | \$130.00 | \$28,600 |
| LT | A-44 | Replace stadium seating in the upper bowl | 3,420 | EA | \$125.00 | \$427,500 |
| LEFT FIELD PICNIC PAVILLION | | | | | | |
| LT | A-45 | Provide 8" CMU base at left field picnic pavilion plaster walls | 160 | LF | \$75.00 | \$12,000 |
| LT | A-46 | Install drains at left field picnic pavilion | 2 | EA | \$5,000.00 | \$10,000 |
| REGRAIDING OUTFIELD AREA | | | | | | |
| LT | A-47 | Regrade area beyond outfield fence, install new catch basins, reseed / install landscaping to stabilize slope | 1 | LS | \$75,000.00 | \$75,000 |
| VISITOR'S DUGOUT TUNNEL | | | | | | |
| LT | A-48 | Provide CMU closure wall at visitor's dugout tunnel | 800 | SF | \$20.00 | \$16,000 |
| EXTERIOR STAIR ROOFS | | | | | | |
| LT | A-49 | Replace damaged areas of EPDM exterior stair roofs | 400 | SF | \$20.00 | \$8,000 |
| SUBTOTAL LONG-TERM ARCHITECTURAL AND GENERAL FACILITY | | | | | | \$1,237,850 |
| 25% CONTINGENCY | | | | | | \$309,460 |
| TOTAL LONG-TERM ARCHITECTURAL AND GENERAL FACILITY | | | | | | \$1,547,310 |

Notes

- 1 Includes seat removal and reinstallation
- 2 Includes single wythe masonry on the outer periphery
- 3 Quantities based on precast triple tiers, per construction drawings
- 4 Control joint has been assumed to be at each column line in exterior walls
- 5 Based on area take-offs from plans assuming approximately 75% of areas requiring full replacement
- 6 Based on seating manifest provided by building maintenance staff. Seat replacement is one for one
- 7 Includes removal and reinstallation of existing cover plates on horizontal surfaces

**LACKAWANNA COUNTY STADIUM
CAPITAL IMPROVEMENT BUDGET**
TOTAL LONG-TERM ARCHITECTURAL AND GENERAL FACILITY

| PRIORITY ITEM LEVEL | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|------------------------|-------------|----------|------|------|--------|
|------------------------|-------------|----------|------|------|--------|

- | | | | | | |
|--|---|--|--|--|--|
| | 8 Quantity indicates estimated percentage of louver sections. Remediation to include louver blade and frame anchorage | | | | |
| | 9 Based on condition of suites observed during spring 2009 walkthrough. | | | | |
| | 10 Includes removal of existing failed coating system | | | | |

Note: 25% contingency for unforeseen conditions, market fluctuation and construction schedule

LACKAWANNA COUNTY STADIUM CAPITAL IMPROVEMENT BUDGET LONG-TERM ELECTRICAL

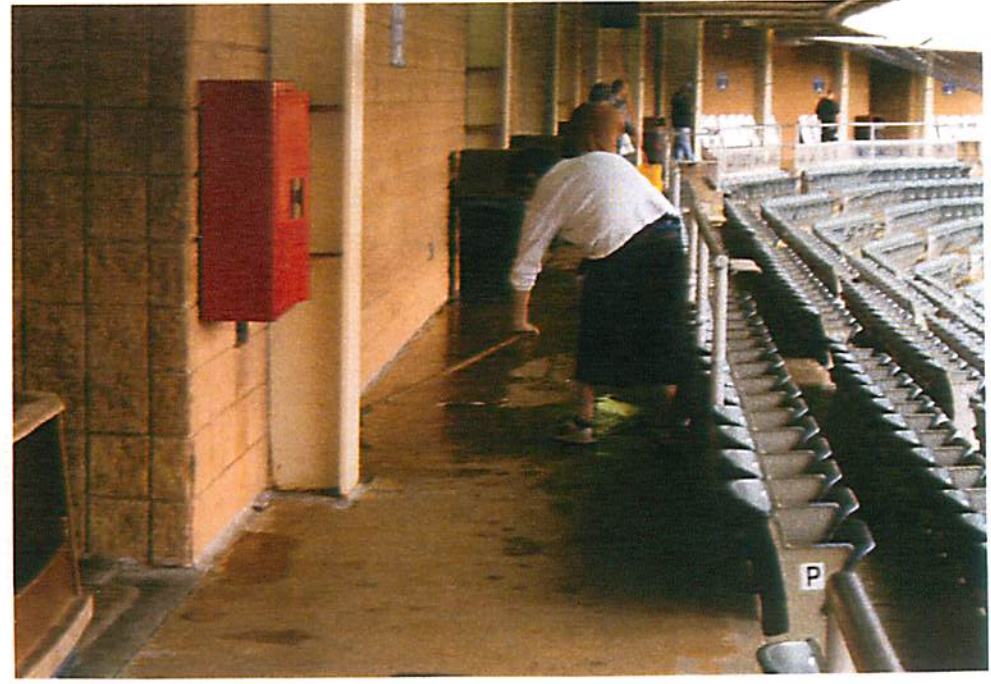
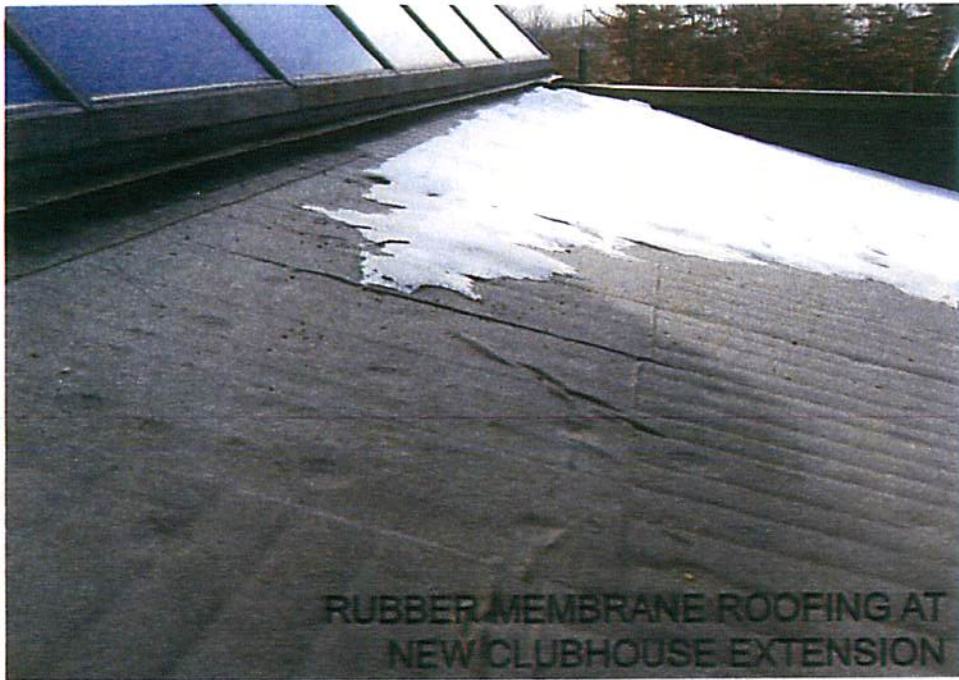
| PRIORITY LEVEL | ITEM | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|--|------|---|----------|------|--------------|--------------------|
| LT | E-01 | Phased Replacement of Main Service Switchgear, Distribution Panelboards, Generator, Automatic Transfer Switches and Appliance Panelboards | | | | |
| | | Main service switchgear | 1 | EA | \$283,500.00 | \$283,500 |
| | | Distribution panels | 11 | EA | \$14,650.00 | \$161,150 |
| | | Generator | 1 | EA | \$400,000.00 | \$400,000 |
| | | ATS | 1 | EA | \$13,500.00 | \$13,500 |
| | | Appliance panels | 52 | EA | \$5,000.00 | \$260,000 |
| LT | E-02 | Replacement of Branch Circuits and Feeders | | | | |
| | | 800Amp feeder 3sets of 4-500KCMIL | 2250 | LF | \$389.00 | \$875,250 |
| | | 600Amp feeder 2sets of 4-350KCMIL | 1225 | LF | \$194.00 | \$237,650 |
| | | 400Amp feeder 1set of 4-500KCMIL | 1050 | LF | \$127.00 | \$133,350 |
| | | 200Amp feeder 1set of 4-4/0 AWG | 2100 | LF | \$75.00 | \$157,500 |
| | | 100Amp feeder 1set of 4-2 AWG | 2100 | LF | \$60.00 | \$126,000 |
| | | Branch Circuits | 1 | LS | \$400,000.00 | \$400,000 |
| LT | E-03 | Phased Replacement of all Original Outdoor and Indoor Luminaires | 500 | EA | \$250.00 | \$125,000 |
| LT | E-04 | Replacement of 1500 watt Sports Lighting Luminaires including associated Branch Circuits, Feeders and Field Lighting Panelboards | 250 | EA | \$1,000.00 | \$250,000 |
| LT | E-05 | Replacement of Lighting Panelboards | 8 | EA | \$19,500.00 | \$156,000 |
| | | New lighting control system | 1 | LS | \$46,000.00 | \$46,000 |
| LT | E-06 | Resupport Low Voltage Cabling | 1 | LS | \$30,000.00 | \$30,000 |
| LT | E-07 | Remove all abandoned Low Voltage Cabling | 1 | LS | \$20,000.00 | \$20,000 |
| SUBTOTAL LONG-TERM ELECTRICAL | | | | | | \$3,674,900 |
| 25% CONTINGENCY | | | | | | \$918,730 |
| TOTAL LONG-TERM ELECTRICAL CAPITAL IMPROVEMENTS | | | | | | \$4,593,630 |

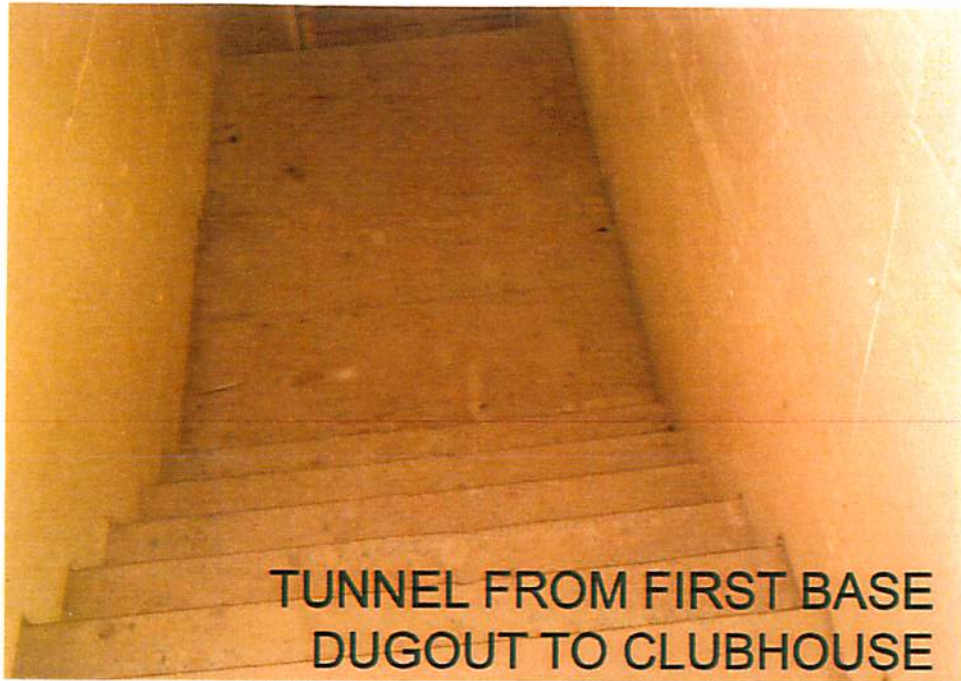
Note: 25% contingency for unforeseen conditions, market fluctuation and construction schedule

**LACKAWANNA COUNTY STADIUM
CAPITAL IMPROVEMENT BUDGET
LONG-TERM PLUMBING AND FIRE-PROTECTION**

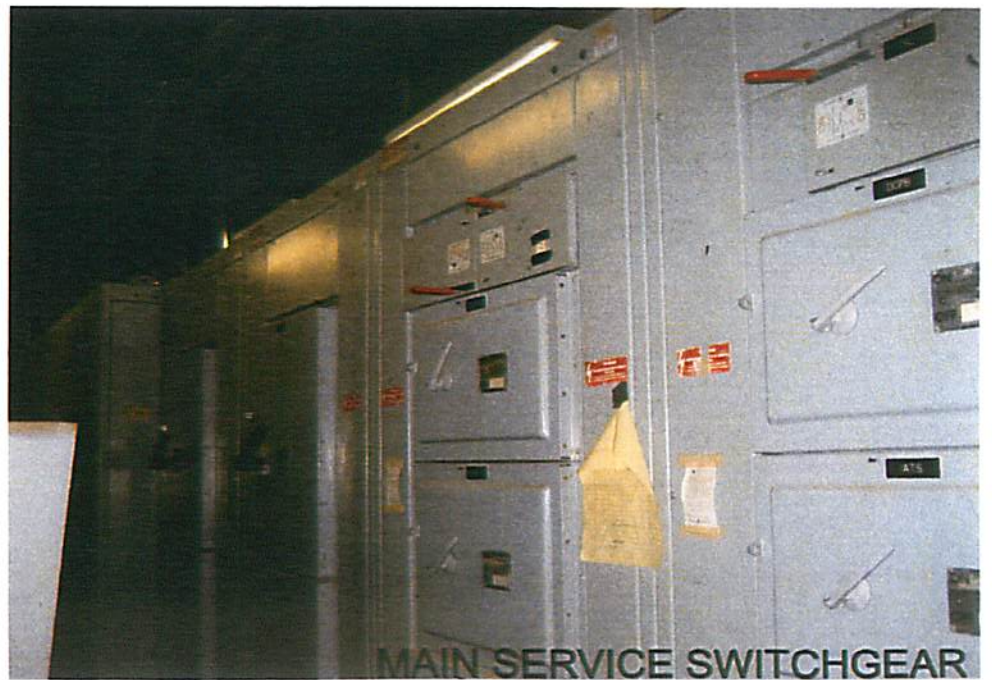
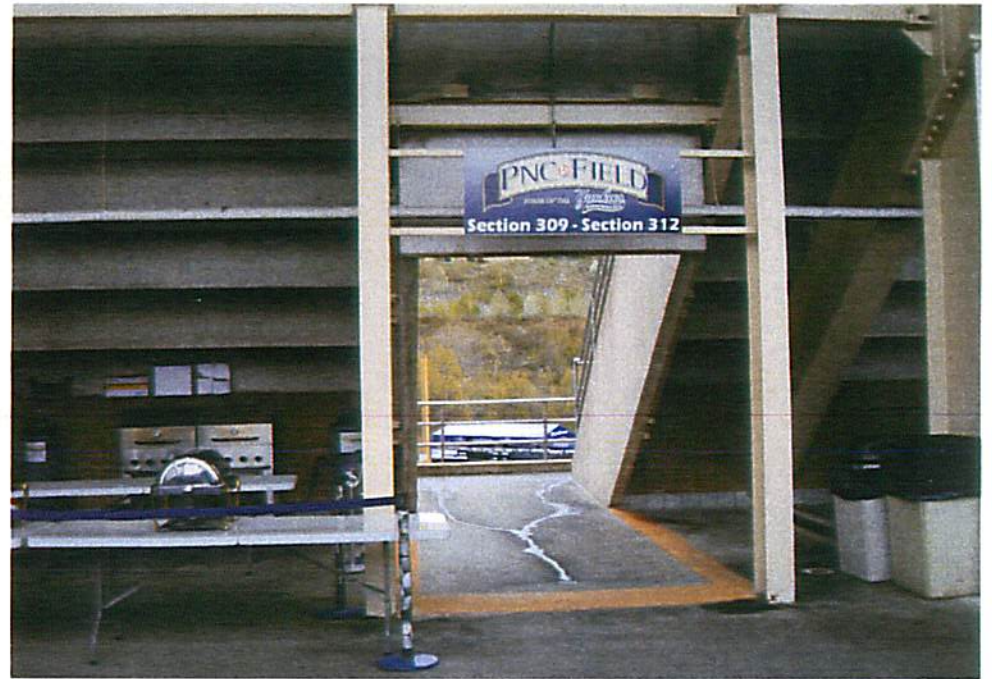
| PRIORITY LEVEL | ITEM | DESCRIPTION | QUANTITY | UNIT | RATE | AMOUNT |
|--|------|---|----------|------|----------|-----------------|
| CONCOURSE DRAINS | | | | | | |
| LT | P-10 | Replace concourse strainers with larger strainers | 20 | EA | \$500.00 | \$10,000 |
| SUBTOTAL LONG-TERM PLUMBING AND FIRE PROTECTION | | | | | | \$10,000 |
| 25% CONTINGENCY | | | | | | \$2,500 |
| TOTAL LONG-TERM PLUMBING AND FIRE PROTECTION | | | | | | \$12,500 |

Note: 25% contingency for unforeseen conditions, market fluctuation and construction schedule



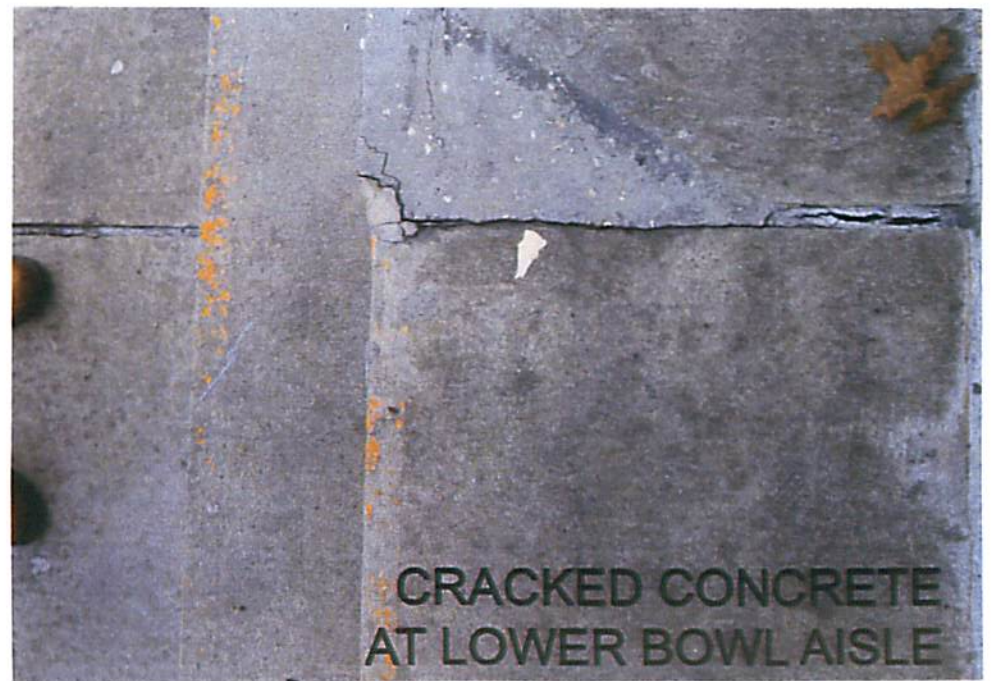


TUNNEL FROM FIRST BASE
DUGOUT TO CLUBHOUSE

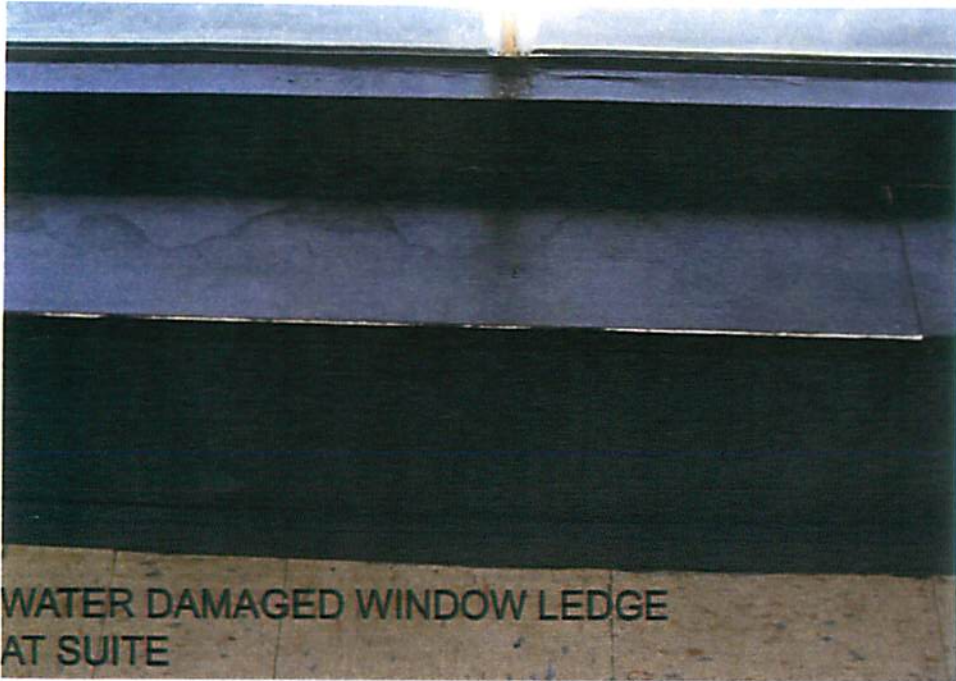


MAIN SERVICE SWITCHGEAR









WATER DAMAGED WINDOW LEDGE
AT SUITE



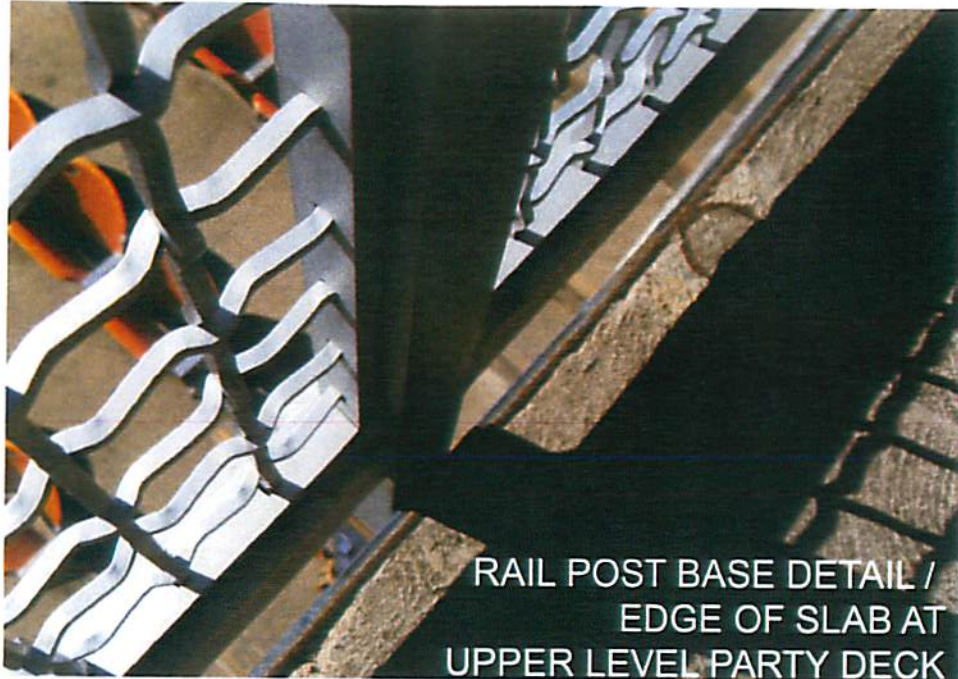
GENERATOR ROOM



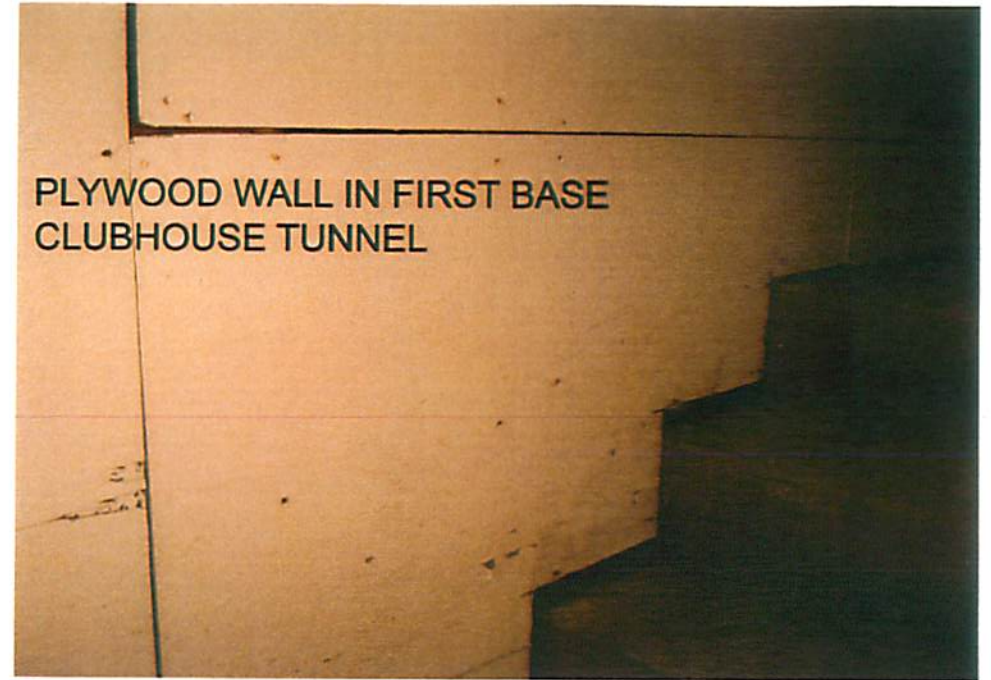
FIELD TRENCH DRAIN
IN RIGHT FIELD



FSE



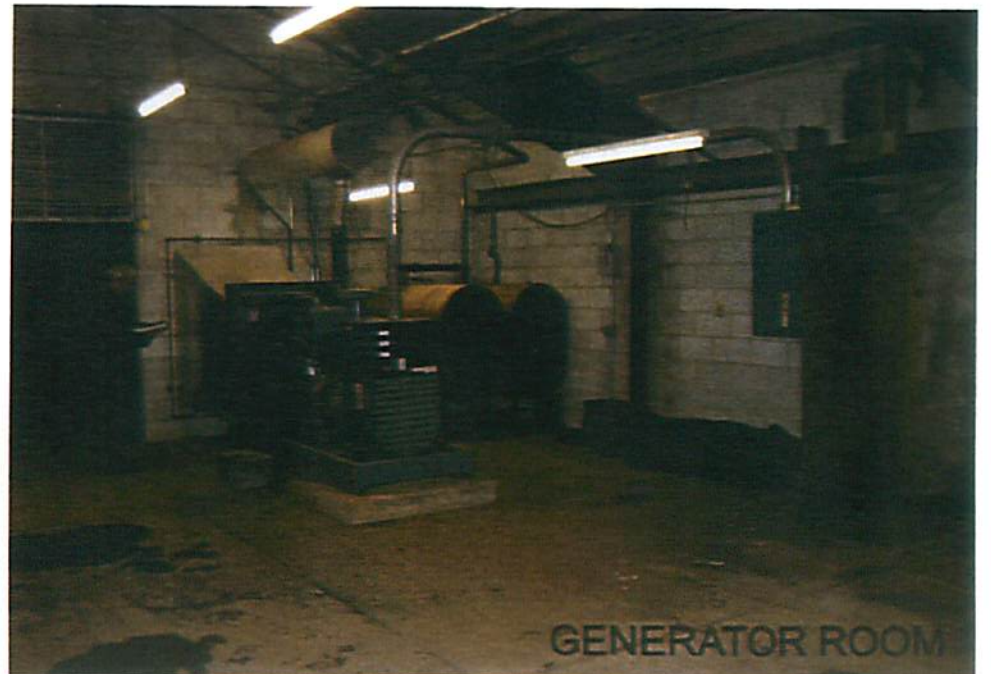
RAIL POST BASE DETAIL /
EDGE OF SLAB AT
UPPER LEVEL PARTY DECK



PLYWOOD WALL IN FIRST BASE
CLUBHOUSE TUNNEL



CONCRETE RAMP



GENERATOR ROOM



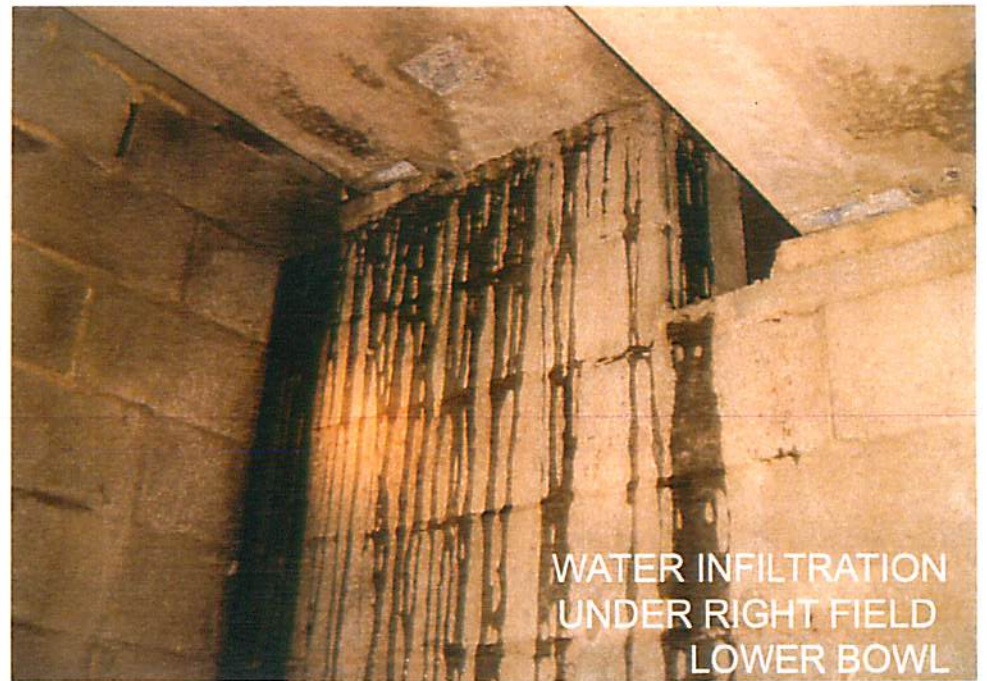
LEFT FIELD PARTY DECK



STANDING SEAM
METAL ROOF



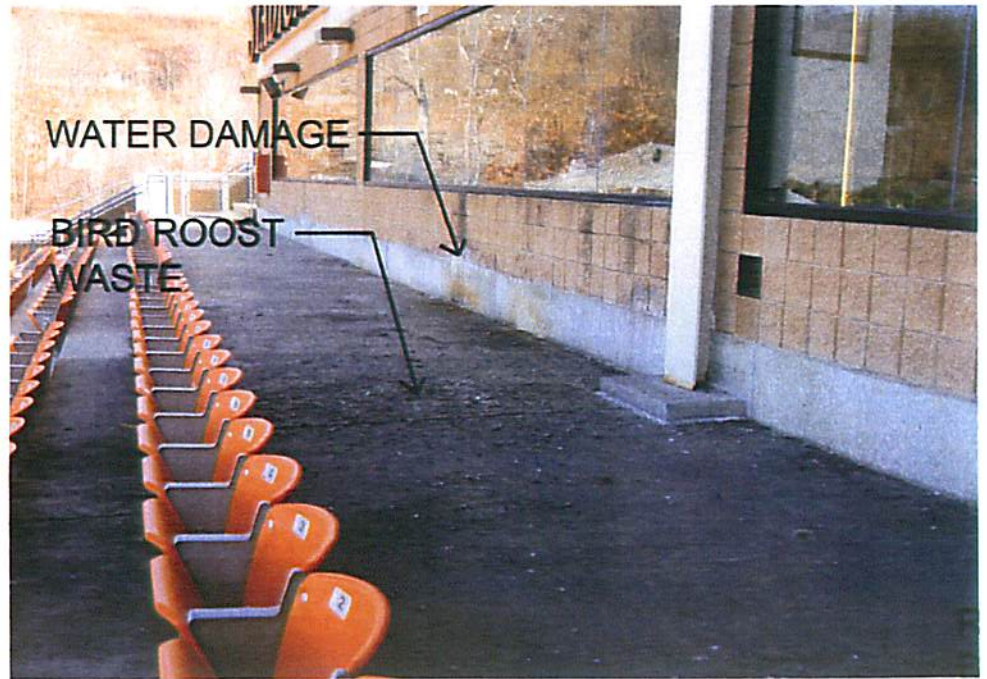
RUSTED HOLLOW METAL DOOR FRAME



WATER INFILTRATION
UNDER RIGHT FIELD
LOWER BOWL

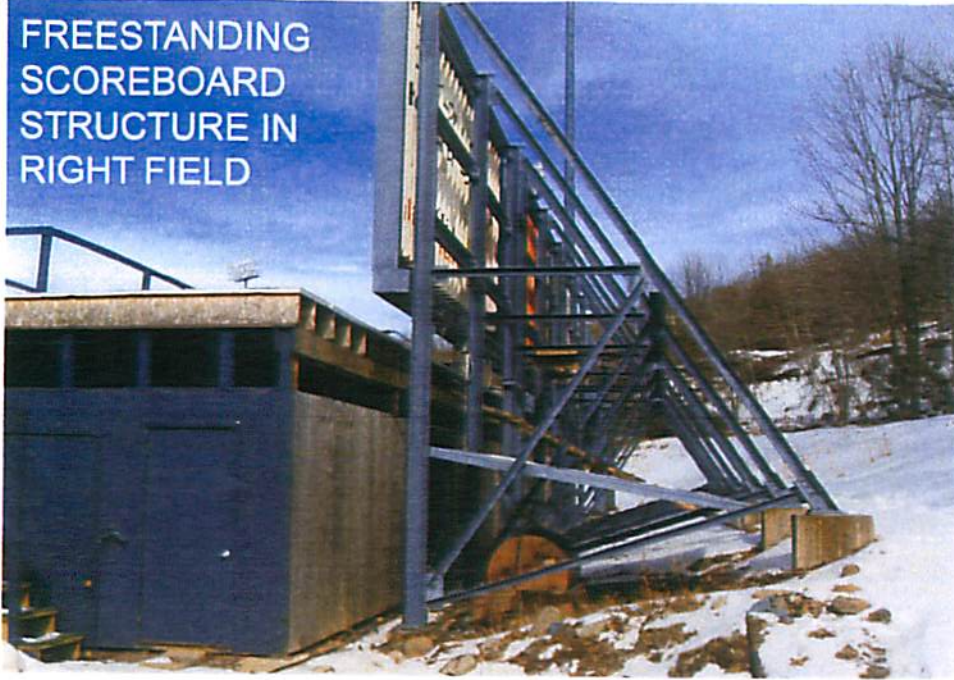


RUSTED STEEL AT UPPER
CONCOURSE COLUMN BASE

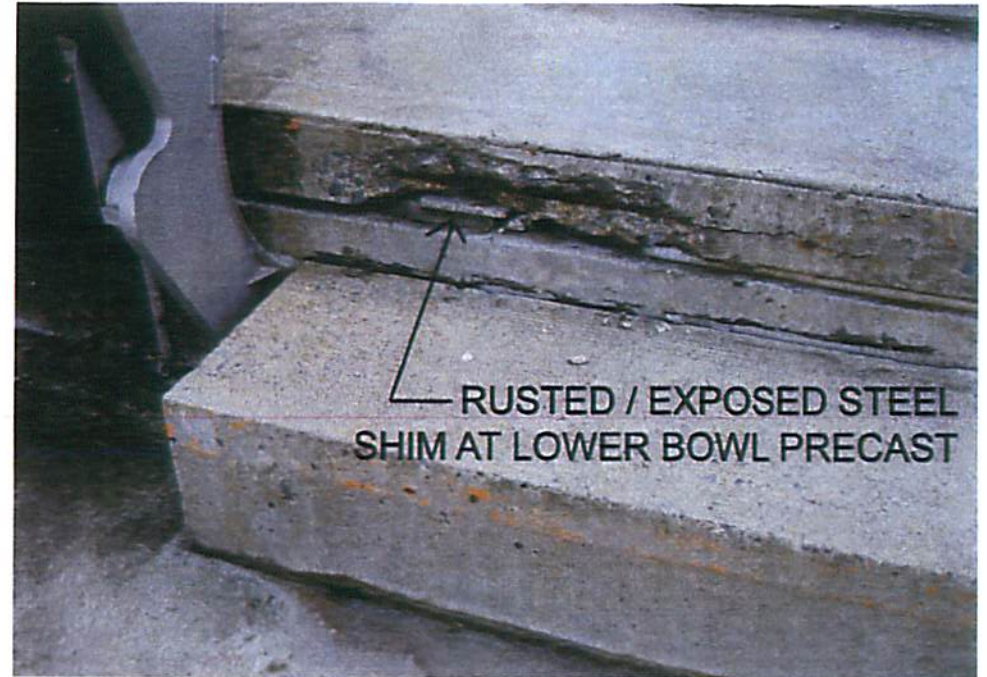


WATER DAMAGE
BIRD ROOST
WASTE

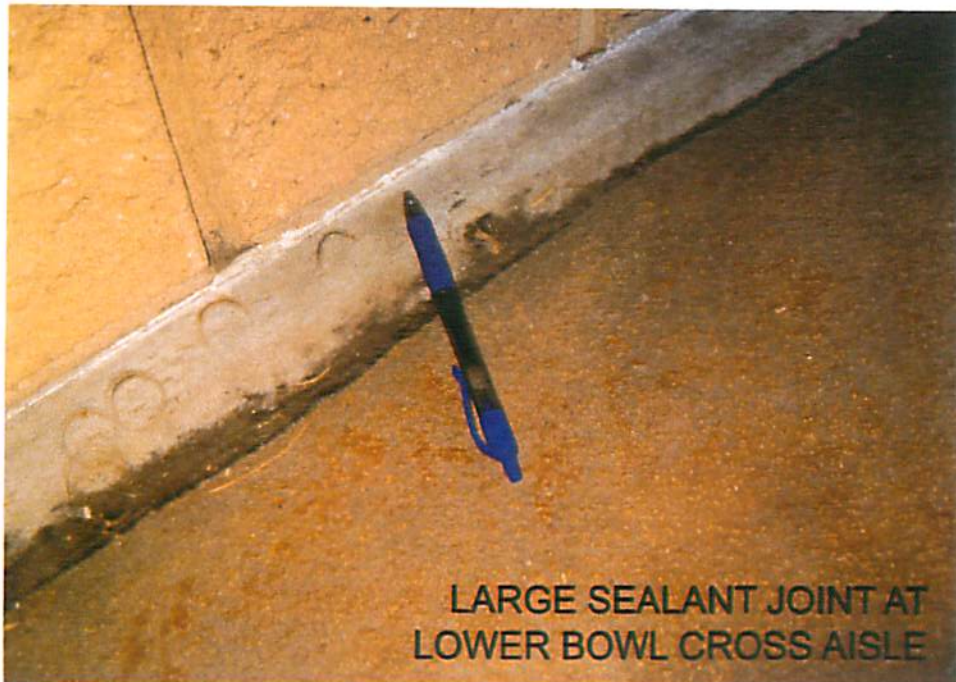
FREESTANDING
SCOREBOARD
STRUCTURE IN
RIGHT FIELD



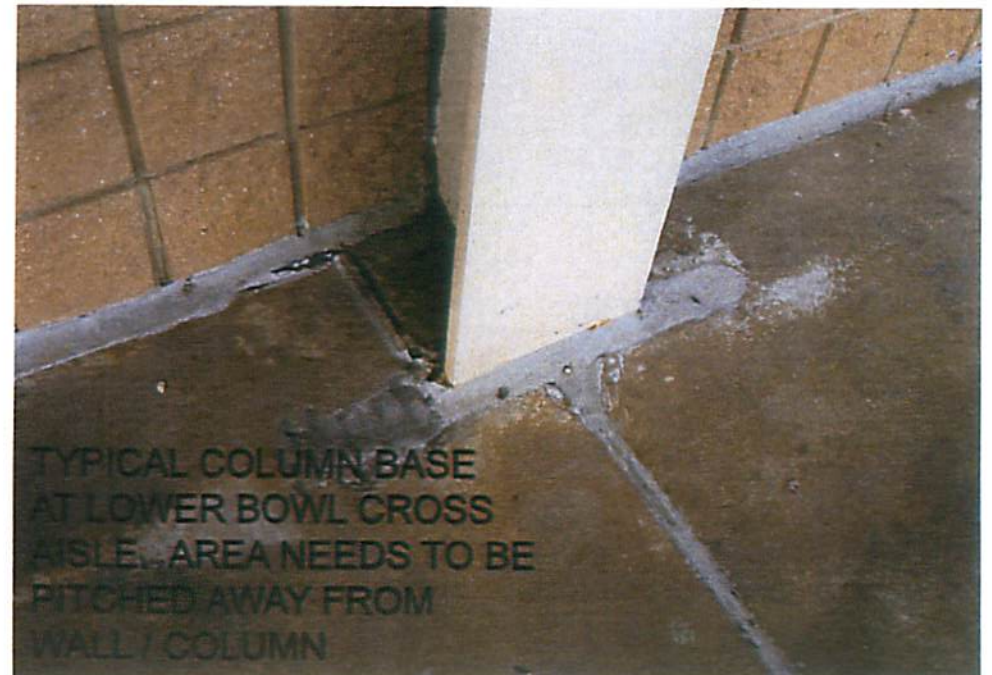
RUSTED / EXPOSED STEEL
SHIM AT LOWER BOWL PRECAST



LARGE SEALANT JOINT AT
LOWER BOWL CROSS AISLE



TYPICAL COLUMN BASE
AT LOWER BOWL CROSS
AISLE. AREA NEEDS TO BE
PITCHED AWAY FROM
WALL / COLUMN

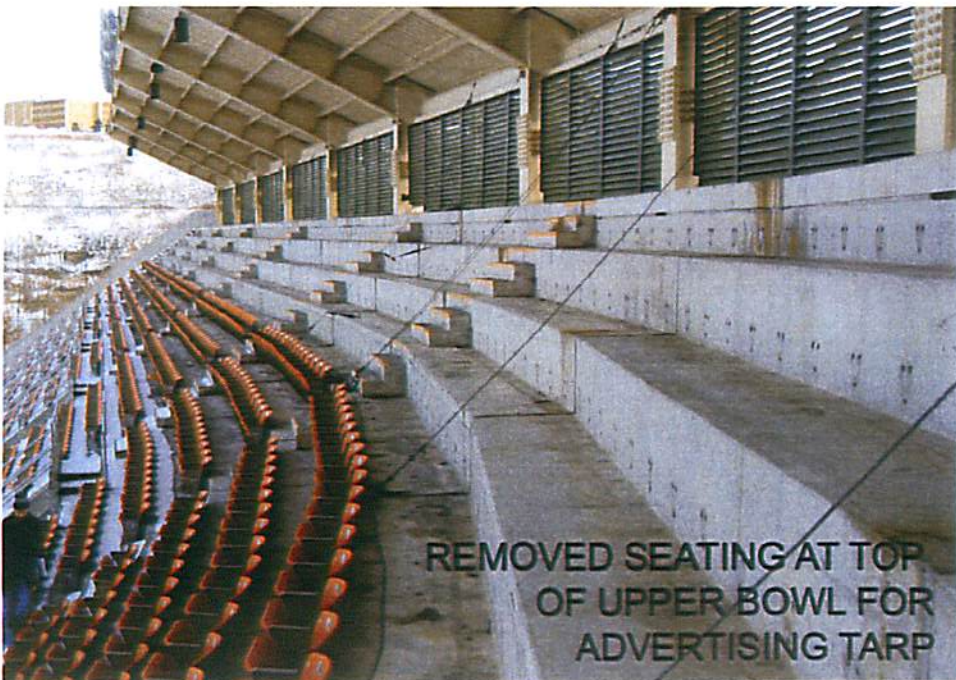




MAINTENANCE STORAGE
BEHIND RIGHT FIELD STANDS



FAILED SEALANT JOINT AT LOWER BOWL



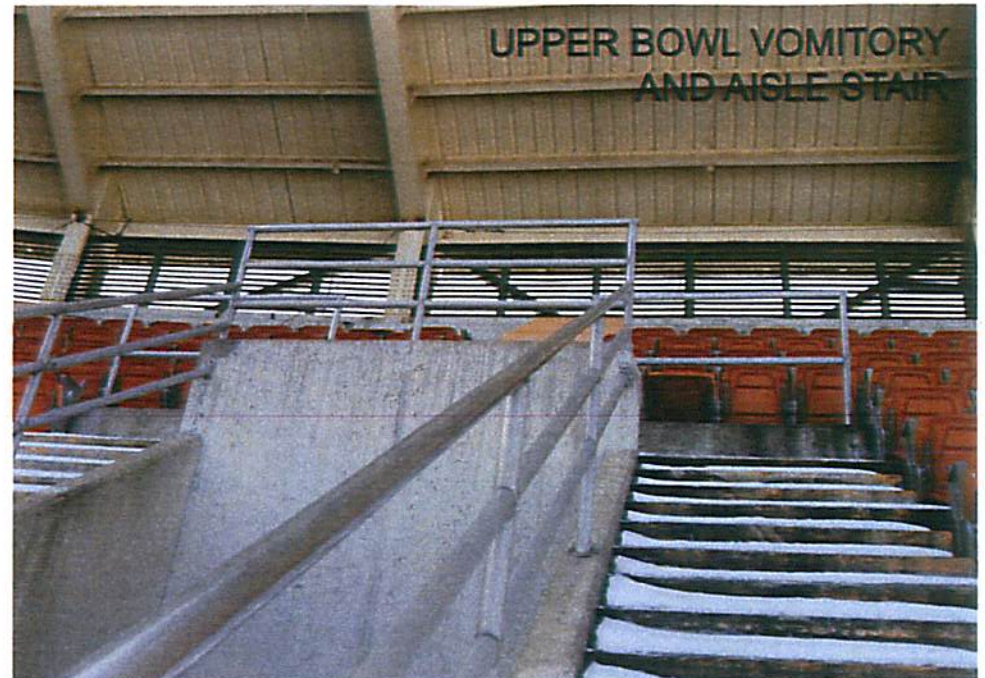
REMOVED SEATING AT TOP
OF UPPER BOWL FOR
ADVERTISING TARP



TYPICAL LOWER BOWL
SEATING ANCHORAGE



EFFLORESCENCE AT CMU WALL.
FLASHING CAP REQUIRED

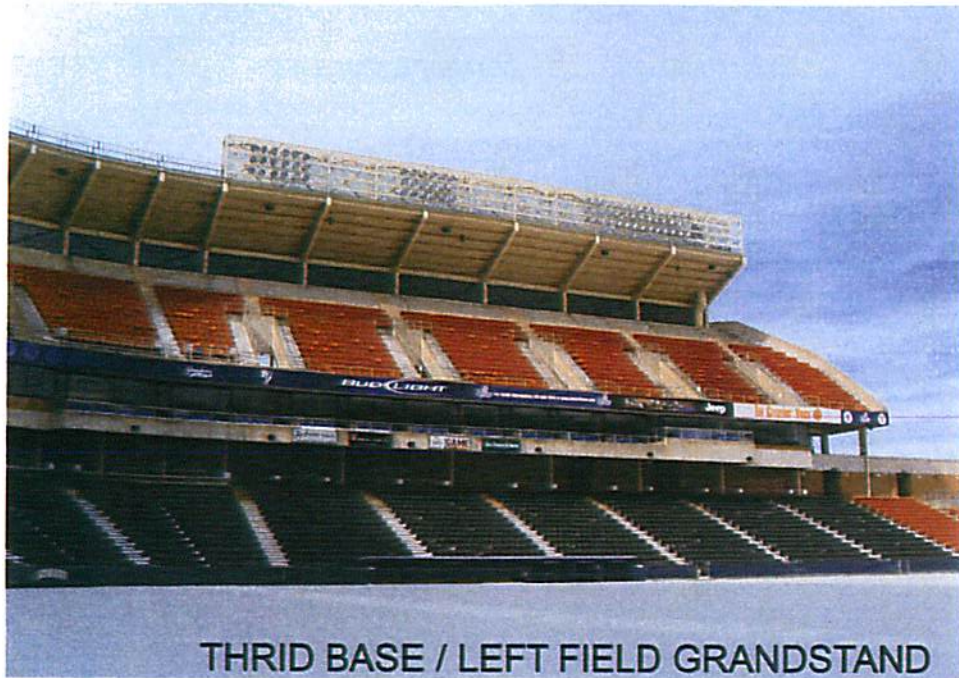


UPPER BOWL VOMITORY
AND AISLE STAIR



WHEELCHAIR PLATFORM FOR
SCOREBOARD OPERATOR
IN PRESS BOX





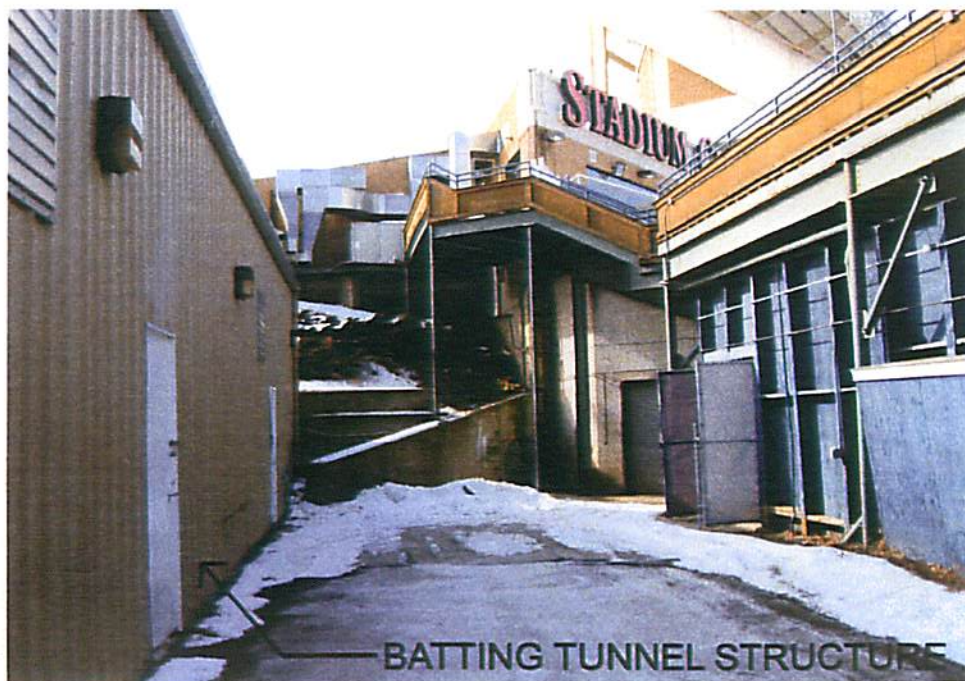
THRID BASE / LEFT FIELD GRANDSTAND



SPALLED CONCRETE
AT LOWER BOWL



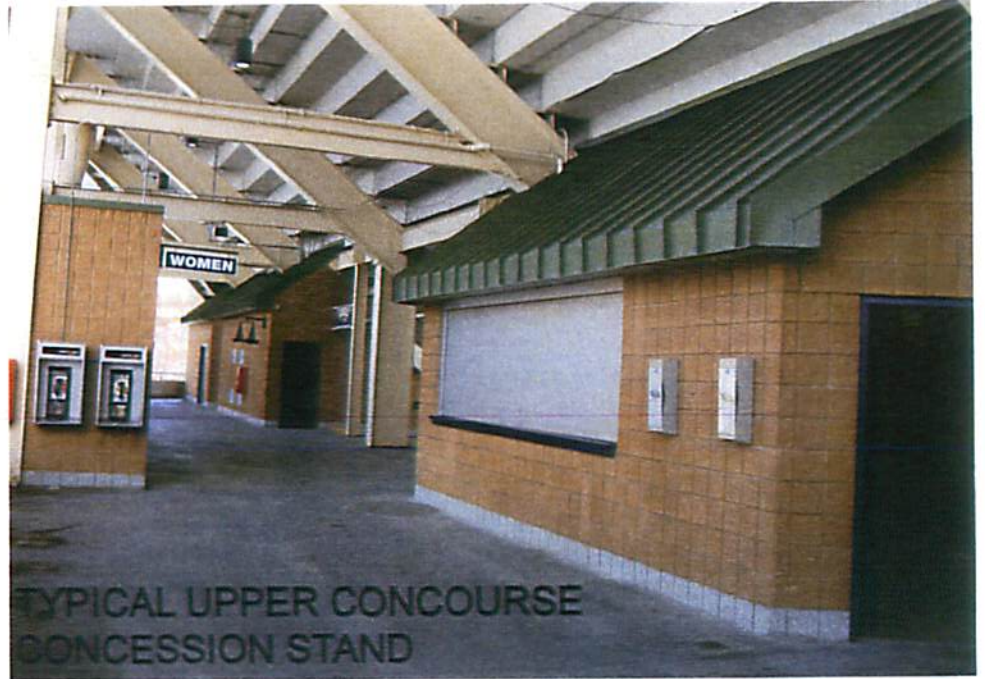
FAILING CONCRETE TOPPING
AT UPPER BOWL FRONT ROW



BATTING TUNNEL STRUCTURE



CRACKED CONCRETE AT
UPPER BOWL RAIL POST BASE



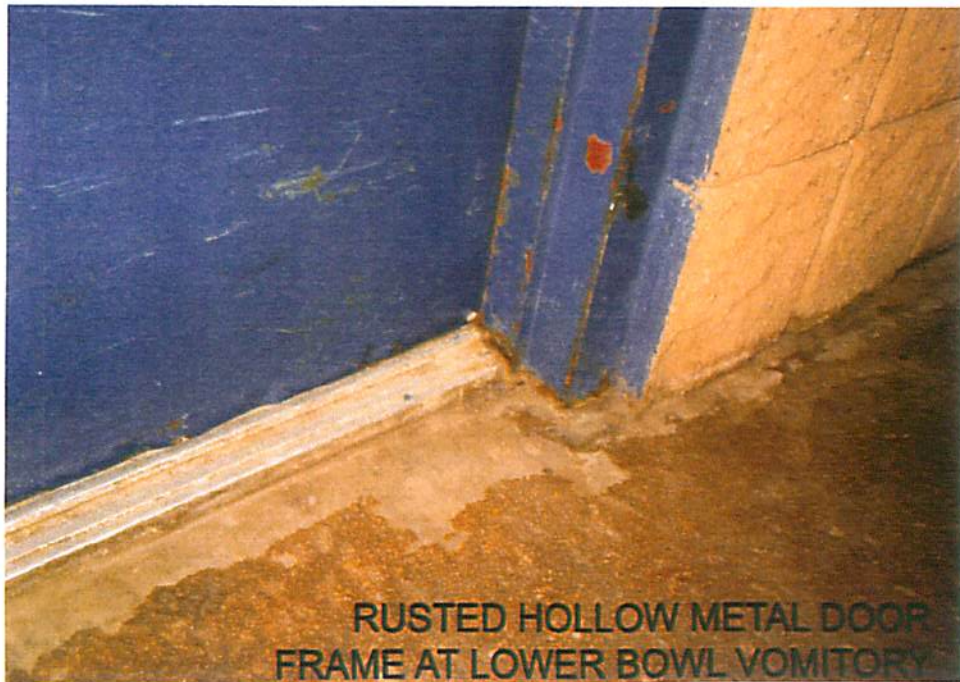
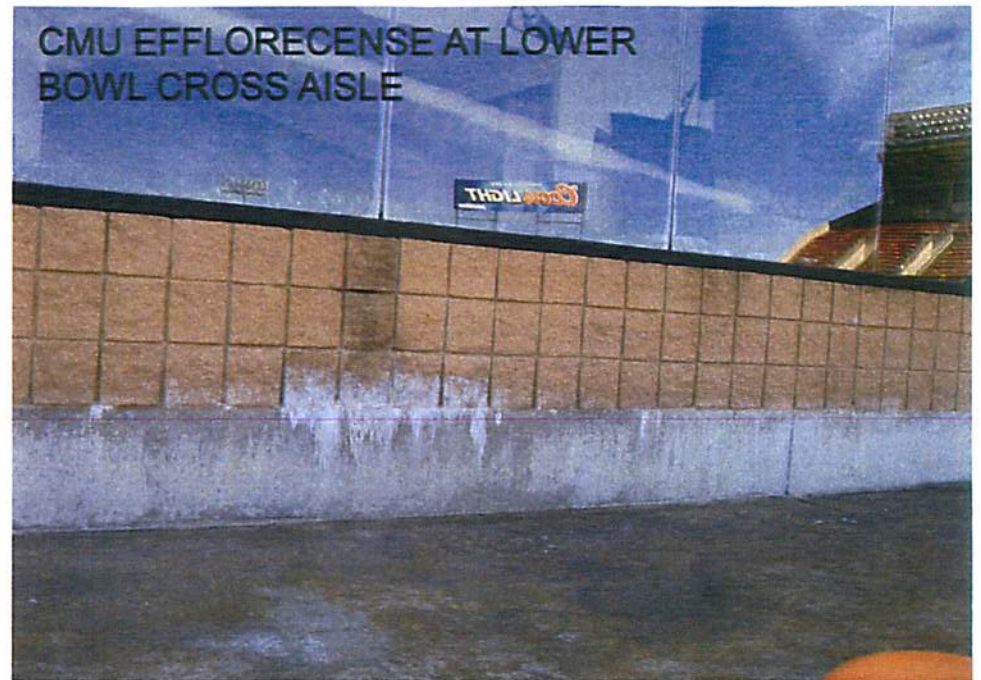
TYPICAL UPPER CONCOURSE
CONCESSION STAND

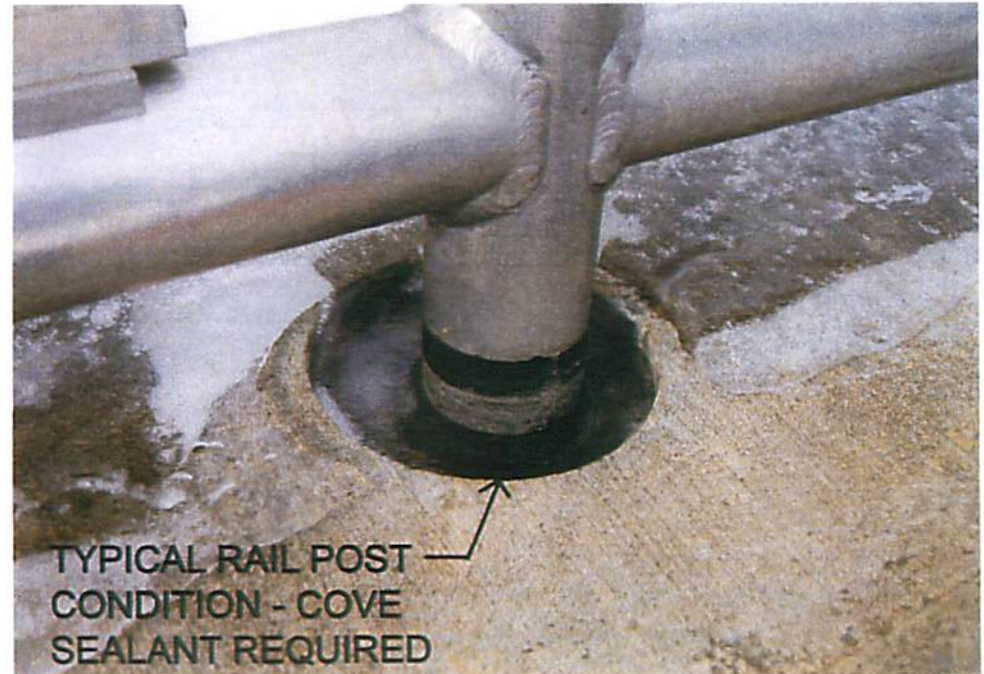


DAMAGED CONCRETE AT
LOWER BOWL RAIL POST BASE



CRACKED CONCRETE AT RAIL
POST BASE IN UPPER BOWL



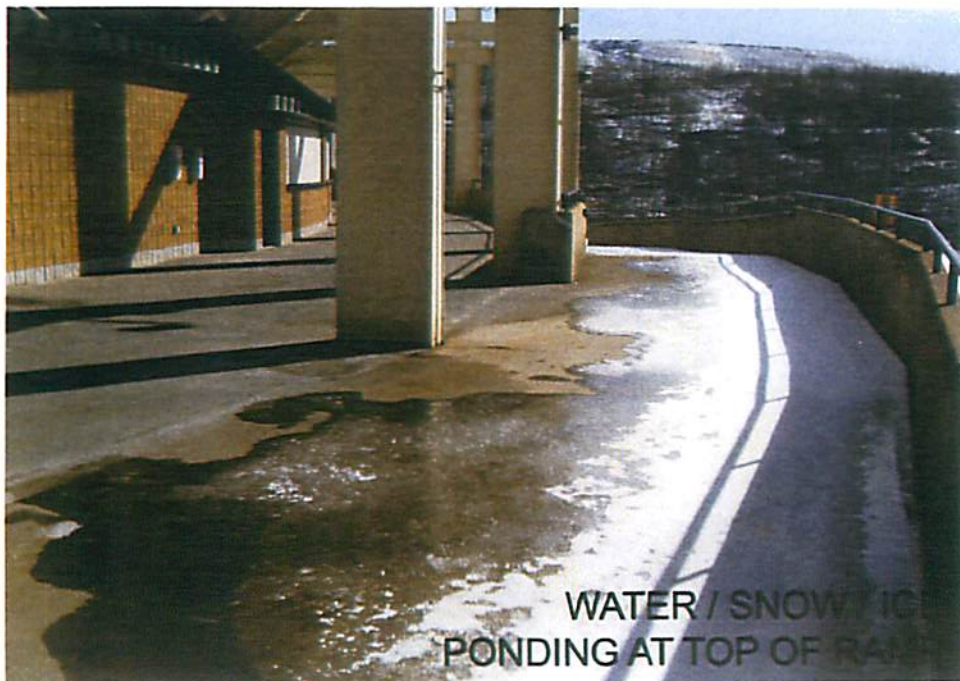




SPALLED / CRACKED
CONCRETE AT LOWR BOWL
WHEELCHAIR PLATFORM



PRESS BOX FIELD SIDE-GLAZING



WATER / SNOW / ICE
PONDING AT TOP OF RAMP



RIGHT FIELD LOWER LEVEL
PARTY DECK



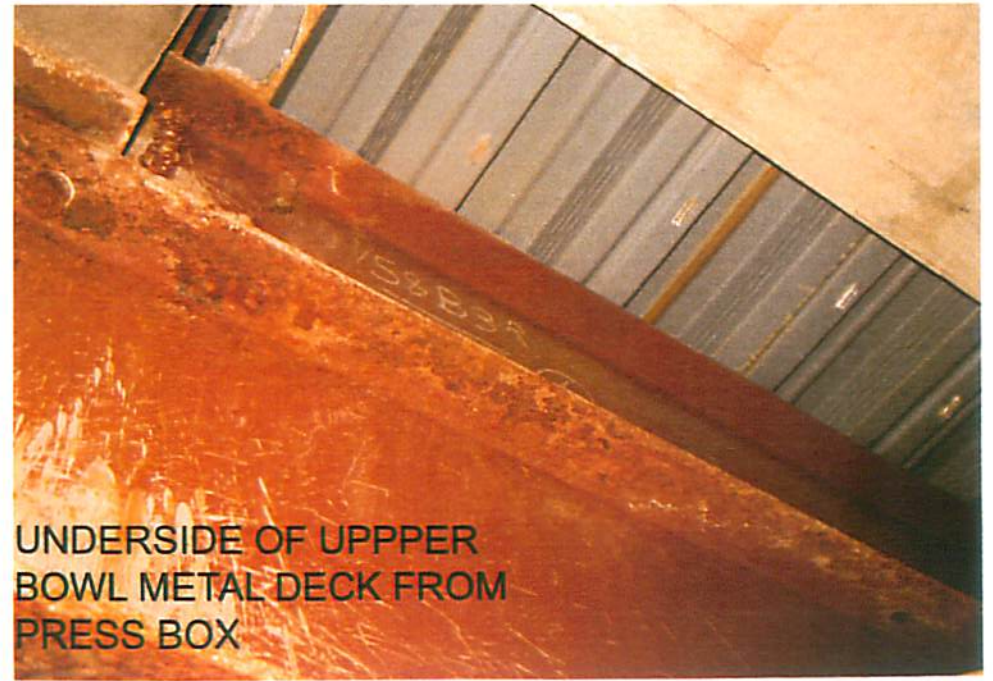
TYPICAL SCALING
CONCRETE AT
LOWER BOWL AISLE



WHEELCHAIR LIFT AT
UPPER LEVEL PARTY DECK



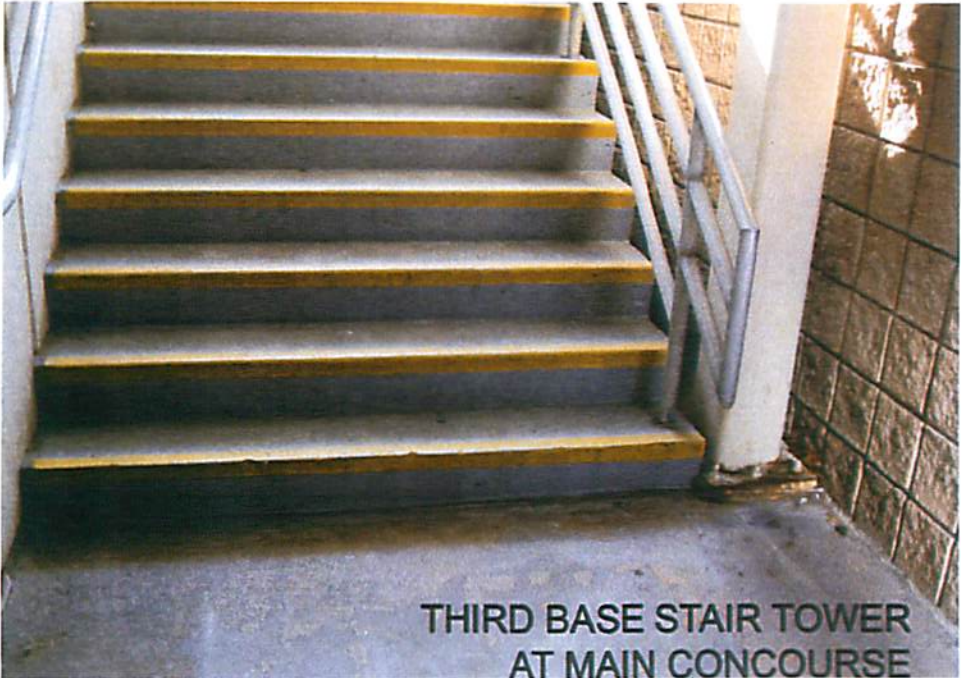
SUITE LEVEL SEATING



UNDERSIDE OF UPPPER
BOWL METAL DECK FROM
PRESS BOX



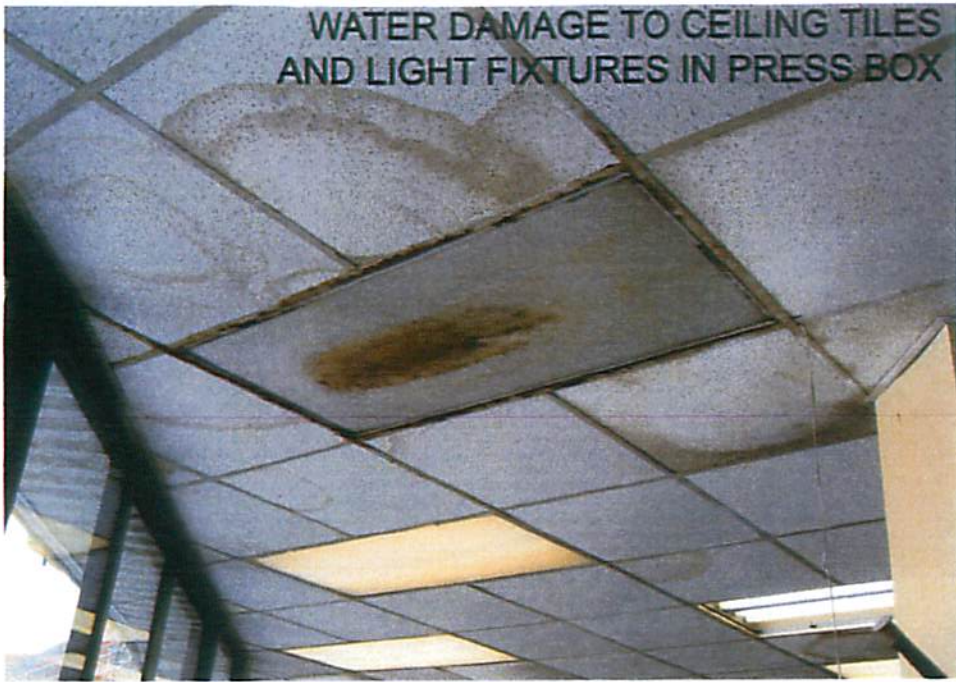
FAILED TRAFFIC COATING AT LOWER BOWL CROSS AISLE



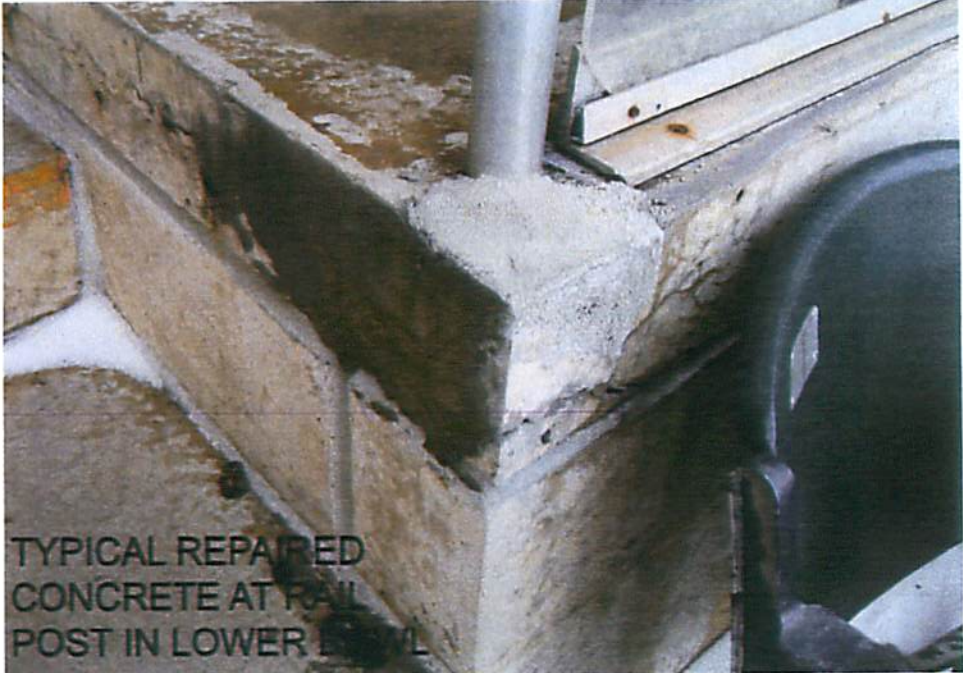
THIRD BASE STAIR TOWER AT MAIN CONCOURSE



DAMAGED PRECAST CONCRETE AT LOWER BOWL AISLE



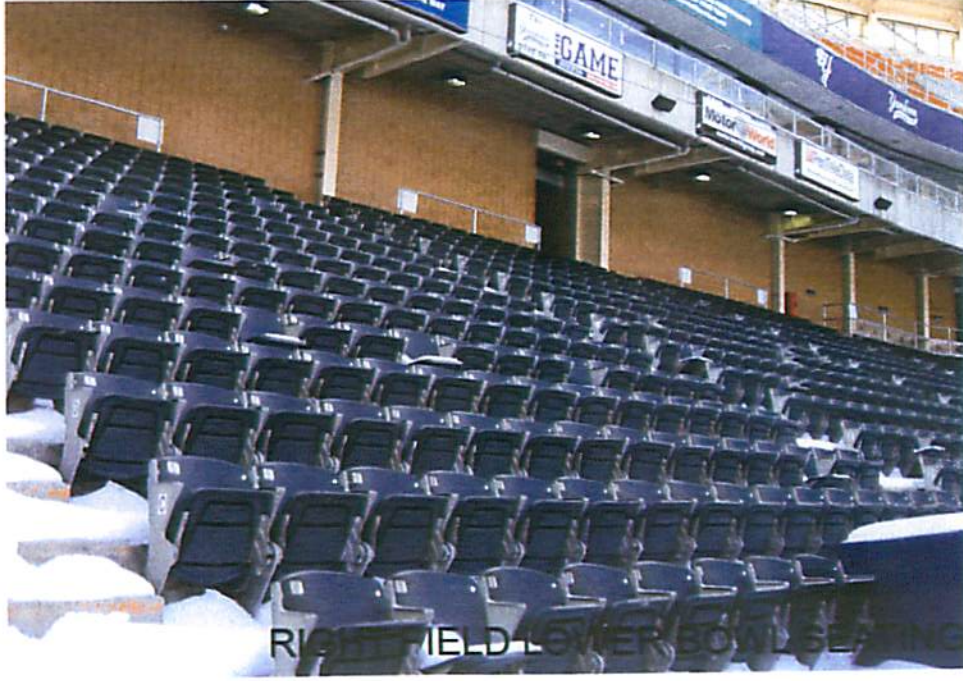
WATER DAMAGE TO CEILING TILES AND LIGHT FIXTURES IN PRESS BOX



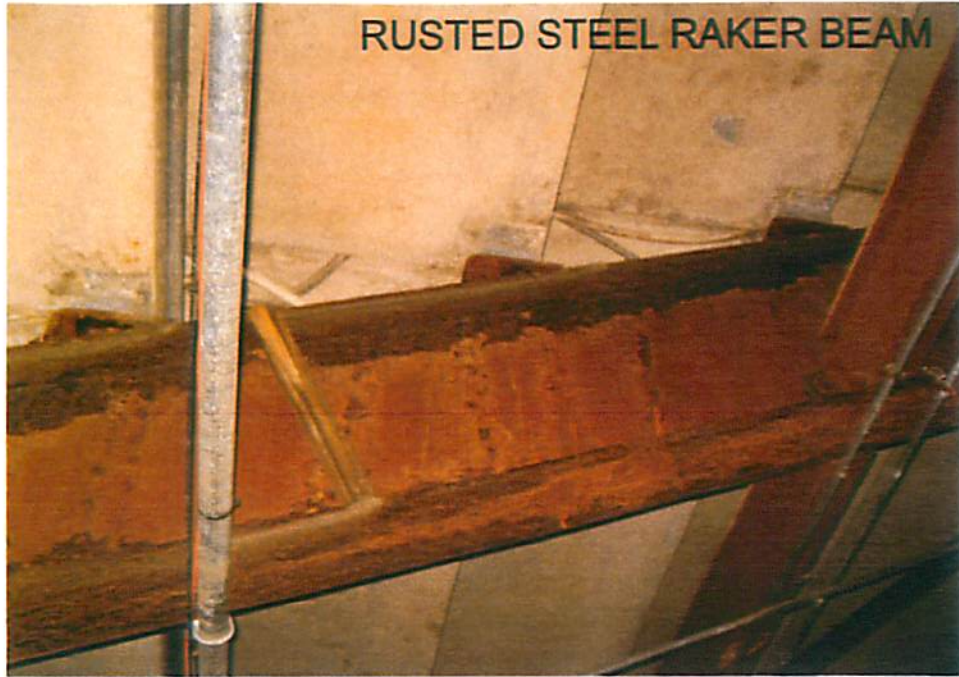
TYPICAL REPAIRED CONCRETE AT RAIL POST IN LOWER LEVEL



TYPICAL UPPER CONCOURSE VOMITORY



RIGHT FIELD LOWER BOWL SEATING



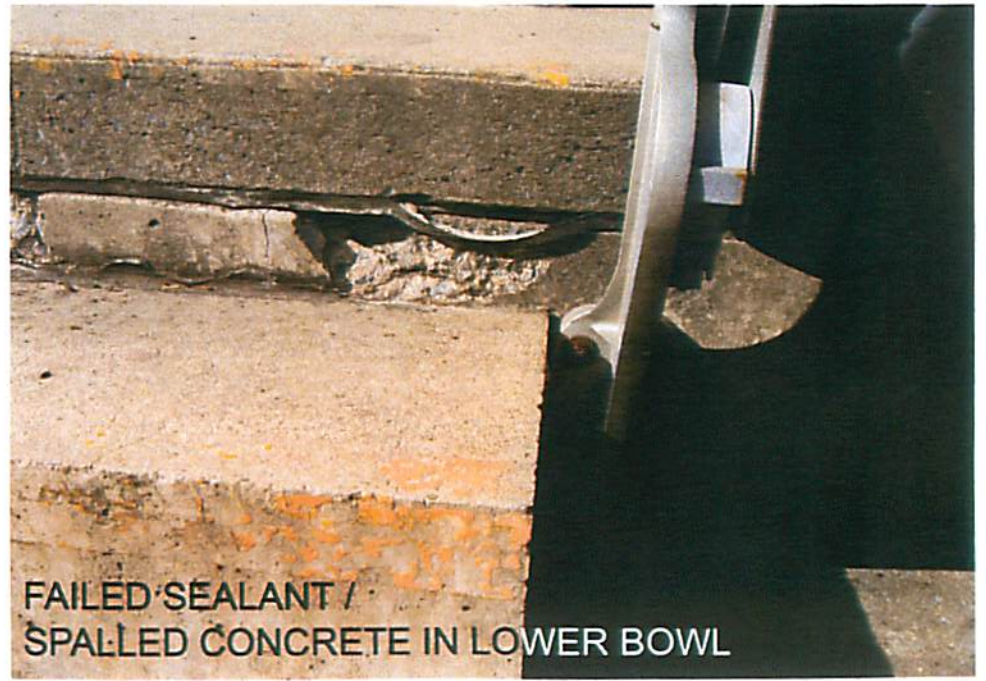
RUSTED STEEL RAKER BEAM



SCALED INTERMEDIATE
TREAD IN LOWER SEATING BOWL



WATER DAMAGED
CABLE TRAY NEAR
FIRST BASE CLUBHOUSE
ENTRY TUNNEL



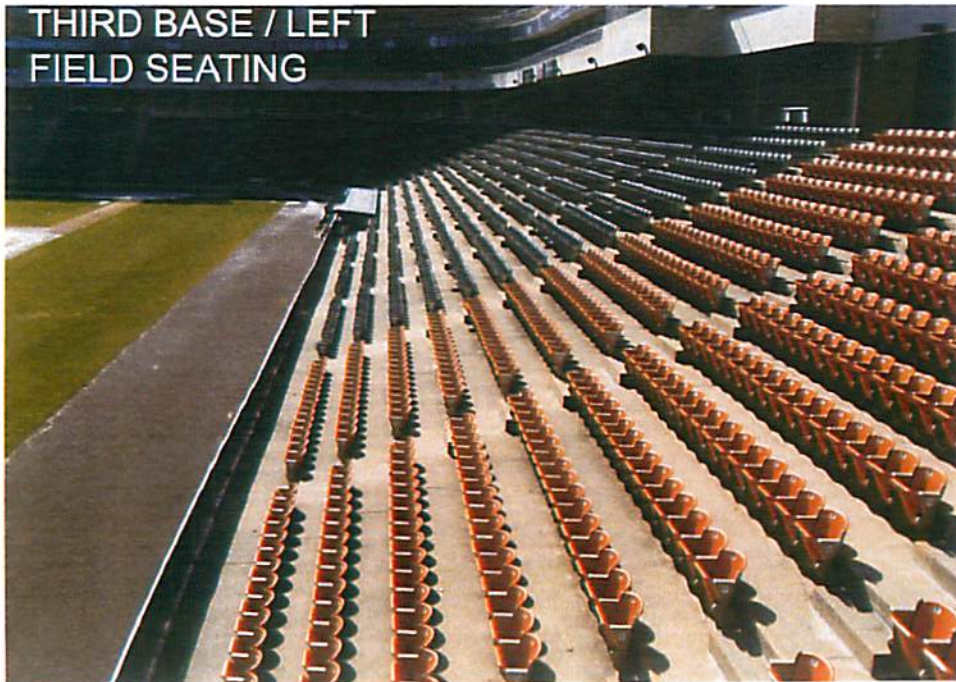
FAILED SEALANT /
SPALLED CONCRETE IN LOWER BOWL



BULLPEN



SPALLED PRECAST CONCRETE
AT LOWER BOWL



THIRD BASE / LEFT
FIELD SEATING



FAILED JOINT SEALANT /
SPALLED CONCRETE NOSING
AT LOWER BOWL AISLE

