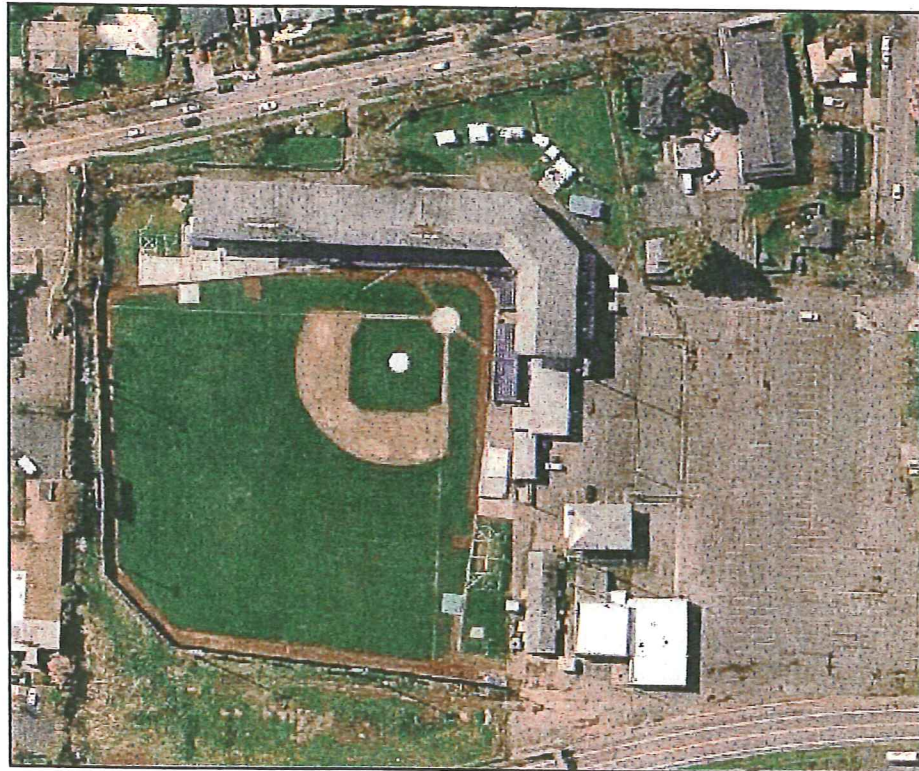


BUILDING INSPECTION REPORT



April, 2009

Civic Stadium Code Issues



City of Eugene
Planning & Development Department
Building & Permit Services
99 W 10th Avenue
541-682-5495

JUN 15 2009

Building Inspection Report

CIVIC STADIUM CODE ISSUES

Civic Stadium was constructed in 1938 and is owned by Eugene School District 4J. The stadium is currently used for various recreational activities including: baseball, soccer, rodeos and is the home of the Eugene Emerald's minor league baseball team.

Eugene School District 4J is looking to the Planning and Development Department to provide a report on the current condition of the stadium. On April 6, 2009 City staff met representatives from 4J at Civic Stadium to perform an inspection of the stadium and associated buildings. The scope of the inspection was limited to state adopted structural, electrical, plumbing and mechanical codes, and did not include a review for compliance with other regulations, such as the Americans with Disabilities Act (ADA) or local health department requirements. The goal of the inspection was to gather enough information to provide Eugene School District 4J with a report that reviewed the structural and mechanical components of the stadium, as well as the overall serviceability of the plumbing and electrical systems.

Conducting an inspection after the work is completed and covered is not typical for city staff, and this review is limited to only what was visible at the time of the inspection. The water service was turned off and the electrical service was not fully operational during this site visit. Additionally, there were some office spaces and closet areas that were not accessible.

State law requires permits be obtained for new construction, alteration or repairs, and that licensed contractors be used. New work will be required to meet current state and local code requirements. Existing work that was legally performed, which will not be altered or repaired, is not required to be updated to meet current code requirements regardless of whether it complies with current code. Existing unaltered work that no longer conforms with codes is referred to as existing non-conforming. Work that has occurred without benefit of permits, either repaired or altered or added may be out-right non-conforming and must be brought into compliance through the permit process.

The report is organized first by an overall assessment of the structural, electrical, plumbing and mechanical systems, followed by inspection comments of specific areas of the stadium. Pictures of specific inspection items are included at the end of the report. Code citations are included with most comments, and correspond to the following:

NEC	National Electric Code
OSSC	Oregon Structural Specialty Code
OPSC	Oregon Plumbing Specialty Code
OMSC	Oregon Mechanical Specialty Code

FOUNDATION, EXTERIOR WALLS & STRUCTURAL COMPONENTS

Structural General Observations

1. Gutters and downspouts are unattached or are not fully functional promoting dry rot of exterior walls. (OPSC 1101.1.1, 310.1; OSSC 1504)
2. The cross bracing seen on most recent construction plans has been removed to create concessions office space, and other rooms located under the bleachers. There are no plans or permit records to verify the adequacy of the altered conditions. (OSSC 105)
3. Plastic sheathing has been applied to the underside of framing members to deflect the rain away from the storage area located under the bleachers, but this is causing water to drain onto the wood flooring located just outside of this area, promoting dry rot. (OPSC 1101.1.1, 310.1)
4. The under bleacher framing has approximately ten 8" x 8" posts embedded in concrete which are showing severe decay of the lower 36" of the posts. (Plan reference: south of sections 7 and 8.) (OSSC 2304.11.2.7, 2304.11.4.1)
5. The west wall bathrooms have support posts for the bathroom floors which are set on non-treated 2"x 8" blocks subject to decay. These blocks are located in the drainage course for the storm water. (OPSC 1101.1.1; OSSC 2304.11.2.1)
6. The main entrance on the west wall has supports for the floor at the stairs and shows signs of water damage against the concrete wall. (OSSC 2304.11.2.3)

STADIUM, BLEACHERS, SEATING AREA & DUGOUTS

Electrical

7. **Bleachers & Seating Areas:**
Junction boxes under the stadium seating area are missing covers. (NEC 315.8)
8. Conduit and wiring located under the box seating by the home team dugout need to be replaced. The conduit is corroded and not properly supported. (NEC 358.30)
9. Extension cords located under stadium seating need to be removed. Permanent, code compliant wiring should be installed. (NEC 400.8)
10. Low voltage cabling located under the stadium seating lacks code compliant support and is not listed for the location. Abandoned cable needs to be removed or tagged. (NEC 725.2)

Plumbing

11. **Stadium:**
The upper roof horizontal rain drains are required to be supported at 4' spacing. Current piping for rain drains on field side has one support in 20', and the pipe is visibly sagging. (OPSC Table 3-2, 310.1)
12. The rain drains on the outer side of the roof are piped down the outside wall for several feet and then enter the building. Inside, several of these drains discharge to the ground, causing water damage to structure. (OPSC 1101.1.1, 310.1, 304)

- 13. Rain drains in other locations have been piped to drain ditches or tiled drain lines below ground. Modifications which appear to have been done over time are not code compliant. (OPSC 1101.1.1, 310.1)
- 14. Because the water service was turned off, the overall integrity of the plumbing systems, including the functionality of the fixtures could not be determined. Per onsite maintenance staff, the water was turned off to repair extensive damage to the water piping as a result of inadequate weatherization.
- 15. The floor drains located in the dugouts are plugged, resulting in standing water on the floor. The sump pump appears to be functional but was not energized. It has no lid and discharges on the ground under bleachers in the area of the corroding metal seating structures. (OPSC 310.1, 1101.1, 303, 304)

NOTE: Items 16–17 describe work that was done without permits and should be corrected immediately.

- 16. Several repair patches are on freeze-damaged galvanized and copper pipe and fittings. The patches are of unknown material and may be harmful to people and/or piping. (OPSC 310.1, 604.1)
- 17. The irrigation piping and the domestic water piping are interconnected without separation. A backflow preventer is required (*unable to confirm at the time of site visit*). (OPSC 603.4.6)
- 18. Several hose-bibs have been added with no vacuum breakers. (OPSC 603.4.7)
- 19. PVC pipe has been used to repair and re-pipe failing galvanized and copper piping. PVC pipe is not approved for use inside a structure. PVC pipe is required to be supported at 4' maximum spacing to prevent sagging and failing piping. (OPSC 604.1, 310.1 and PC pipe installation standards)

Structural

- 20. **Bleachers:**
The wooden bleachers appear to be in fair condition partly due to some recent repair. There is evidence of some dry rot; ongoing maintenance and repair will be needed.
- 21. The metal bleachers have the most extensive deterioration. Due to a lack of water drainage from the walking surfaces, and the grade below at the footings, the decking and support systems are compromised. (OSSC 1009.5.2, 2203.2)
- 22. The wall at the east end of the wooden bleachers, about half way up the blue steps, has become detached from the main structure. When pushed outward, the guardrail will separate from the wall at the stair treads approximately ¾ to 1". There is evidence of dry rot in the stair treads.
- 23. The guardrail on the stairs in Section B has a broken weld which is weak for the entire length of the seating section.
- 24. **Dugouts:**
Wood dry rot and corrosion of the metal supports are present in both dugouts. Additionally there is evidence of settling of the concrete walls in the first base dugout and at the third baseline dugout. There was water accumulation in the first base dugout.

Roofs

- 25. The trusses appear to be in good condition. There are perkins and sheathing that show evidence of dry rot as the roofing material has exceeded its functional lifespan. It is estimated that approximately 8% to

12% of the sheathing is in need of replacing and new roofing is needed.

26. The light towers are in need of painting to prevent any further corrosion of the bare metal. (OSSC 2203.2)

27. The roof access hatch is loose from the roof surface allowing water to leak into the access enclosure. Dry rot is evident.

CONCESSION STANDS & FOOD PREPARATION

Structural

28. The cross bracing has been removed to create an area under the stadium bleachers for dishwashing, ice machines and walk-in coolers. The walk-in cooler appears to be inoperative and is currently being used for storage of mop buckets and other items. There is considerable dry rot in the area where the ice machines are located, and also in the beer concession stands. This cooler is causing deflection of the floor.

Electrical

29. **Southwest Concession Stand:**
Exposed wiring above light fixture(s). (NEC 110.8)

30. Light fixtures need to be enclosed and supported. (NEC 410.11)

31. **West Concession Stand:**
Panel "C" has missing panel cover screws. (NEC 110.3)

32. Soda machine has exposed wiring. (NEC 110.8)

33. Receptacles on exterior wall(s) have missing covers and need to be rated for a damp location. (NEC 406.8)

34. **Main kitchen:**
Strapping is needed on conduits and MC cable. (NEC 300.11)

35. Knock-out seals needed on boxes (west wall). (NEC 110.12)

36. Remove cable at electrical panel. (NEC 110.8)

37. The beer cooler has a broken conduit and the zip will need to be replaced with code compliant wiring methods. (NEC 110.3)

38. **Food Row (west side of stadium):**
Overhead supports are not properly installed. (NEC 110.3)

39. **North east concession stand:**
Needs proper overhead wiring and disconnect. (NEC 225.6)

Plumbing

40. **South Field Concession:**
Beer tap drains are piped below the floor and dump onto the ground. (OPSC 303, 304, 301.1)

41. A piped sink drain and a condensate drain that are piped are tied into the rain drains, use improper fittings, and have back-graded piping. (OPSC 310.1, 1101.1, 303)

42.	Beverage dispenser draining onto the floor, the floor is rotted. (OPSC 303, 304, 603.4.12)
43.	Several holes in walls and floor, without insect or rodent-proofing. (OPSC 313.12)
44.	The outside sink is not secured to a structure and not protected from freezing or mechanical damage; the drain is piped under the structure and dumps onto the ground. (OPSC 310.1, 303, 313.5, 313.6)
45.	Hose-bib has no vacuum breaker and does not have freeze protection. PVC pipe is not code compliant. (OPSC 310.1, 603.4.7, 604.1, Table 6-4)
46.	Connection to the sanitary drainage system for all drains is required. (OPSC 304)
47.	There is no backflow preventer for the carbonator. (OPSC 603.4.12)
48.	Southwest Concession: An unsecured sink without trap or venting has a drain line tied to the rain drains below the floor. (OPSC 310.1, 304, 1101.1, 303, 407.6, 310.4)
49.	Beer tap and beverage dispenser drains dump onto the ground under the floor. (OPSC 310.1, 303, 304)
50.	Main Kitchen: Improper pipe and fittings used on drain, waste, vent and water piping. (OPSC 310.1, 701.1, 706, 604.1)
51.	Leaks in copper water piping repaired with some sort of mastic. (OPSC 604.1)
52.	Inadequate support of suspended PVC water piping. (OPSC 314, Table 3-2)
53.	A 3-compartment sink and commercial dishwasher were installed with no vent for the sink, no trap for the dishwasher, and an open sewer vent at about head-level in the room. The under-floor piping is draining into the rain drain system. (OPSC 310.1, 310.4, 901, 906, 1001, 304)
54.	There are no floor drains or floor sinks installed as required for commercial kitchens. Indirect waste tubing from equipment or dispensers drains to overflow buckets or pans creating an unsanitary condition. (OPSC 411.2.2, 301.1, 304) <i>This should be addressed immediately.</i>
55.	There are no plumbing vents through the roof. (OPSC 901, 906, 310.1)
56.	There are no insect or rat proofing, no backflow preventers and no food prep sink. (OPSC 310.1, 313.12, 602.3, 801.2.3)
57.	Northeast Concession: Sink draining in ground. (OPSC 310.1, 304)
58.	Water heater not strapped. (OPSC 508.20)
59.	There is no backflow protection where required. (OPSC 602.3)
60.	No rat proofing. (OPSC 313.12)
61.	PVC water piping used. (OPSC 604.1, Table 6-4)
62.	Northwest Concession: Sink drain dumping below floor. (OPSC 304, 310.1)
63.	Beverage dispenser drains to ground below floor and has no backflow device on water supply to carbonator. (OPSC 310.1, 304, 303, 603.4.12)

- 64. PVC water piping used. (OPSC 604.1, Table 6-4)
- 65. **Food Service Outbuildings:**
The food service outbuildings were not accessible at the time of inspection. There did not appear to be any plumbing connections or hand sinks in this area. (OPSC 303, 304, 310.1)
- 66. PVC water piping used. (OPSC 604.1m Table 6-4)

LOCKER ROOMS, RESTROOMS & OUTBUILDINGS

Structural

- 67. **Locker & Laundry Rooms:**
Exterior deck at locker room entrances has decking material that is pressure treated and in sound condition but the support system is questionable as the decking and fasteners can be pulled up with little effort and walking on the system feels very soft and deflects considerably. (OSSC 2304.11.2.1)
- 68. The stairs leading to the locker rooms are lacking handrails. (OSSC 1009.10)
- 69. There are several support posts in the dressing area that have been cut off and repaired with wood blocks. There are no indications of positive connections between the two pieces at each of these repairs. (OSSC 2304.9)
- 70. Tile shower floor appears to be sloping toward the wall between "home" and "visitors" locker rooms; damage and mold visible. (OPSC 411.4, 310.1)
- 71. A wall has been built dividing the shower area in two. This wall has rotted about ½ the total height above the shower floor and is floating at the bottom, not attached. (OSSC 2304.11.5)
- 72. The door from the east shower area to the exterior has a 28" drop to the asphalt surface below. A landing and steps are required. (OSSC 1008.1.5 and OSSC 1009)
- 73. The roof assembly support ledger located above the laundry room ceiling, and also in the room adjacent to the east, has failed and the roof is dropping.

Plumbing

- 74. Open grated catch basins in both locker rooms, with no apparent function, could backflow in to room. (OPSC 306, 309, 710.1)
- 75. Laundry room has a commercial clothes washer with a 3" drain run to a 2" floor drain; improper piping and fittings. This undersized drain could cause backflow and an unsanitary condition. (OPSC 311.5, 310.1)

Electrical

- 76. The light fixture in the visitors' shower room has a missing lens. (NEC 110.3)
- 77. Laundry room located off of home locker room needs cover for light fixture and fan. (NEC 110.3)

Structural

- 79. The west wall bathrooms have support posts for the bathroom floors set on non-treated 2"x 8" blocks. These blocks are in the drainage course for the storm drainage. (OSSC 2304.11.4.1)

80.	Women's Restroom (west): Restroom does not meet ADA requirements. (OPSC 413)
81.	Toilets in stalls do not have required clearance from center to side walls. (OPSC 407.6)
82.	The lavatory is blocking access to two toilet stalls. (OPSC 309)
Plumbing	
83.	The drinking fountain located outside is broken and is not secured to the wall. The drain is tied into the sanitary waste system with no trap and no vent. Traps and vents are required. (OPSC 310.1, 310.4, 901, 1001.1)
84.	There is evidence that the north half of this restroom was altered at some point. The alterations created the following health concerns: <ul style="list-style-type: none"> • There are several open drains and vents below the floor which allow sewer gas, and potentially sewage to enter the structure. (OPSC 310.1, 303, 304, 906, 712.1) • A bank of toilets was installed with drains provided but no vents. The end of the line opens to under floor space. (OPSC 310.1, 303, 304, 906, 712.1)
85.	The old 4" cast iron sewer main located from here to underground appears to be intact and useable. The condition of the underground sewer piping is unknown and may need to be videotaped to determine continued serviceability.
Mechanical	
86.	Laundry Room The laundry room in the east locker room has a gas dryer that needs a gas shutoff valve (OSMC 409.5)
87.	Terminations of the exhaust ducting for the dryers should be to the exterior of the building (OSMC 504.1)
88.	Boiler Rooms The old boiler is not functioning; water and gas piping need to be capped. There is no apparent heat source or steam supply to this building. (OPSC 310.1)
89.	The old boiler has visible flaking asbestos open to the room; the storage tank is covered with asbestos insulation.
90.	New boilers are installed in an outbuilding with open side, with no freeze protection. The tanks are not secured properly to the structure; PVC piping was used; and the required water shut-off valves are not installed. (OPSC 310.1, 310.4, 508.2, 604.1, Table 6-4, 605.2). Seismic restraint and gas equipment shutoff valves should be installed. (OSMC C409.5 OPSC301.15 508.2.)
91.	The old gas supply piping to the abandoned boiler needs to be capped to prevent accidental opening of the valve, which would allow an unregulated flow of gas into a room with sources of ignition.
Electrical	
92.	The electrical panel located in the west boiler room has visible damage due to moisture.
Structural	
93.	Significant roof leak.

94.	Plants and ivy are penetrating the walls and windows.
Electrical	
95.	East Boiler Room: Breaker blanks need to be installed in electrical panel.(NEC 110.12.0
96.	Wiring from panel to disconnect needs to be installed in conduit. (NEC 110.8.)
97.	Time clock on East wall needs cover installed. (NEC 110.12.)
98.	Maintenance Shop: Temporary wiring for lighting should be removed and replaced with proper wiring methods.
99.	The 240 volt cord that runs through the wall needs to be removed and installed properly.
100.	Low voltage cabling needs supports in garage area.
101.	Office Building: South wall second floor closet light fixture needs to be enclosed. (NEC 410.11.)
102.	Outside south wall stair light fixture needs lens installed.
103.	North side overhead feeder too close to upstairs window. (NEC 230.9.)
Plumbing	
104.	Upstairs water heater needs seismic restraints and a temperature and pressure relief valve drain pipe, piped to outside. (OPSC 508.2, 608.5)
Mechanical	
105.	There appears to be an abandoned underground oil tank on east side; vents and fill pipes are visible. Need to confirm that it is pumped out and filled with sand or concrete. (OMSC 1301.5)
Electrical	
106.	Weight Room & Grounds Keeper's Building: GFCI receptacle above whirl pool tubs is loose.
107.	Heaters located throughout need covers.
Plumbing	
108.	Training Room / Maintenance Shed: Therapy tubs and ice machine located in bathroom where toilets were removed but the connection floor flanges have not been plugged; allowing sewer gas and possibly sewage to enter the room. (OPSC 310.1, 712.2)
109.	Therapy tubs and ice machine are draining to the open floor flanges with no air gap; allowing contamination of ice and tubs. A clothes washer is draining into one of the therapy tubs. <i>This should be addressed immediately.</i> (OPSC 310.1, 304, 804.1, 801.2)
110.	A mop sink located at the east end drains through the wall and dumps on the ground outside the building. (OPSC 310.1, 304)
111.	The water heater has no seismic restraints and no shutoff valve on water supply. (OPSC 605.2, 508.2)

Structural

112. The roof on the "grounds-keepers" building has a zero life expectancy; visible leaks.

MISCELLANEOUS**113. Water Valve Vault:**

Has three 3" mains, two protected with backflow preventers and one unprotected. There are no labels to determine what they feed. Appears that when originally constructed the drinking water was protected properly; however subsequent repairs were made and now they are tied together under the grandstands. (OPSC 310.1, 602)

114. Drainage fittings were used where pressure fittings required. (OPSC 606)

115. Leak on domestic main. (Maintenance crew indicated that there has been a leak for many years in the water piping underground near this vault; location not determined therefore not repaired). (OPSC 310.1, 602)

116. Cash Room:

Missing covers on hot water heater (NEC 110.12)

117. Secure MC cable. (NEC 330.30)

118. The water heater serving the kitchen is located in the cash room. There are no seismic straps and no temperature and pressure relief valve drain piping. This is a potential safety hazard. In addition there are open element covers with line voltage wiring connections exposed. (OPSC 310.4, 508.2, 608.5)

119. There is an open sump pit or catch basin in floor, full of dirty water. These are not approved for use inside buildings. It is likely that in the original construction these catch basins were storm drains for underside of grandstands, over the years rooms were built in this space. Carpet is wet. (OPSC 310.1, 303, 304)

120. PVC water piping used throughout. (OPSC 604.1, Table 6-4)

121. Other:

All water heaters need seismic restraints. (OPSC 508.2)

122. East picnic & deck areas (three levels):

Access from one to the other is by ramp and steps. The lower level seems sound with only slight decay in the decking materials. The intermediate level shows considerable decking material decay and loose nails. The upper deck is relatively sound but is built over an existing deck which is at the same level as the intermediate. Judging the condition of the intermediate deck that is visible, the upper deck is subject to the condition of the deck supporting it. The ramps all have plywood surfaces (slick when wet), and the leading edges are in excess of the maximum 1/2" elevation change per the current code. The Guardrail at the third baseline is weak at the intermediate level deck. (OSSC 1109.4.5 1109.7.9)

GENERAL COMMENTS

126. **Electrical Inspector Comments**

The majority of the electrical installations appear to have been code compliant at the time of installation. Recent electrical work has been done without permits therefore not inspected. This work must be verified by an electrical contractor and then legitimized through the permitting process.

127. **Plumbing Inspector Comments**

The domestic water piping system can no longer be deemed potable due to the cross connections, improper pipe, and potential contamination from above and below ground leaks. There are two options for using this system:

1. Fix the leaks, use pre-mixed carbonated beverage canisters at beverage dispensers, and post permanent signs at all water outlets, "Caution: Non-potable water, do not drink", as per OPSC sec 601.2.2. Also, provide backflow device on the unprotected water main to protect the municipal water system.

Or

2. Re-pipe all of the needed potable water lines, provide approved backflow protection devices where required, provide freeze protection for exposed piping and equipment, and determine location and repair the leak below ground near the vault.

The only portions of the waste system that can still be used with minimal work would be the men's restroom at the entrance, and the locker room showers and restrooms. However all open drains and vents in the sanitary drainage system will need to be capped or connected properly with needed vents terminating above the roof, and all other fixtures removed and their piping capped. If any other fixtures in the stadium need to be used, their drains and vents will need to be brought up to code, and they cannot drain to the storm sewer system or on to the ground.

Another area of concern is in the training room building. The open waste lines need to be capped and provide proper indirect waste piping receptors for the ice machine, the clothes washer and the therapy tubs. The other rest room in this building is functional and appears to have been properly piped.

In order to prevent further damage to the structure the rain drains should be repaired as noted, and the other noted items should be corrected to protect health and safety.

All changes will require permits and inspections and be performed by a licensed journeyman plumber.

128. **Structural/Mechanical Inspector Comments**

The wood framed portion of the Stadium appears sound with the exception of the lack of properly functioning roof and storm drain systems, and the removal of cross bracing to add rooms and storage areas under the stadium.

Work done without permits may have contributed to premature deterioration of the structure.

The metal bleachers are deteriorated and may require immediate rehabilitation or replacement to protect the safety of users.

Building Inspection Report



Structural support of metal bleacher seats corroded.



Structural support below metal bleacher section.



Metal stairs and hand rails.



Metal stairs to raised bleacher seats.



Roof downspout drains to grade along foundation.
Visible signs of dry rot.



Roof downspout drains to grade along foundation.
Visible signs of dry rot.



Visible signs of dry rot.



Visible signs of dry rot.



Temporary, non-secured steps to concession stand.



Downspout(s) disconnected from gutter. Gutters are not supported along roof edge.



Unprotected wiring in wooden bleacher section.



Electrical conduit corroded and broken, suspended with electrical wiring.



Alteration to structural framing.



Stadium roof.



Stadium roof.



Stadium lighting located on roof.



Propane accessible and open to the public.



Flexible connectors require quick-connect fittings.



Concession area outside sink not secured to structure, or protected from freezing or mechanical damage. Drain is piped to ground under structure.



Drain of utility sink, drains to ground.



Non-compliant plumbing and garden hose in food prep area.



Leaky plumbing under sink drains.



Plumbing cross connections and improper pipe material.



Plumbing cross connections and improper pipe material.



Urinals installed without venting; old toilet fixtures not properly sealed.



Lavatory sink projects into toilet stall.



Open unvented drains to sanitary sewer system; source of sewer and sewer gas and access point for rats and vermin.



Plumbing cross connections and improper pipe material.



Electrical box cover missing; improper wire termination.



Exposed wiring.



Electrical box cover missing.



Irrigation control box missing cover, fumes from gas can be source of possible ignition.



Unsecured 220 volt outlet; outlet wired from sub panel. Overuse of extension cords.



Wiring from electrical panel feeds 220 outlet



Open and insecure electrical boxes in concessions area.



Over use of extension cords.



Deteriorated weather-proofing.



Carbonation tubing in outlet wiring chase.



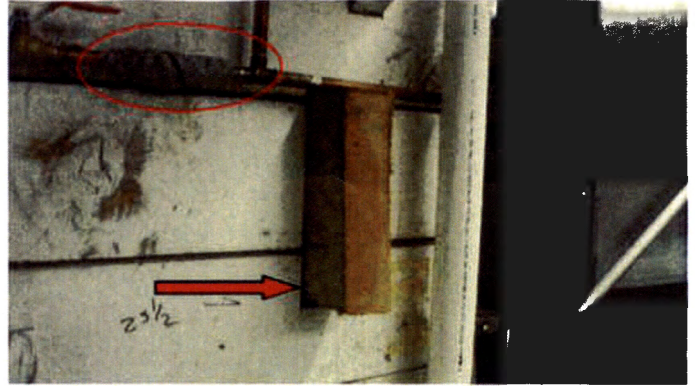
Unattached heater cover.



Corroded plugs.



Repair to structural framing.



Plumbing patch with unknown material; structural element removed.