

Site

Located at the southern edge of the UW-Madison campus, The Field House is positioned on a north-south axis on a highly visible site at the corner of Regent Street, Breeze Terrace, and Monroe Street. Little Street also intersects the area directly south of the Field House. Connected to the south end of the Camp Randall Stadium, the Field House brings a sense of history to a modern-day athletic facility.

The site is accessed by the public mainly from the west, south, and east. The 50-foot-tall monument “Nails Tails,” created by artist Donald Pinski and installed in 2005, is positioned at the southwest corner of the site.

A fence enclosure is provided on three sides of the site while the north side abuts the stadium. The fence varies in design between a vertical metal baluster-style along the west and a chain link fence along the south.

A noticeable change in elevation occurs at the southeast corner of the site with a 10-foot decline to the parking lot of Kellner Hall. This change in grade is treated through the use of a concrete retaining wall along Monroe and Little Streets. In desperate need of repair, it is believed that this wall is of original construction. The east side of the Field House site is paved for fire truck access and includes a landscape area and stairs down to the plaza area south of Kellner Hall.



Figure 40: Campus Map (UW-Madison 2018)

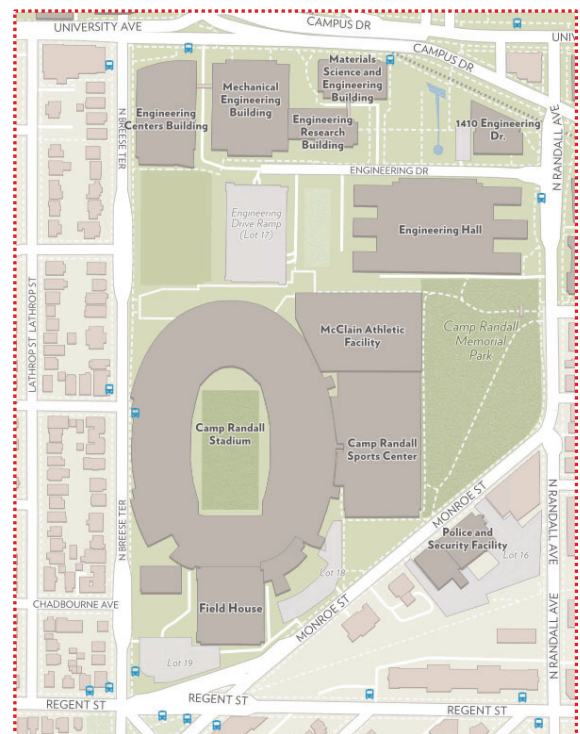


Figure 41: Campus Map (UW-Madison 2018)



Figure 42: Field House Retaining Wall
(River Architects July 12, 2018)



Figure 43: Field House Exterior Stairs
(River Architects July 12, 2018)



Figure 44: Field House Exterior
(River Architects July 12, 2018)



Figure 45: Field House Exterior Light Fixture
(River Architects May 3, 2018)

The west side of the site is divided roughly in half between public use and maintenance use. UW Athletics occupies a one-story maintenance building where deliveries are made while the other half is a general use parking lot by permit only. A sliding chain link gate provides security between the two areas.

Limited amounts of vegetation can be found along the south and west sides of the site. Trees, mulch ground cover, and boulders align the sidewalk along Little Street and Breese Terrace.

Central to the south elevation of the Field House, a 33-foot wide concrete stair structure ascends from the sidewalk along Little Street to the south plaza in front of the Field House. Painted metal pipe railings are located at the stair while wing walls original to the Field House structure flank the east and west edges of the stair. Precast concrete bollards are located at the top of the stair along the south edge of the plaza.

A concrete retaining wall extends from the driveway into Lot 18 east of the property and terminates in alignment with the west face of the Field House. The wall is believed to be of original construction due to the board-formed impression that is visible through the parge coating and aligns with historic photographs showing the board-formed concrete pattern. It is believed the wall precedes the stair in date of construction.

Ornamental light fixtures that are placed on top of the two stone wing walls at the concrete stair are believed to not be original to the Field House. Historic photographs collected of the Field House prior to 1960 do not appear to show these fixtures. However, photos taken during the 1960s, following a renovation and addition to the Wisconsin General Hospital in the late 1950s do appear to show these light fixtures.



Figure 46: Wisconsin General Hospital
(UW Archives 1923)

EXTERIOR CONDITION ASSESSMENT

Overview

To the thousands of visitors of the Field House every year, one can be overcome by the scale and beauty of this historic structure. The use of durable materials has proven to be a vital asset to the overall integrity of the building envelope. Those involved in the authoring of this report agree that the exterior needs immediate repair. This section of the Historic Structure Report will focus on the conditions of the exterior and provide documentation of observations made.

Methodology

For the purposes of this Historic Structure Report, all assessments were made through on-site visual observations conducted in May and July of 2018, high definition photography, and drone photography. Original drawings from 1929 were analyzed and compared to as-built conditions throughout the entire process in an effort to better understand and assess the design intent versus the actual constructed environment.

Alterations

Although the Field House has remained intact on the exterior for most of its existence, there have been alterations to the historic fabric, most of which have occurred after the Period of Significance (1930-1947) and others have occurred following the Field House being put on the National Register of Historic Places (1998). Modifications have been made to all facades including entrances being cut into the existing walls, widening of original entrances, mechanical louvers replacing original windows and doors, replacement and/or removal of original light fixtures, etc. On a larger scale, the modifications and additions to Camp Randall Stadium have compromised the historic nature of the north end of the building, while trying to preserve the original envelope as much as possible. Original skylights removed in 1980 due to safety concerns on the arena floor is also a considerable alteration from the building's original character. While the original windows remain intact, each unit has been painted and dark window coverings have been incorporated in order to block out as much natural light and heat gain as possible.

Conditions

On a scale of poor, fair, good, and excellent, the exterior envelope of the Field House would likely be rated as fair condition. The conditions appear to be mainly related to masonry and fenestration issues, all of which can be treated through proper restoration efforts. The cracking is evident in the stone work, while spalling is visible at much of the glazed terra cotta detailing. Mortar integrity, flashings, sealants, and stone repair are all issues that are expected of a building of this age.



Figure 47: Field House Masonry Deterioration
(River Architects May 3, 2018)

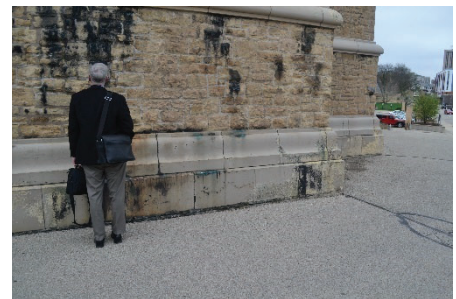


Figure 48: Field House Masonry Staining
(River Architects May 3, 2018)



Figure 49: Field House Exterior Detailing
(River Architects July 12, 2018)



Figure 50: Field House Exterior
(River Architects May 3, 2018)



Figure 51: Field House Exterior
(River Architects July 12, 2018)



Figure 52: Field House Window Arch
(River Architects July 12, 2018)

Future Assessment

While this report has focused on the Field House history and will highlight the noticeable conditions observed, it is highly recommended that a more invasive and explorative approach be conducted to evaluate the true performance of the exterior envelope. Further testing of the moisture content of the stone, air and vapor infiltration, condensation measurements in the roof system, etc. are all potential means of determining if future restoration efforts will be benefited by a better performing envelope.

Anticipated Scope of Work

Although UW-Madison initially stated that there were no intentions of restoring the entire Field House to its original condition and wasn't interested in conducting major repair work, many issues have been uncovered. As a result, prioritization of the overall project scope will need to be addressed and will influence the overall outcome of any restoration effort. Suggested treatment recommendations are outlined in Part 2 of this report.



Figure 53: Field House South Elevation
(River Architects July 12, 2018)

South Elevation Assessment

The south elevation of the Field House has retained much of its historic fabric over its nearly 90 years of existence. This elevation exemplifies the Renaissance Revival style of building with its symmetrical facade, scale, arched entrances, and classical detailing. While the overall condition of the south facade appears to be in good condition, a closer look of the materials and areas of deterioration lead to concerns of the overall integrity of the exterior envelope. It is evident that numerous efforts have been made to prevent further damage to the structure, which have prohibited further deterioration. The assessment of the south elevation is summarized in the following narrative and subsequent pages in further detail.

Masonry

The rubble stone in general appears to be in good condition. Staining is evident in a number of areas and is expected from a building of this age. There are numerous fractures in the masonry near the windows and doors, likely caused by movement in the structure, water infiltration, and absence of control joints.

The glazed terra cotta trim that provides intricate detailing to this elevation is in relatively poor condition. Numerous areas were observed where glaze spalling has occurred and as a result, the terra cotta has deteriorated. The step cracking that is found in the rubble stone is often transferred through the terra cotta trim, resulting in fractured units that require replacement.

Steel lintels placed over the windows appear to be in stable condition.

Additional information regarding the masonry can be found in Appendix H.



Figure 54: Field House South Elevation
(River Architects July 12, 2018)



Figure 55: South Elevation Cartouche
(River Architects July 12, 2018)



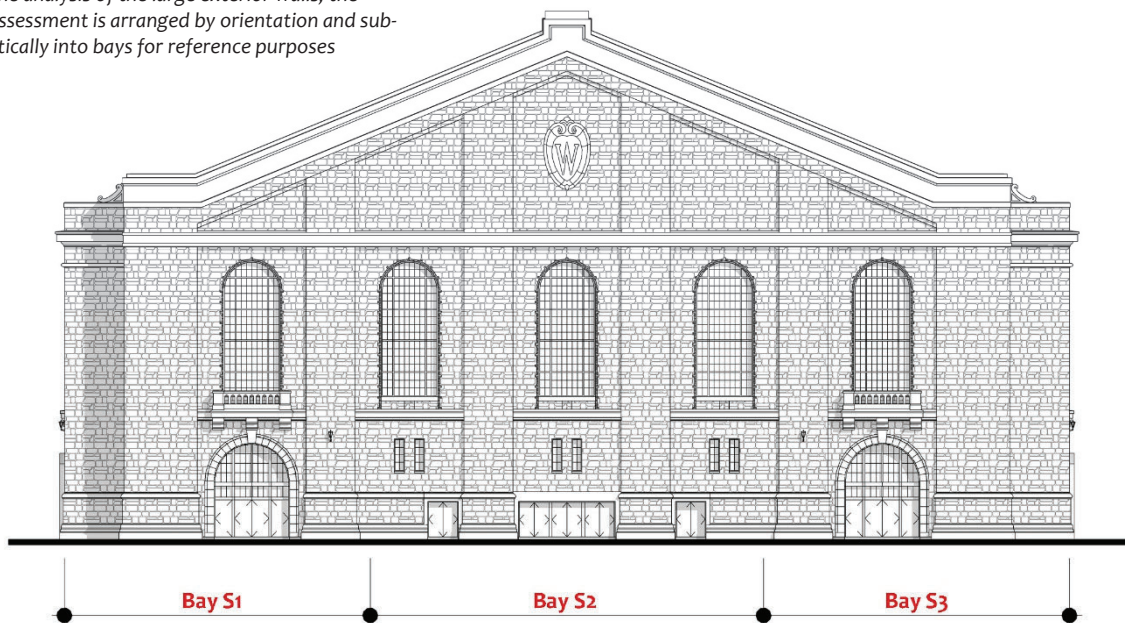
Figure 56: Field House Southwest Corner
(River Architects July 12, 2018)



Figure 57: Field House Southwest Entrance
(River Architects July 12, 2018)

WALL REFERENCE NOTE

To help in the analysis of the large exterior walls, the condition assessment is arranged by orientation and subdivided vertically into bays for reference purposes



Doors

Historic drawings and photos indicate the original doors at the southwest and southeast entrances were half-lite doors with glazed transom units above. These doors have since been replaced with flush hollow metal doors while the transom units remain intact.

An introduction of two sets of entry doors were added in the 1970s along with a modification to the center doors which altered the size of the opening substantially.

Windows

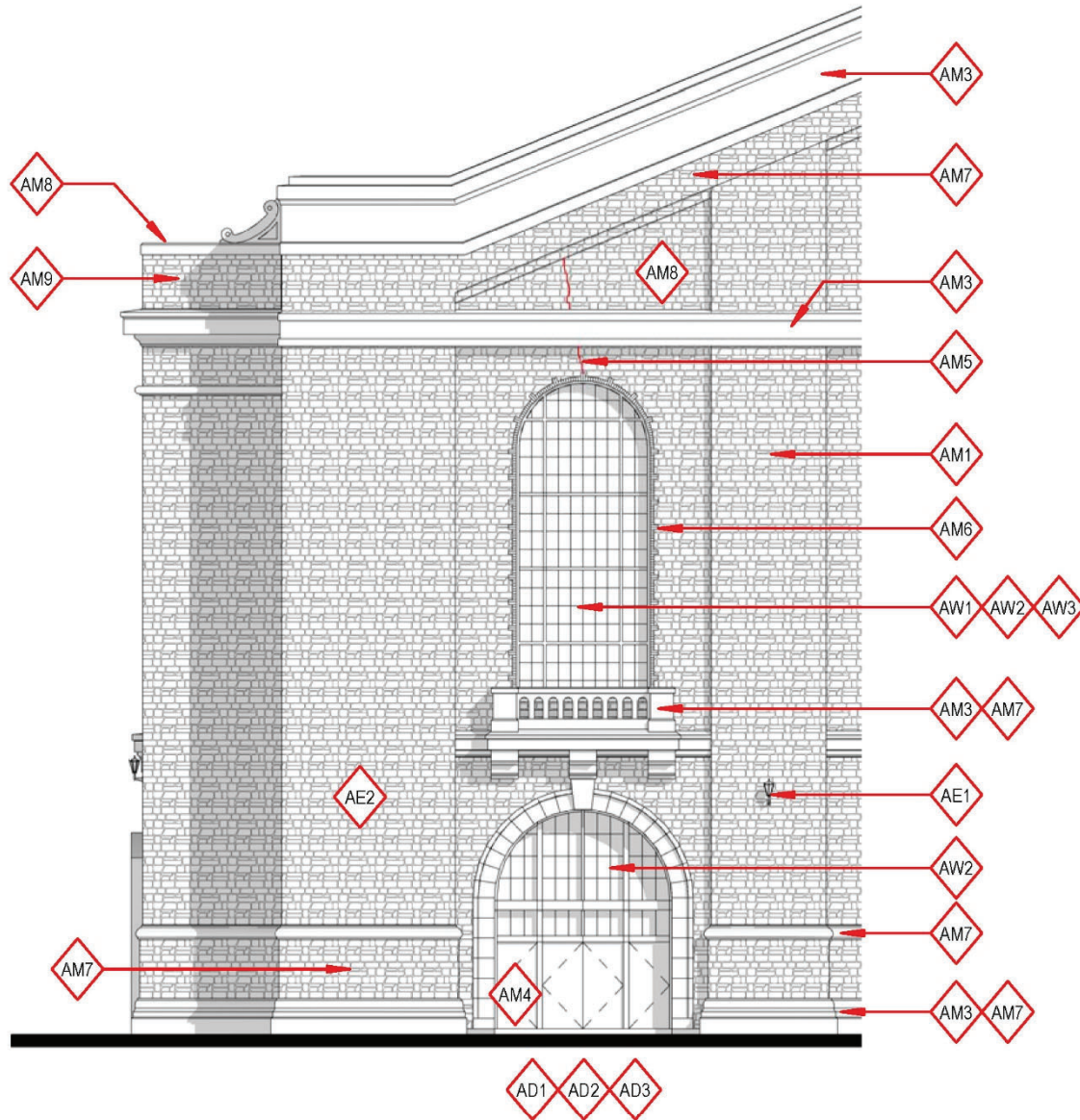
The windows on the south elevation are original and intact. Constructed of steel framing, the windows are in good condition. Glass has been painted on the interior surface as a means of blocking sunlight and reducing heat gain but the condition of this paint has deteriorated. Operable sections of the windows remain functional although the original interior hardware has been decommissioned.

Alteration Summary

The modifications to the south facade include the following:

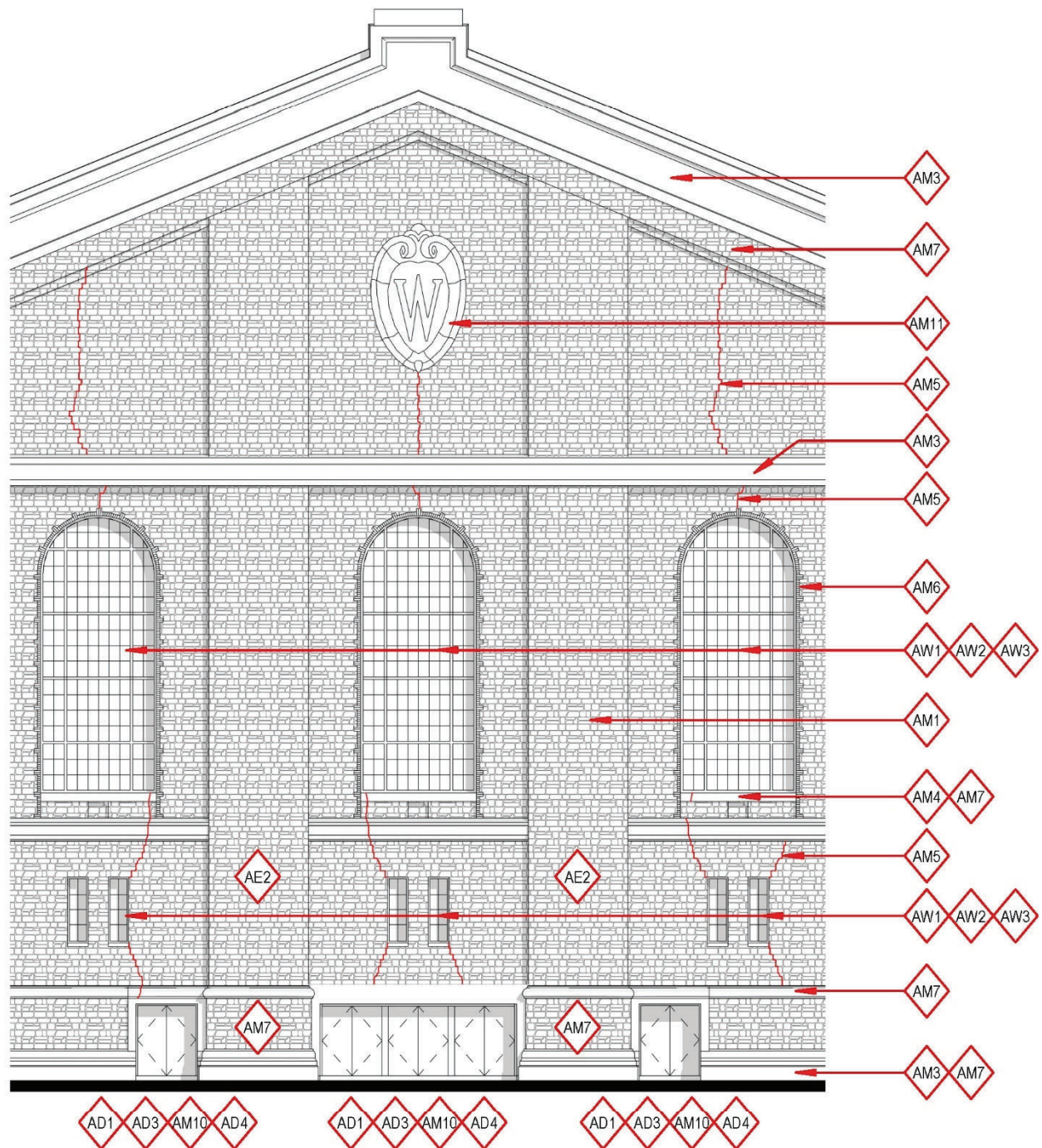
- Doors added and/or modified.
- Light fixtures replaced and/or removed.

South Elevation Examination



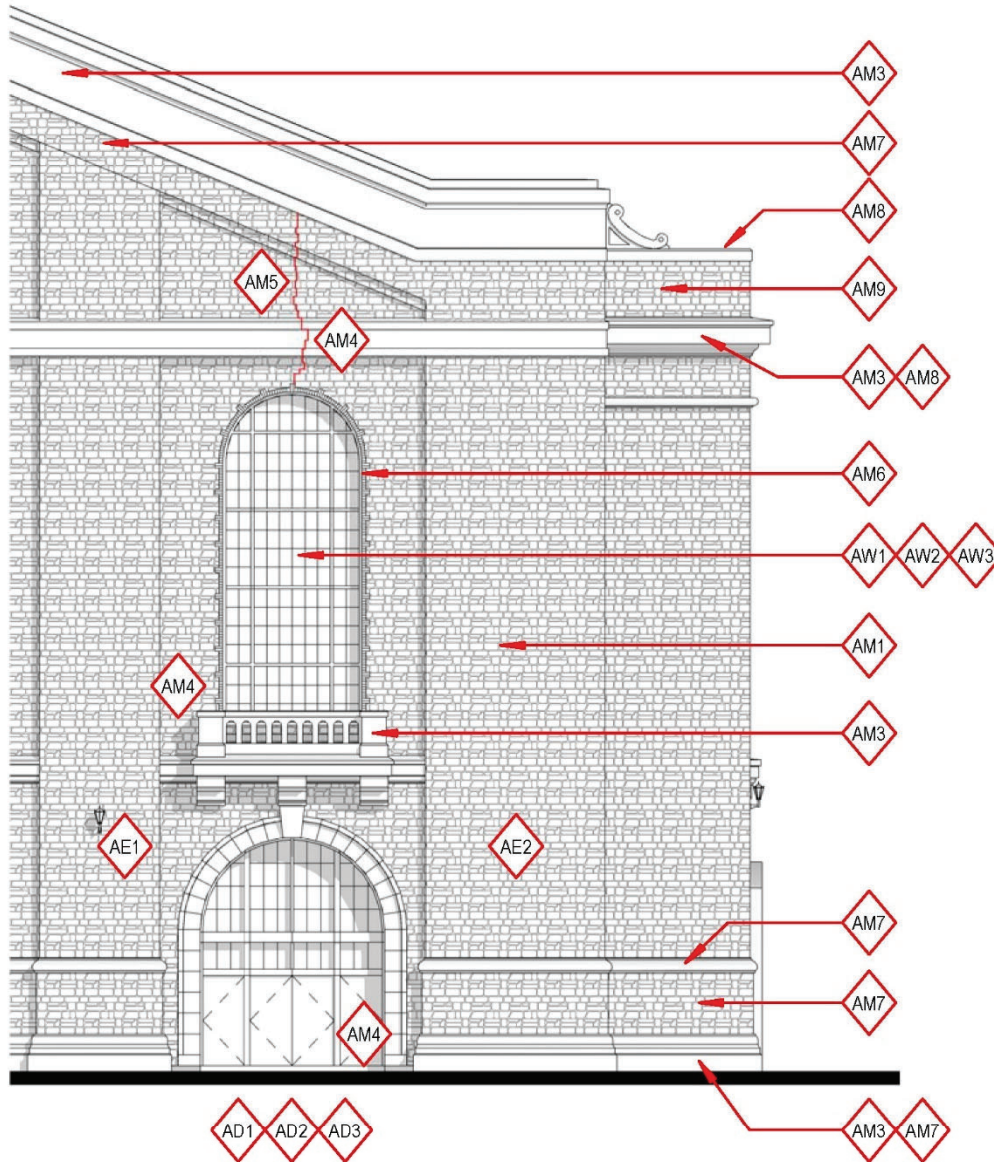
CONDITION ASSESSMENT SUMMARY - SOUTH ELEVATION - BAY S1

DOORS	ELECTRICAL	MASONRY	WINDOWS
AD1 NON-ORIGINAL HOLLOW METAL DOORS ARE IN GOOD CONDITION	AE1 NON-ORIGINAL LIGHT FIXTURE - ORIGINAL FIXTURE MOUNTING HARDWARE REMAINS	AM1 EVIDENCE OF PREVIOUS TUCKPOINTING EFFORT WITH NON-MATCHING MORTAR	AW1 DETERIORATED FINISH AT METAL WINDOW FRAME
AD2 ORIGINAL WOOD FRAME IN FAIR CONDITION WITH DETERIORATION PRESENT AT GRADE	AE2 LIGHT FIXTURE MISSING - ORIGINAL FIXTURE MOUNTING HARDWARE REMAINS	AM3 EVIDENCE OF TERRA COTTA SPALLING	AW2 GLAZING UNITS HAVE BEEN PAINTED ON THE INTERIOR FACE
AD3 SEALANT AT DOOR PERIMETER IN POOR CONDITION		AM4 FRACTURED TERRA COTTA UNIT(S)	AW3 SEALANT AT WINDOW PERIMETER IN POOR CONDITION
		AM5 DIAGONAL STEP CRACKING PRESENT	
		AM6 BRICK AT THE PERIMETER OF THE WINDOW APPEARS TO BE IN GOOD CONDITION	
		AM7 MASONRY STAINING PRESENT	
		AM8 DETERIORATION OF SKYWARD FACING JOINTS OBSERVED	
		AM9 DETERIORATED MORTAR JOINTS PRESENT	



CONDITION ASSESSMENT SUMMARY - SOUTH ELEVATION - BAY S2

DOORS	ELECTRICAL	MASONRY	WINDOWS
AD1 NON-ORIGINAL HOLLOW METAL DOORS ARE IN GOOD CONDITION	AE2 LIGHT FIXTURE MISSING - ORIGINAL FIXTURE MOUNTING HARDWARE REMAINS	AM1 EVIDENCE OF PREVIOUS TUCKPOINTING EFFORT WITH NON-MATCHING MORTAR	AW1 DETERIORATED FINISH AT METAL WINDOW FRAME
AD3 SEALANT AT DOOR PERIMETER IN POOR CONDITION		AM3 EVIDENCE OF TERRA COTTA SPALLING	AW2 GLAZING UNITS HAVE BEEN PAINTED ON THE INTERIOR FACE
AD4 NON-ORIGINAL PLASTER DOOR SURROUND IN FAIR CONDITION		AM4 FRACTURED TERRA COTTA UNIT(S)	AW3 SEALANT AT WINDOW PERIMETER IN POOR CONDITION
		AM5 DIAGONAL STEP CRACKING PRESENT	
		AM6 BRICK AT THE PERIMETER OF THE WINDOW APPEARS TO BE IN GOOD CONDITION	
		AM7 MASONRY STAINING PRESENT	
		AM10 FLASHING AND SEALANT IN POOR CONDITION	
		AM11 CRACK OBSERVED IN "W" CARTOUCHE	



CONDITION ASSESSMENT SUMMARY - SOUTH ELEVATION - BAY S3

DOORS	ELECTRICAL	MASONRY	WINDOWS
AD1 NON-ORIGINAL HOLLOW METAL DOORS ARE IN GOOD CONDITION	AE1 NON-ORIGINAL LIGHT FIXTURE - ORIGINAL FIXTURE MOUNTING HARDWARE REMAINS	AM1 EVIDENCE OF PREVIOUS TUCKPOINTING EFFORT WITH NON-MATCHING MORTAR	AW1 DETERIORATED FINISH AT METAL WINDOW FRAME
AD2 ORIGINAL WOOD FRAME IN FAIR CONDITION WITH DETERIORATION PRESENT AT GRADE	AE2 LIGHT FIXTURE MISSING - ORIGINAL FIXTURE MOUNTING HARDWARE REMAINS	AM3 EVIDENCE OF TERRA COTTA SPALLING	AW2 GLAZING UNITS HAVE BEEN PAINTED ON THE INTERIOR FACE
AD3 SEALANT AT DOOR PERIMETER IN POOR CONDITION		AM4 FRACTURED TERRA COTTA UNIT(S)	AW3 SEALANT AT WINDOW PERIMETER IN POOR CONDITION
		AM5 DIAGONAL STEP CRACKING PRESENT	
		AM6 BRICK AT THE PERIMETER OF THE WINDOW APPEARS TO BE IN GOOD CONDITION	
		AM7 MASONRY STAINING PRESENT	
		AM8 DETERIORATION OF SKYWARD FACING JOINTS OBSERVED	
		AM9 DETERIORATED MORTAR JOINTS PRESENT	



Figure 58: Field House Southeast Window Balcony
(River Architects July 12, 2018)

The photo to the left represents a common theme of the Field House's exterior condition. The rubble stone is generally in good condition while the terra cotta has suffered from glaze spalling and is continuing to deteriorate. Fractures in the masonry wall are evident at the window heads and sill areas while staining is commonly present near the base of the wall. Areas are observed where previous tuckpointing efforts were made with a non-matching mortar. Window frames are generally in good condition but are in need of refinishing.



Figure 59: Field House Southwest
(River Architects May 3, 2018)

Terra cotta detailing used at grade and near door openings has suffered extreme deterioration over the years. Glaze spalling and fractures can be found on many units. Staining of the masonry is most evident near the base of the wall on the south elevation.

Glaze spalling can be seen at the underside of the decorative terra cotta banding in the photo to the right. Close observations of the rubble stone indicate mortar separation occurring.

The bottom photo is a good example of the typical conditions found at the windows. Window frames are in relatively good condition while the sealants and adjacent masonry is often in poor condition. The terra cotta sills and balconies at the south elevation need immediate repair.



Figure 60: Southwest Corner of Field House
(River Architects May 3, 2018)



Figure 61: Southeast Window Balcony
(JP Cullen May 17, 2018)



Figure 62: West Elevation - Southwest Entrance
(River Architects July 12, 2018)



Figure 63: Field House West Elevation
(River Architects May 3, 2018)

West Elevation Assessment

Consistent with the south elevation, the west facade of the Field House is relatively unaltered from its original design. Overall, the west elevation is in good condition, with deterioration similar to that of the south elevation. The assessment of the west elevation is summarized in the following narrative and subsequent pages provide additional detail.

Masonry

In general, the rubble stone is in good condition. Staining is apparent in a number of areas and is expected from a building of this age. Step cracking is noticeable at the windows and doors, likely caused by movement in the structure, water infiltration, and nonexistent control joints.

The glazed terra cotta trim is in relatively poor condition, depending on location. Numerous areas observed where glaze spalling has occurred and as a result, the terra cotta has deteriorated. Fractured and/or spalled units can be seen throughout the entire elevation.

Steel lintels placed over the windows appear to be in stable condition.

Additional information regarding the masonry can be found in Appendix H.

Doors

Compared to the original design, all of the doors along the west elevation have been replaced or modified. Historic drawings and photos indicate the original doors at the west elevation were half-lite doors and the entrances at the northwest and southwest included glazed transom units above.

The central pair of doors were widened between 1974 and 1976 to include eight leaves, while a mechanical louver replaced the southern pair of doors in 2016.

Windows

With the exception of one unit, which was replaced with a mechanical louver in 1980, the windows located on the west facade are original and intact. Although the finishes have worn away on the exterior, the steel framing is in good condition. Paint applied to the interior surface of the glass was added in an effort to block sunlight and reduce heat gain but the condition of this paint has deteriorated. Operable sections of the windows remain functional although the original interior hardware has been decommissioned.

Alteration Summary

The modifications to the west facade include the following:

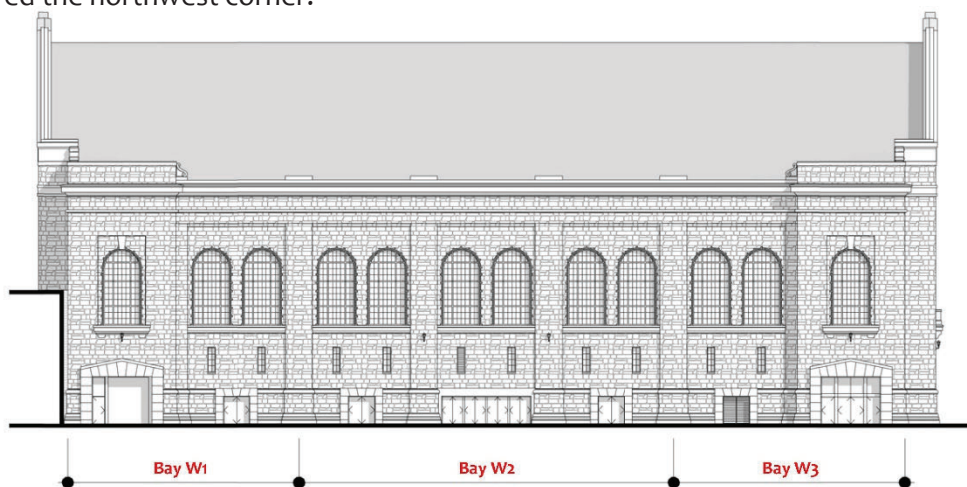
- Doors added and/or modified.
- Light fixtures replaced and/or removed.
- Addition of an overhead coiling door and two mechanical louvers into original door and window openings.
- 2004 Camp Randall Stadium renovation altered the northwest corner.

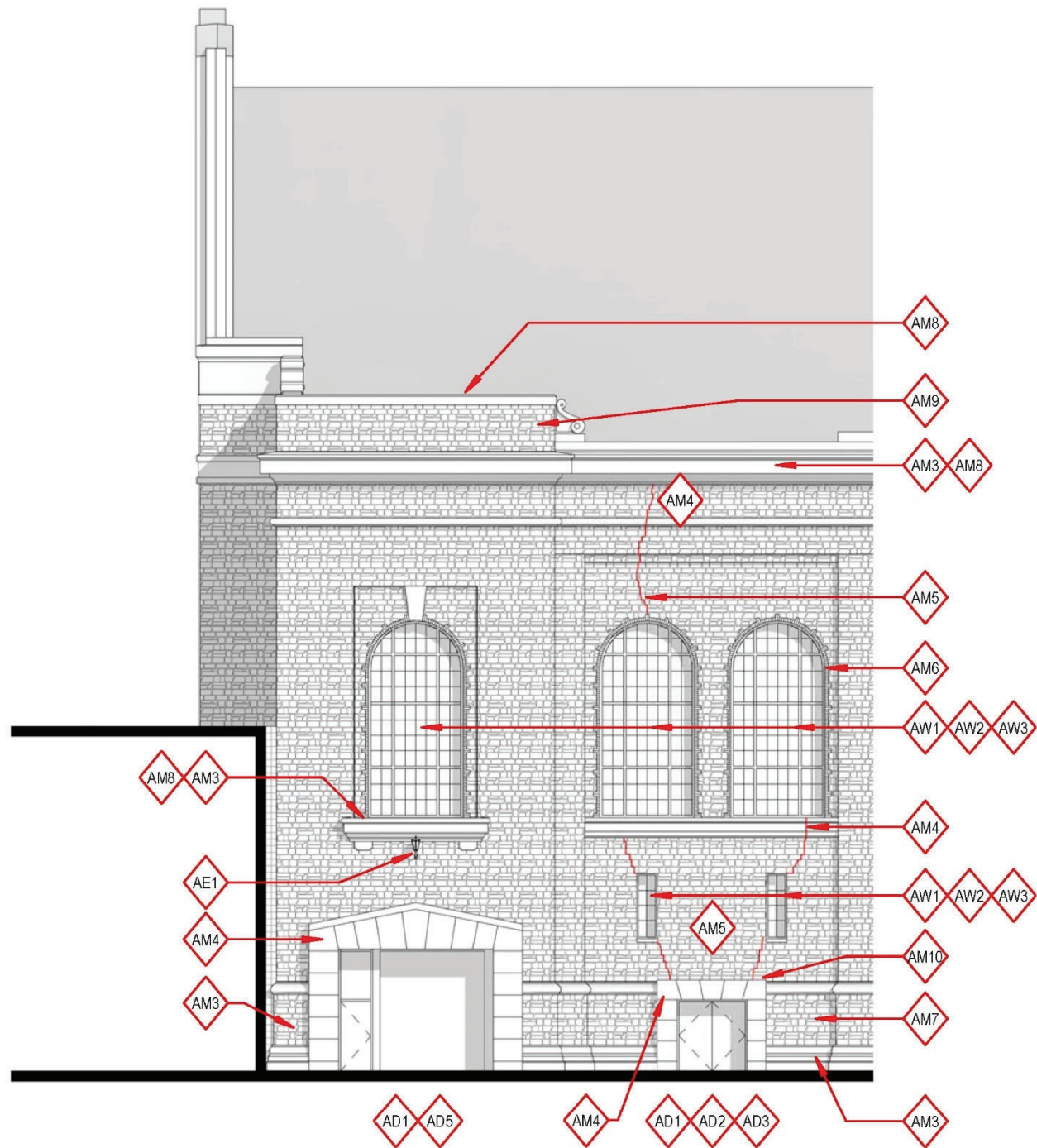


Figure 64: Field House West Elevation
(River Architects May 3, 2018)



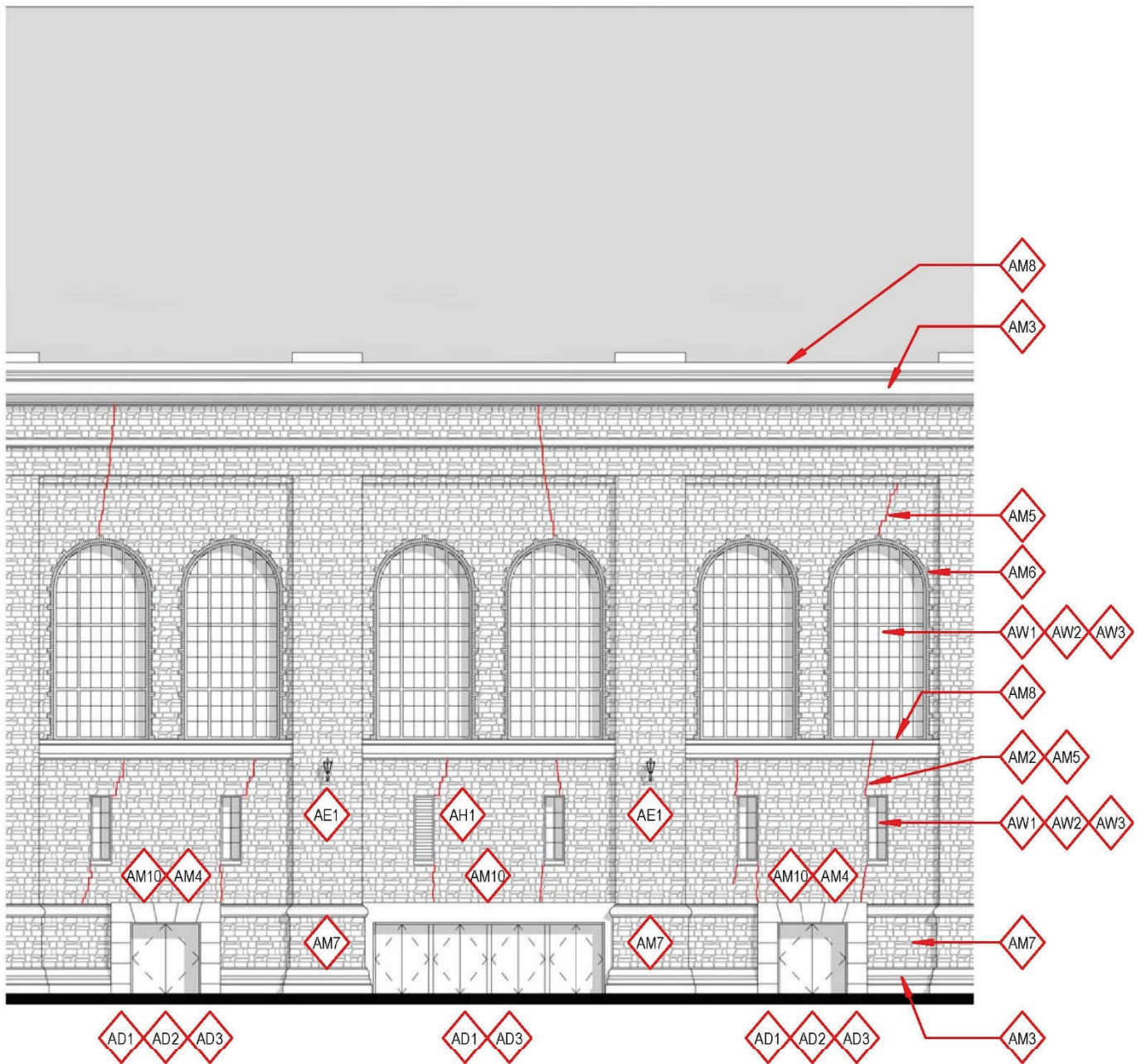
Figure 645: Field House Roof - West Elevation
(JP Cullen May 17, 2018)





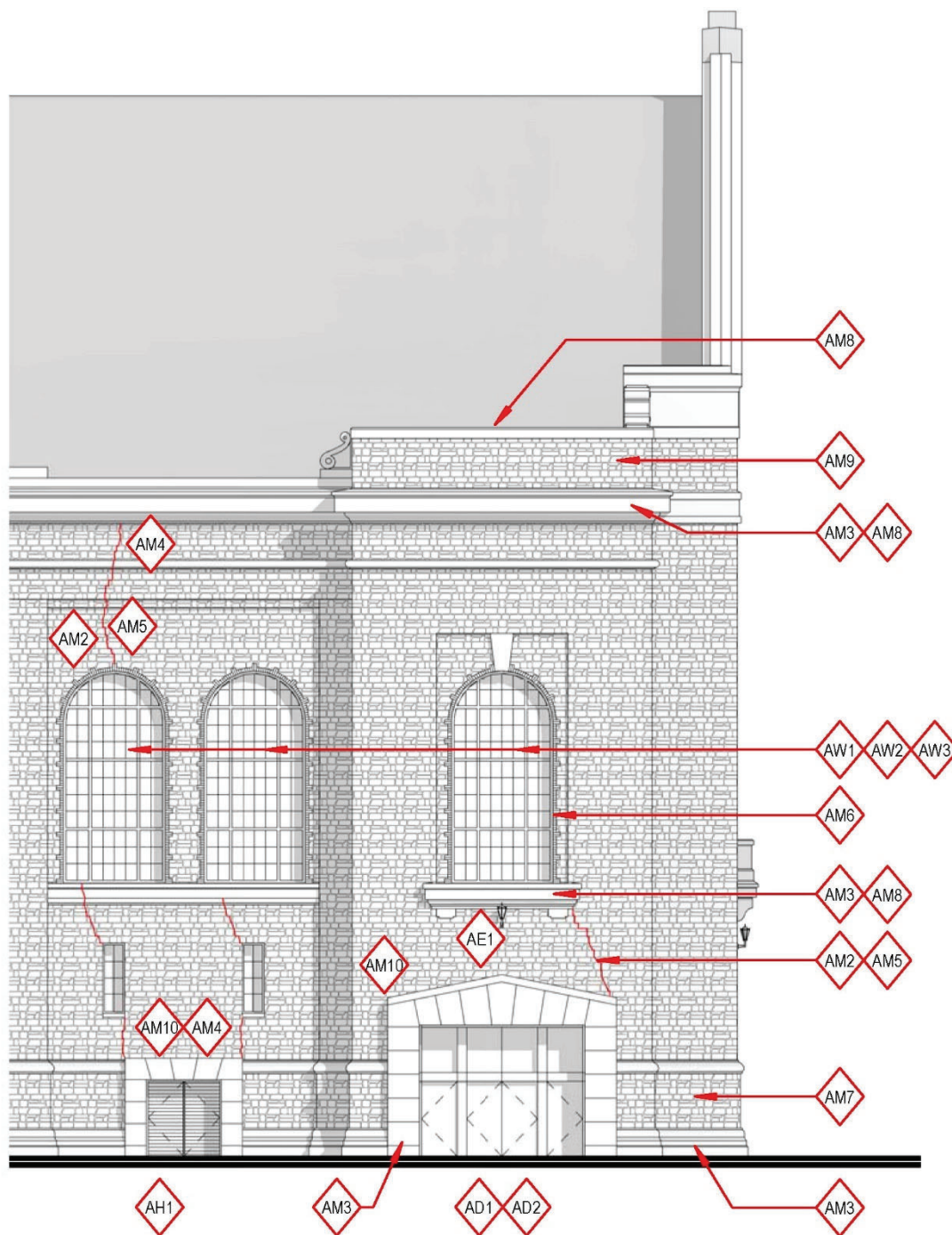
CONDITION ASSESSMENT SUMMARY - WEST ELEVATION - BAY W1

DOORS	ELECTRICAL	MASONRY	WINDOWS
AD1 NON-ORIGINAL HOLLOW METAL DOORS ARE IN GOOD CONDITION	AE1 NON-ORIGINAL LIGHT FIXTURE - ORIGINAL FIXTURE MOUNTING HARDWARE REMAINS	AM3 EVIDENCE OF TERRA COTTA SPALLING	AW1 DETERIORATED FINISH AT METAL WINDOW FRAME
AD2 ORIGINAL WOOD FRAME IN FAIR CONDITION WITH DETERIORATION PRESENT AT GRADE		AM4 FRACTURED TERRA COTTA UNIT(S)	AW2 GLAZING UNITS HAVE BEEN PAINTED ON THE INTERIOR FACE
AD3 SEALANT AT DOOR PERIMETER IN POOR CONDITION		AM5 DIAGONAL STEP CRACKING PRESENT	AW3 SEALANT AT WINDOW PERIMETER IN POOR CONDITION
AD5 NON-ORIGINAL SECTIONAL DOOR IN GOOD CONDITION		AM6 BRICK AT THE PERIMETER OF THE WINDOW APPEARS TO BE IN GOOD CONDITION	
		AM7 MASONRY STAINING PRESENT	
		AM8 DETERIORATION OF SKYWARD FACING JOINTS OBSERVED	
		AM9 DETERIORATED MORTAR JOINTS PRESENT	
		AM10 FLASHING AND SEALANT IN POOR CONDITION	



CONDITION ASSESSMENT SUMMARY - WEST ELEVATION - BAY W2

DOORS	ELECTRICAL	MASONRY	WINDOWS
AD1 NON-ORIGINAL HOLLOW METAL DOORS ARE IN GOOD CONDITION	AE1 NON-ORIGINAL LIGHT FIXTURE - ORIGINAL FIXTURE MOUNTING HARDWARE REMAINS	AM2 FRACTURED RUBBLE STONE UNIT(S)	AW1 DETERIORATED FINISH AT METAL WINDOW FRAME
AD2 ORIGINAL WOOD FRAME IN FAIR CONDITION WITH DETERIORATION PRESENT AT GRADE		AM3 EVIDENCE OF TERRA COTTA SPALLING	AW2 GLAZING UNITS HAVE BEEN PAINTED ON THE INTERIOR FACE
AD3 SEALANT AT DOOR PERIMETER IN POOR CONDITION		AM4 FRACTURED TERRA COTTA UNIT(S)	AW3 SEALANT AT WINDOW PERIMETER IN POOR CONDITION
	HVAC	AM5 DIAGONAL STEP CRACKING PRESENT	
	AH1 NON-ORIGINAL LOUVER AND SEALANT IN GOOD CONDITION	AM6 BRICK AT THE PERIMETER OF THE WINDOW APPEARS TO BE IN GOOD CONDITION	
		AM7 MASONRY STAINING PRESENT	
		AM8 DETERIORATION OF SKYWARD FACING JOINTS OBSERVED	
		AM10 FLASHING AND SEALANT IN POOR CONDITION	



DOORS		ELECTRICAL	MASONRY	WINDOWS
AD1	NON-ORIGINAL HOLLOW METAL DOORS ARE IN GOOD CONDITION	AE1 NON-ORIGINAL LIGHT FIXTURE - ORIGINAL FIXTURE MOUNTING HARDWARE REMAINS	AM2 FRACTURED RUBBLE STONE UNIT(S)	AW1 DETERIORATED FINISH AT METAL WINDOW FRAME
AD2	ORIGINAL WOOD FRAME IN FAIR CONDITION WITH DETERIORATION PRESENT AT GRADE		AM3 EVIDENCE OF TERRA COTTA SPALLING AM4 FRACTURED TERRA COTTA UNIT(S) AM5 DIAGONAL STEP CRACKING PRESENT AM6 BRICK AT THE PERIMETER OF THE WINDOW APPEARS TO BE IN GOOD CONDITION	AW2 GLAZING UNITS HAVE BEEN PAINTED ON THE INTERIOR FACE AW3 SEALANT AT WINDOW PERIMETER IN POOR CONDITION
		HVAC	AM7 MASONRY STAINING PRESENT AM8 DETERIORATION OF SKYWARD FACING JOINTS OBSERVED AM9 DETERIORATED MORTAR JOINTS PRESENT AM10 FLASHING AND SEALANT IN POOR CONDITION	

The photo to the right is a good example of the poor condition of the sealant at the windows. Moisture infiltration is eminent at these areas and must be treated immediately. Sealant used at the terra cotta door surround has also deteriorated and needs to be replaced. There is no indication that these flashings are of thru-wall condition and as a result, moisture infiltration that occurs above at the window sill will migrate down through the wall system to the door opening.



Figure 66: Southeast Entrance Flashing
(JP Cullen May 17, 2018)

Bottom photo is a closer view of the typical conditions at the roof edges and parapets. Open joints in the terra cotta cornice are allowing moisture into the wall system as are the deteriorated mortar joints in the rubble stone masonry. Glaze spalling and fractures can be found in many of the terra cotta copings and cornice units.



Figure 67: West Roof Parapet
(JP Cullen May 17, 2018)



Figure 68: West Window Sill
(JP Cullen May 17, 2018)

Photo to left provides a closer look at the sill condition of the window. Open sealant joints and skyward facing mortar joints in the terra cotta are weak points in the wall system. Photo shows where sealant has been applied to prohibit moisture infiltration.



Figure 69: Northwest Corner of Original Field House
(River Architects July 12, 2018)

Bottom left photo shows the interior space at the northwest corner of the Field House where Camp Randall Stadium connects to the building structure. Original exterior walls remain exposed and exhibit the same issues as the masonry on the exterior.

North Elevation Assessment

The Field House has experienced most of its transformation at the north elevation. The original stadium seating north of the building has been replaced with a larger section and now covers over half of the north facade. Credit needs to be given to the design team of that project as the stadium seating does not connect directly to the Field House and is roughly 6'-0" away, preserving this elevation as much as possible. Window openings have been preserved and remain in their original size and configuration. It should be noted that this work occurred in 2004 following its acceptance onto the National Register of Historic Places in 1998.

Although visually compromised, the majority of the historic fabric of the north facade remains intact. The overall condition of the north elevation is similar to that of others. Signs of neglect have taken their toll on the materials and have thus resulted in deterioration across the entire elevation.

The assessment of the north elevation is summarized in the following narrative and subsequent pages in further detail.

Masonry

The rubble stone in general appears to be in good condition. Staining is evident in a number of areas and is expected from a building of this age. Much like the other elevations, cracks are evident at the top of the large windows. Numerous areas observed of prior tuckpointing efforts that were conducted with a non-matching mortar.

The terra cotta detailing has deteriorated in a number of areas as a result of glaze spalling, likely caused by water infiltration.

Additional information regarding the masonry can be found in Appendix H.



Figure 70: North Elevation
(River Architects July 12, 2018)



Figure 71: North Elevation Cartouche
(JP Cullen May 17, 2018)



Figure 72: North Elevation
(River Architects July 12, 2018)

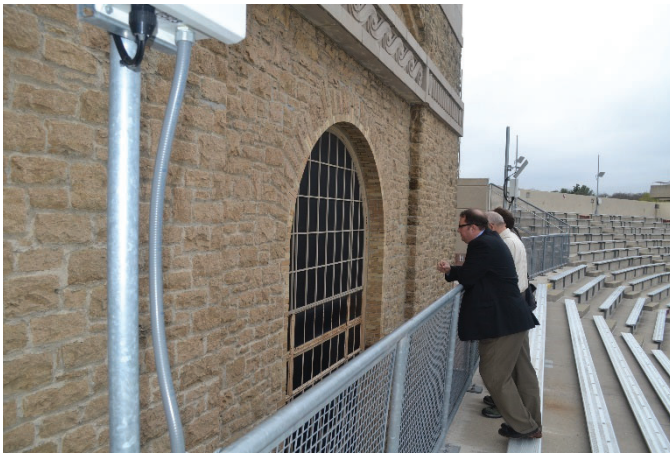


Figure 73: North Elevation
(River Architects May 3, 2018)

Doors

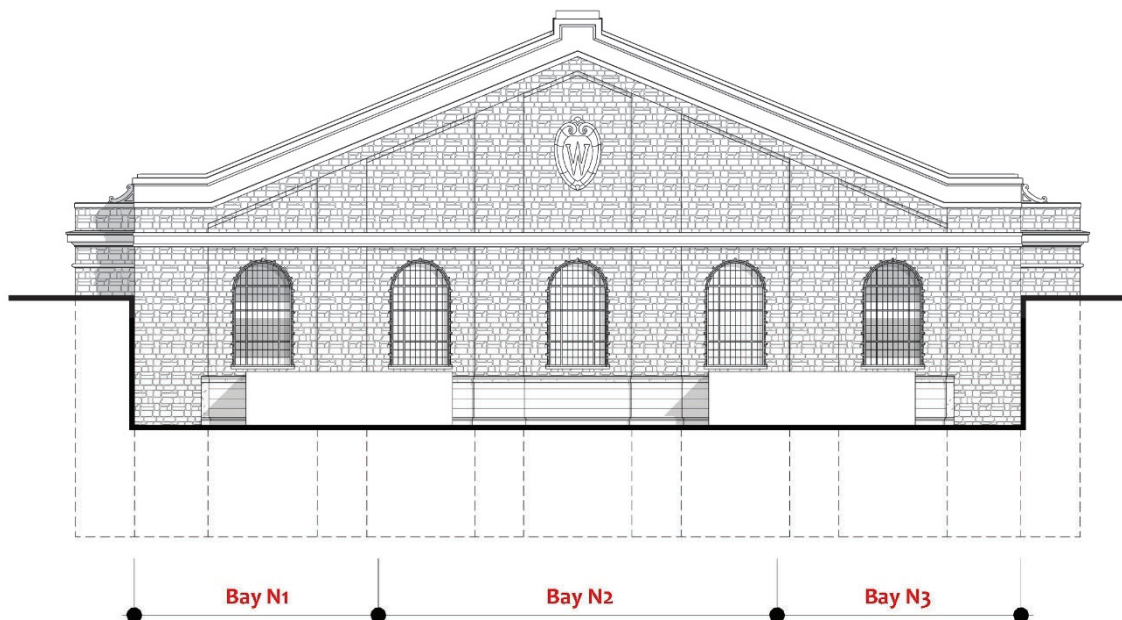
There are currently no doors or entrances at the north elevation. Work done to the stadium seating in 2004 removed the entire original section of bleachers and as a result, all doors were removed.

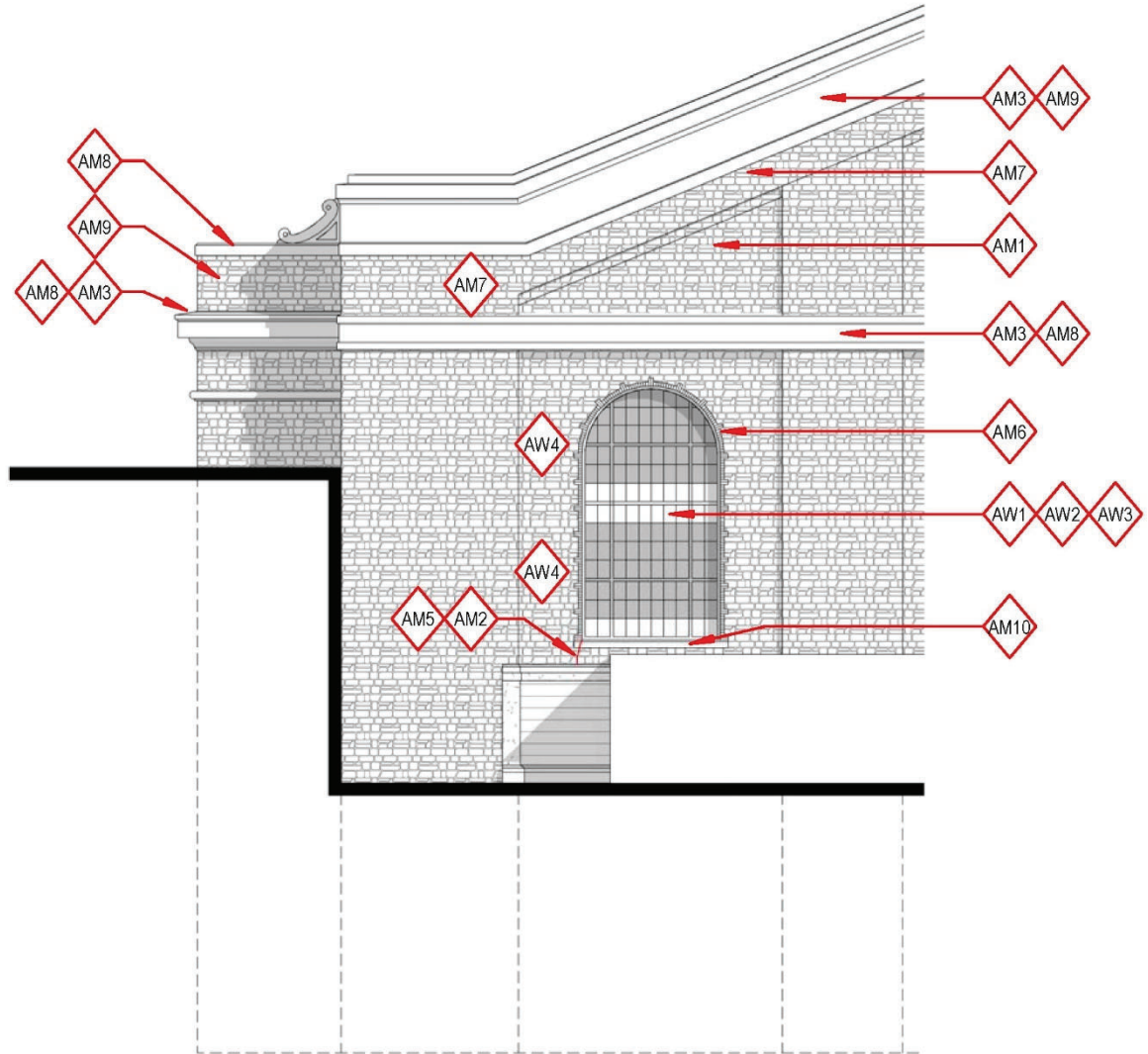
Windows

The windows on the north elevation have been modified significantly as compared to other window units. The east and west windows were modified when loudspeaker systems were installed for the stadium. Upon the removal of these speakers, infill sections were put back into the openings that are inaccurate and do not match the original window profiles. The remaining three window units have retained their size with the operable sections of the windows remaining functional although the original interior hardware has been decommissioned.

Alterations

Of all the areas of the Field House, the historic integrity of the north facade, northwest and northeast corners have been compromised the most over the years due to the increasing demand of Camp Randall Stadium. While some may consider the north facade to be a subordinate elevation, it is viewed by over 80,000 spectators per game during the football season.





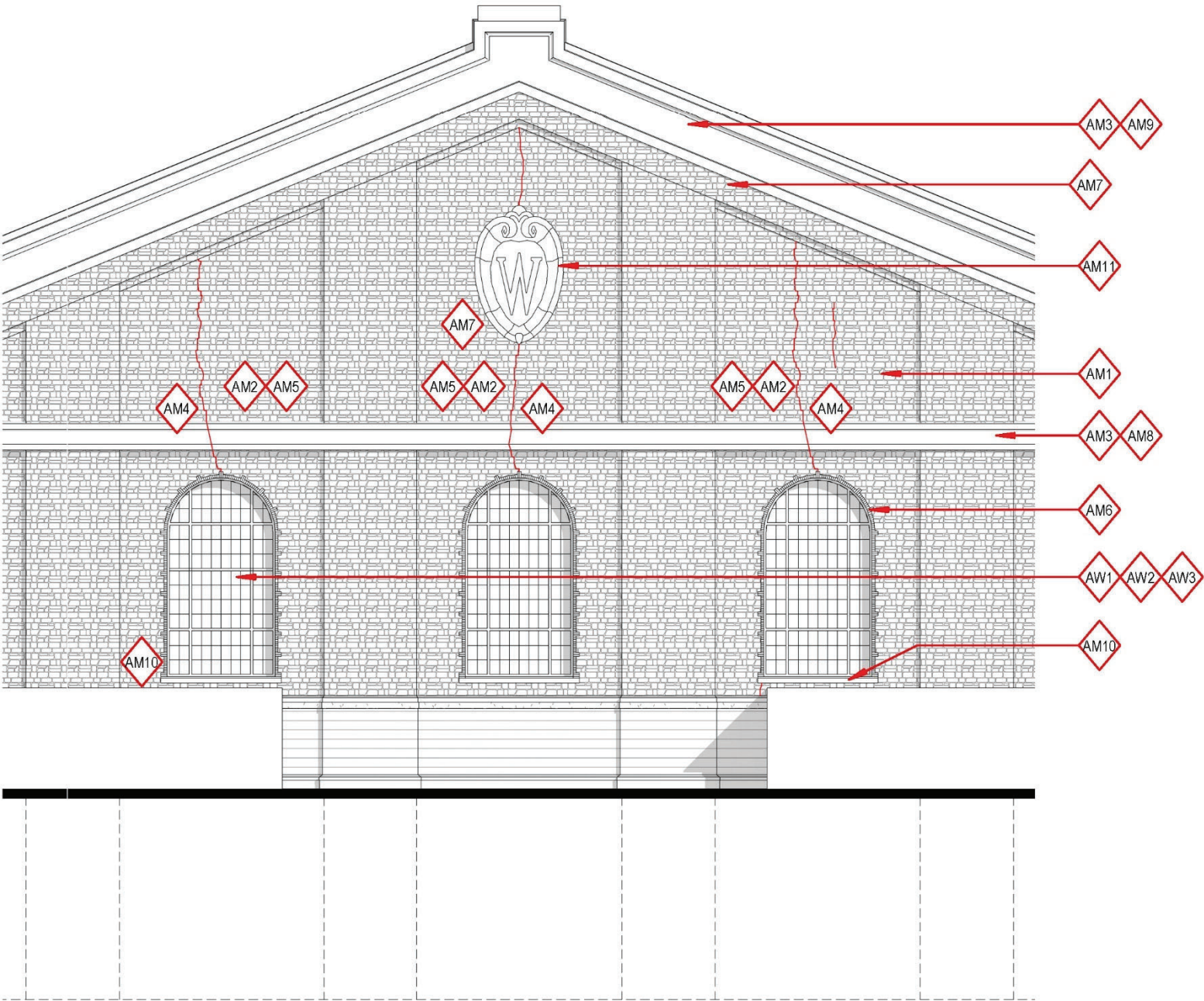
CONDITION ASSESSMENT SUMMARY - NORTH ELEVATION - BAY N1

MASONRY

AM1	EVIDENCE OF PREVIOUS TUCKPOINTING EFFORT WITH NON-MATCHING MORTAR
AM2	FRACTURED RUBBLE STONE UNIT(S)
AM3	EVIDENCE OF TERRA COTTA SPALLING
AM5	DIAGONAL STEP CRACKING PRESENT
AM6	BRICK AT THE PERIMETER OF THE WINDOW APPEARS TO BE IN GOOD CONDITION
AM7	MASONRY STAINING PRESENT
AM8	DETERIORATION OF SKYWARD FACING JOINTS OBSERVED
AM9	DETERIORATED MORTAR JOINTS PRESENT
AM10	FLASHING AND SEALANT IN POOR CONDITION

WINDOWS

AW1	DETERIORATED FINISH AT METAL WINDOW FRAME
AW2	GLAZING UNITS HAVE BEEN PAINTED ON THE INTERIOR FACE
AW3	SEALANT AT WINDOW PERIMETER IN POOR CONDITION
AW4	NON-ORIGINAL WINDOW INFILL



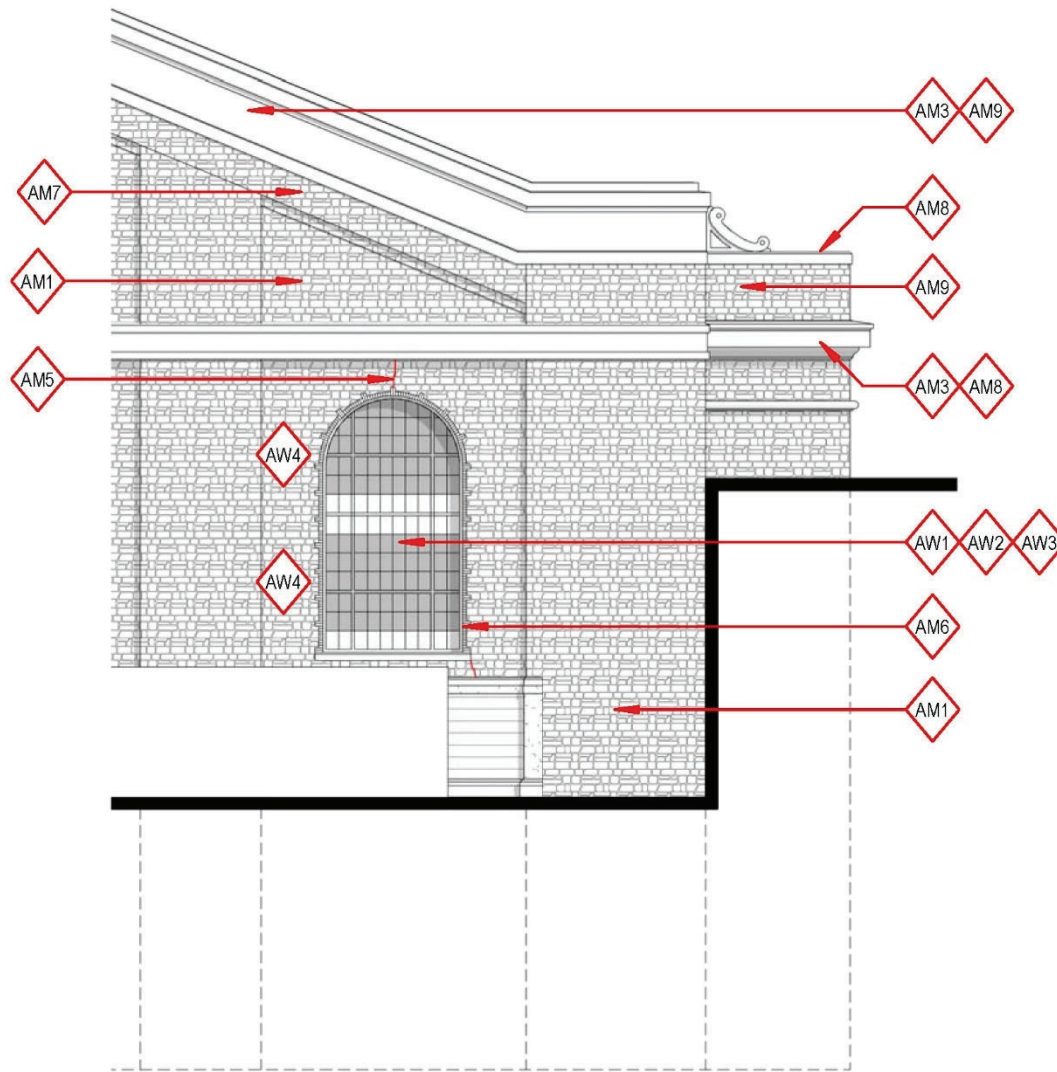
CONDITION ASSESSMENT SUMMARY - NORTH ELEVATION - BAY N2

MASONRY

- AM1 EVIDENCE OF PREVIOUS TUCKPOINTING EFFORT WITH NON-MATCHING MORTAR
- AM2 FRACTURED RUBBLE STONE UNIT(S)
- AM3 EVIDENCE OF TERRA COTTA SPALLING
- AM4 FRACTURED TERRA COTTA UNIT(S)
- AM5 DIAGONAL STEP CRACKING PRESENT
- AM6 BRICK AT THE PERIMETER OF THE WINDOW APPEARS TO BE IN GOOD CONDITION
- AM7 MASONRY STAINING PRESENT
- AM8 DETERIORATION OF SKYWARD FACING JOINTS OBSERVED
- AM9 DETERIORATED MORTAR JOINTS PRESENT
- AM10 FLASHING AND SEALANT IN POOR CONDITION
- AM11 CRACK OBSERVED IN "W" CARTOUCHE

WINDOWS

- AW1 DETERIORATED FINISH AT METAL WINDOW FRAME
- AW2 GLAZING UNITS HAVE BEEN PAINTED ON THE INTERIOR FACE
- AW3 SEALANT AT WINDOW PERIMETER IN POOR CONDITION



CONDITION ASSESSMENT SUMMARY - NORTH ELEVATION - BAY N3

MASONRY

- AM1 EVIDENCE OF PREVIOUS TUCKPOINTING EFFORT WITH NON-MATCHING MORTAR
- AM3 EVIDENCE OF TERRA COTTA SPALLING
- AM5 DIAGONAL STEP CRACKING PRESENT
- AM6 BRICK AT THE PERIMETER OF THE WINDOW APPEARS TO BE IN GOOD CONDITION
- AM7 MASONRY STAINING PRESENT
- AM8 DETERIORATION OF SKYWARD FACING JOINTS OBSERVED
- AM9 DETERIORATED MORTAR JOINTS PRESENT

WINDOWS

- AW1 DETERIORATED FINISH AT METAL WINDOW FRAME
- AW2 GLAZING UNITS HAVE BEEN PAINTED ON THE INTERIOR FACE
- AW3 SEALANT AT WINDOW PERIMETER IN POOR CONDITION
- AW4 NON-ORIGINAL WINDOW INFILL

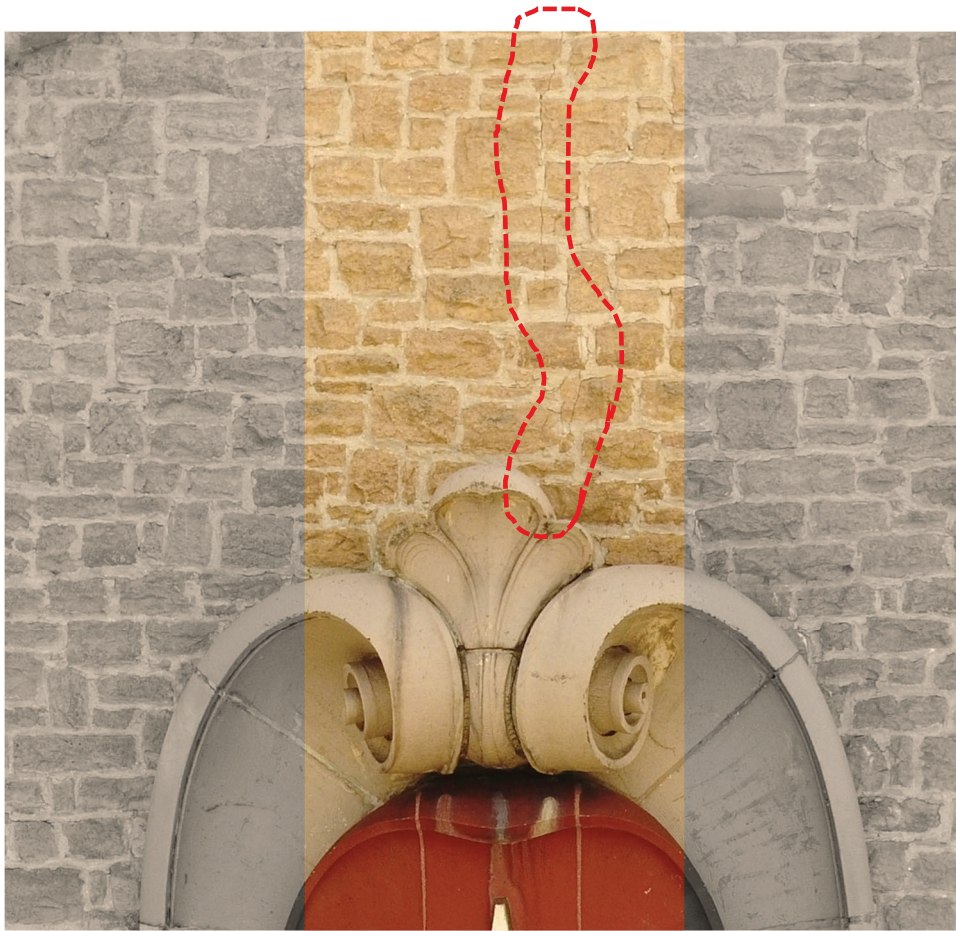


Figure 74: North Elevation Cartouche
(JP Cullen May 17, 2018)

Photo to the left is a good example of the conditions at the Field House. It is only through close observation or high-resolution photography that these hairline cracks can be observed. The fractures in these stone units must be evaluated more closely as it is unknown if the fracture continues through the entire stone unit or if it is only a surface fracture. Fractures above window and door openings likely started as a hairline crack similar to this and continued to deteriorate and separate over the years.



Figure 75: North Elevation Window Infill
(River Architects May 3, 2018)

Bottom left photo shows how the two windows on the north facade were infilled when the stadium loudspeaker system was removed and non-matching framing and glazing were used to fill the opening.

The north wall provides an up-close look at the conditions commonly observed at the Field House. Glaze spalling of the terra cotta trim, deteriorated mortar joints, and fractured rubble stone can all be seen in this photo in the upper right.



Figure 76: North Elevation Window Head
(River Architects May 3, 2018)

The lower right photo is a good example of the typical conditions at the existing windows. Deteriorated paint finishes, open sealant joints, and corrosion of the metal frames. The brick jambs at the windows are commonly found to be in good condition.



Figure 77: North Elevation Window Jamb
(River Architects May 3, 2018)



Figure 78: East Elevation – Southeast Entrance
(River Architects July 12, 2018)



Figure 79: East Elevation
(River Architects July 12, 2018)

East Elevation Assessment

Similar to the south and west elevations, the east side of the Field House is moderately intact from its original design. Overall, the east facade is in good condition, with deterioration similar to that of the other elevations. The assessment of the east elevation is summarized in the following narrative and subsequent pages provide additional detail.

Masonry

In general, the rubble stone is in good condition with isolated areas showing signs of movement and/or water infiltration. Many areas of the east elevation have been tuckpointed using a non-matching mortar. Staining is evident in a number of areas.

Depending on location, the glazed terra cotta trim is in relatively poor condition. Several areas were observed where glaze spalling has arisen and as a result, the terra cotta has deteriorated. Consistent with the other facades, fractures transfer to the terra cotta trim from areas above or below.

Steel lintels placed over the windows appear to be in stable condition.

Additional information regarding the masonry can be found in Appendix H.

Doors

All of the doors along the east elevation have been replaced or modified when compared to the original design. Historic drawings and photos indicate the original doors at the east elevation were half-lite doors and the entrances at the northeast and southeast included glazed transom units above. The northeast entrance has been modified from its original configuration in order to accommodate expansion of the adjacent stadium and Kellner Hall. The central pair of doors were widened between 1974 and 1976 to include eight leaves in an effort to provide additional egress width from the building.

Windows

The window units located in the east facade are original and intact. The window unit at the balcony level remains intact while the Kellner Hall addition blocks this unit from the exterior. Although the finishes have worn away on the exterior, the steel framing is in good condition. Paint applied to the interior surface of the glass was added in an effort to block sunlight and reduce heat gain but the condition of this paint has deteriorated. Operable sections of the windows remain functional although the original interior hardware has been decommissioned.

Alterations

The modifications to the east facade include the following:

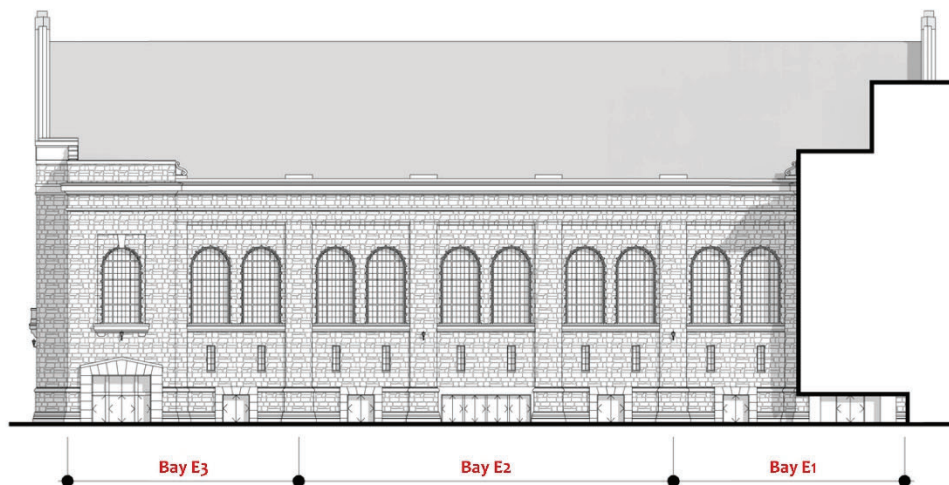
- Doors were added and/or modified.
- Light fixtures replaced and/or removed.
- 2004 Camp Randall Stadium renovation altered the northeast corner.

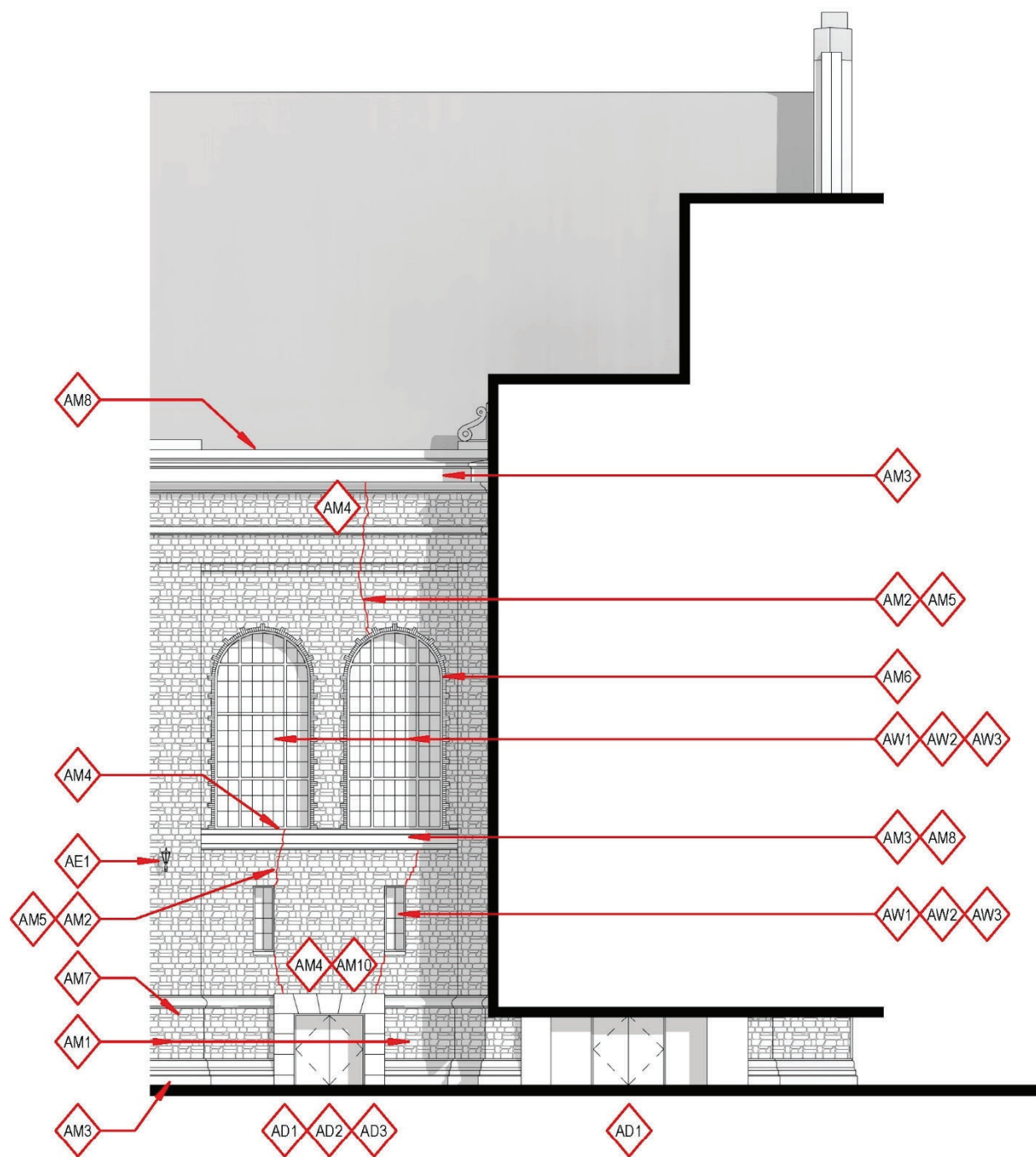


Figure 80: East Elevation
(River Architects July 12, 2018)



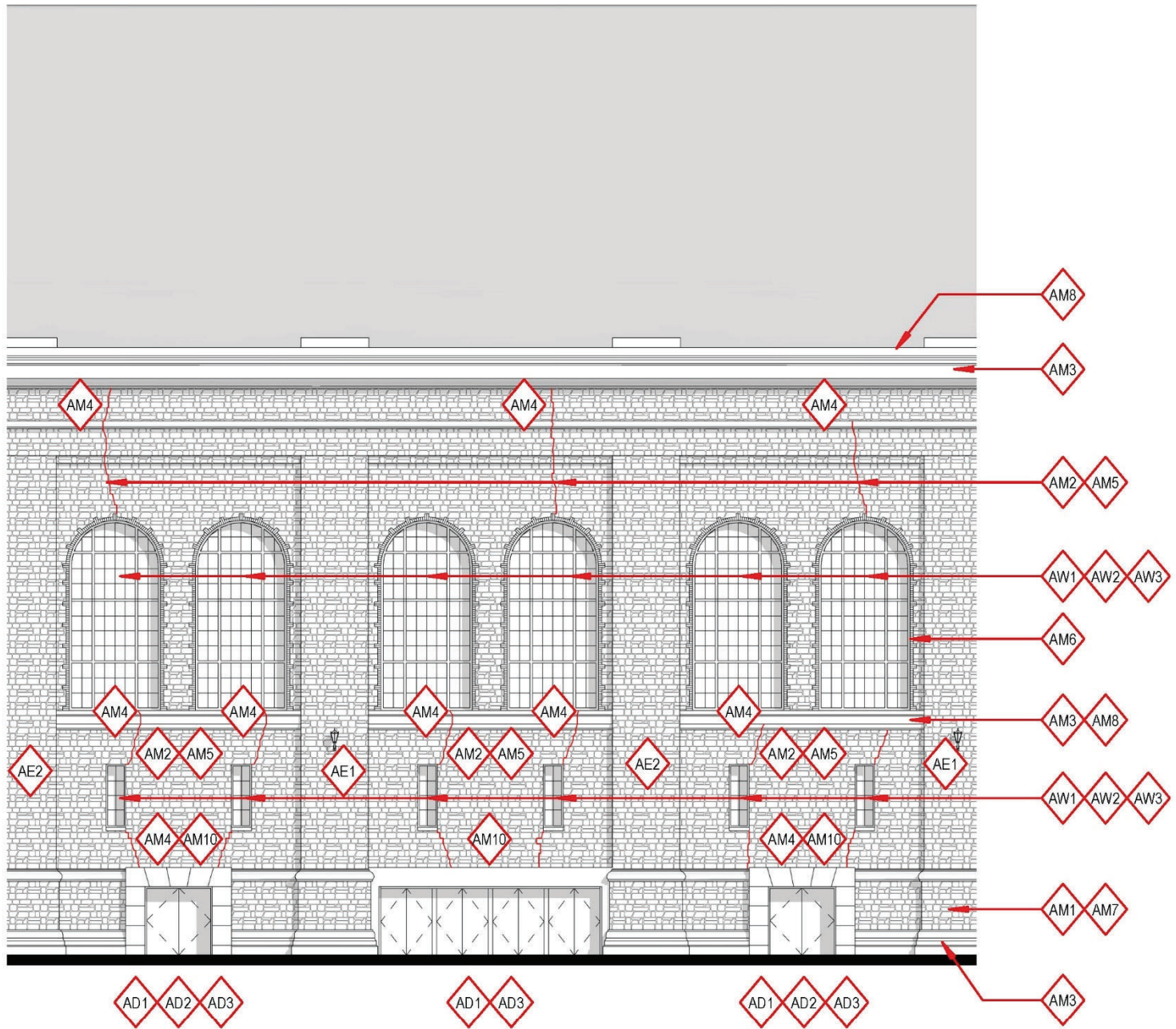
Figure 81: East Elevation Light Fixture
(River Architects July 12, 2018)





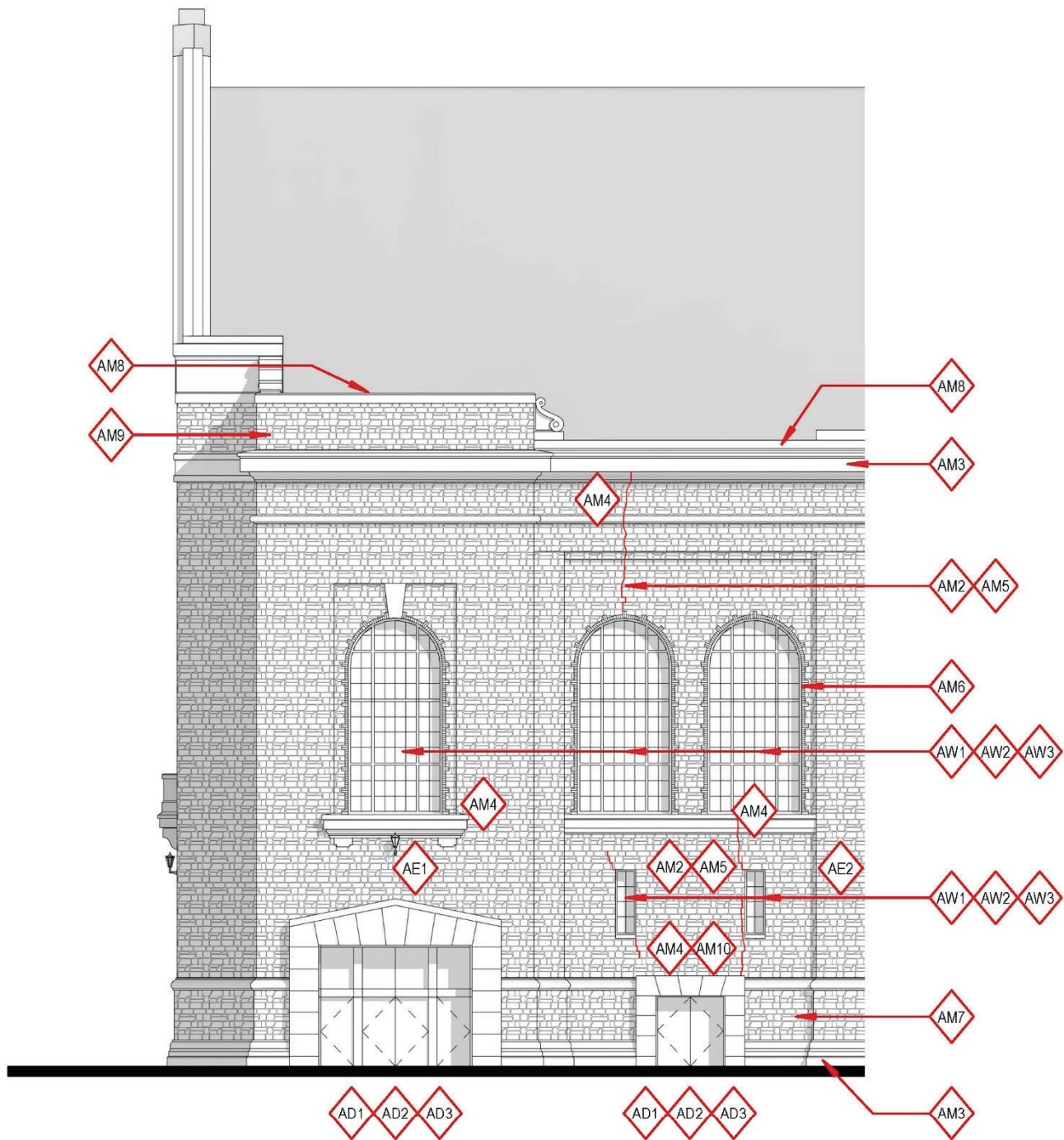
CONDITION ASSESSMENT SUMMARY - EAST ELEVATION - BAY E1

DOORS	ELECTRICAL	MASONRY	WINDOWS
AD1 NON-ORIGINAL HOLLOW METAL DOORS ARE IN GOOD CONDITION	AE1 NON-ORIGINAL LIGHT FIXTURE - ORIGINAL FIXTURE MOUNTING HARDWARE REMAINS	AM1 EVIDENCE OF PREVIOUS TUCKPOINTING EFFORT WITH NON-MATCHING MORTAR	AW1 DETERIORATED FINISH AT METAL WINDOW FRAME
AD2 ORIGINAL WOOD FRAME IN FAIR CONDITION WITH DETERIORATION PRESENT AT GRADE		AM2 FRACTURED RUBBLE STONE UNIT(S)	AW2 GLAZING UNITS HAVE BEEN PAINTED ON THE INTERIOR FACE
AD3 SEALANT AT DOOR PERIMETER IN POOR CONDITION		AM3 EVIDENCE OF TERRA COTTA SPALLING	AW3 SEALANT AT WINDOW PERIMETER IN POOR CONDITION
		AM4 FRACTURED TERRA COTTA UNIT(S)	
		AM5 DIAGONAL STEP CRACKING PRESENT	
		AM6 BRICK AT THE PERIMETER OF THE WINDOW APPEARS TO BE IN GOOD CONDITION	
		AM7 MASONRY STAINING PRESENT	
		AM8 DETERIORATION OF SKYWARD FACING JOINTS OBSERVED	
		AM10 FLASHING AND SEALANT IN POOR CONDITION	



CONDITION ASSESSMENT SUMMARY - EAST ELEVATION - BAY E2

DOORS	ELECTRICAL	MASONRY	WINDOWS
AD1 NON-ORIGINAL HOLLOW METAL DOORS ARE IN GOOD CONDITION	AE1 NON-ORIGINAL LIGHT FIXTURE - ORIGINAL FIXTURE MOUNTING HARDWARE REMAINS	AM1 EVIDENCE OF PREVIOUS TUCKPOINTING EFFORT WITH NON-MATCHING MORTAR	AW1 DETERIORATED FINISH AT METAL WINDOW FRAME
AD2 ORIGINAL WOOD FRAME IN FAIR CONDITION WITH DETERIORATION PRESENT AT GRADE	AE2 LIGHT FIXTURE MISSING - ORIGINAL FIXTURE MOUNTING HARDWARE REMAINS	AM2 FRACTURED RUBBLE STONE UNIT(S)	AW2 GLAZING UNITS HAVE BEEN PAINTED ON THE INTERIOR FACE
AD3 SEALANT AT DOOR PERIMETER IN POOR CONDITION		AM3 EVIDENCE OF TERRA COTTA SPALLING	AW3 SEALANT AT WINDOW PERIMETER IN POOR CONDITION
		AM4 FRACTURED TERRA COTTA UNIT(S)	
		AM5 DIAGONAL STEP CRACKING PRESENT	
		AM6 BRICK AT THE PERIMETER OF THE WINDOW APPEARS TO BE IN GOOD CONDITION	
		AM7 MASONRY STAINING PRESENT	
		AM8 DETERIORATION OF SKYWARD FACING JOINTS OBSERVED	
		AM10 FLASHING AND SEALANT IN POOR CONDITION	



CONDITION ASSESSMENT SUMMARY - EAST ELEVATION - BAY E3

DOORS	ELECTRICAL	MASONRY	WINDOWS
AD1 NON-ORIGINAL HOLLOW METAL DOORS ARE IN GOOD CONDITION	AE1 NON-ORIGINAL LIGHT FIXTURE - ORIGINAL FIXTURE MOUNTING HARDWARE REMAINS	AM2 FRACTURED RUBBLE STONE UNIT(S)	AW1 DETERIORATED FINISH AT METAL WINDOW FRAME
AD2 ORIGINAL WOOD FRAME IN FAIR CONDITION WITH DETERIORATION PRESENT AT GRADE	AE2 LIGHT FIXTURE MISSING - ORIGINAL FIXTURE MOUNTING HARDWARE REMAINS	AM3 EVIDENCE OF TERRA COTTA SPALLING	AW2 GLAZING UNITS HAVE BEEN PAINTED ON THE INTERIOR FACE
AD3 SEALANT AT DOOR PERIMETER IN POOR CONDITION		AM4 FRACTURED TERRA COTTA UNIT(S)	AW3 SEALANT AT WINDOW PERIMETER IN POOR CONDITION
		AM5 DIAGONAL STEP CRACKING PRESENT	
		AM6 BRICK AT THE PERIMETER OF THE WINDOW APPEARS TO BE IN GOOD CONDITION	
		AM7 MASONRY STAINING PRESENT	
		AM8 DETERIORATION OF SKYWARD FACING JOINTS OBSERVED	
		AM9 DETERIORATED MORTAR JOINTS PRESENT	
		AM10 FLASHING AND SEALANT IN POOR CONDITION	

Common to many of the windows located between the ground floor and the first balcony, step cracking can be found at the lintel and continuing upward to the window and sill of the upper level. Step cracking can also be seen continuing downward from the sill to the door surround below. While this crack often times is found in the mortar joint, there are numerous fractures found in the rubble stone as well.



Figure 82: East Elevation Window
(River Architects July 12, 2018)

Photo to the right shows just how deteriorated the terra cotta at the door surrounds can be. Evidence of previous repairs were observed. Flashing and sealant above the terra cotta is in poor condition. Fractures can be seen in the rubble stone from the step cracking above.



Figure 83: East Elevation Door Surround
(River Architects July 12, 2018)



Figure 84: Northeast Roof
(JP Cullen May 17, 2018)



Figure 85: Southwest Roof
(JP Cullen May 17, 2018)



Figure 86: South Roof
(JP Cullen May 17, 2018)

Roof Assessment

Roofing work was last completed in 1980 according to UW-Madison. The roofing project included removal of the original skylight system that was centered over the gymnasium floor. Based on photos of the current conditions, flashings were likely also removed at that time and modified to be a continuous reglet flashing rather than reusing the original thru-wall step flashing.

Visual observations from drone photography were used to compile these observations of the existing roof conditions. UW-Madison has commented on water infiltration occurring over the past few years. While re-roofing is not being considered in any immediate project at the Field House, this report provides a summary of the current conditions. A closer examination of the roof was conducted in October 2018 and is included in Appendix G.

The existing roof consists of nearly 48,000 square feet of surface with roughly 900 lineal feet of masonry parapet copings. Combined with the overall height and scale of the roof, numerous opportunities for water infiltration are possible if not properly maintained.

Conditions at the backside of the masonry parapets is known to be compromised at the brick masonry and flashings. Every surface of the exposed brick should be thoroughly examined in order to locate any additional deterioration, fractures, or any other areas where water infiltration may occur. The downward slope of the roof into these masonry walls during heavy rainfall should be closely monitored to ensure the roof drains are maintaining adequate flow. A secondary drainage system is being considered at this time and would provide additional drainage in the event of drain blockage or failure.

Roof Examination

Tiles

Based on visual inspection from photographs, the existing roof tiles appear to be in good condition. Close examination of the roof resulted in the discovery of a number of broken tiles.

Copings

Coping stones present at the north and south elevations have been capped with a metal flashing that is not indicated on the original drawings. Original drawings indicate the copings and large cornice profile were to be constructed of stone but are actually glazed terra cotta. Copings along the east and west facades consist of glazed terra cotta units and include mortar in the head and bed joints.

Flashings

Original drawings indicate flashings were to be installed at the parapet coping joints. There is no evidence that this was ever done. As a result, these skyward facing joints have lost their integrity over time and have likely failed. Roofing paper placed under the parapet copings as depicted in the original drawings appears to be installed.

Vents

A number of mechanical vents are located on the Field House roof. The three exhaust fans located at the north and south ends of the roof are non-original and are in relatively poor condition. Two exhaust fans located at the north end, west side, are original to the Field House and are also in poor condition.

Drains

There is a total of six roof drains along both the east and west roof edges. Signs of prior leaking are evident at the interior wood roof deck around the areas of these drains. Membrane roofing has been patched at the parapet walls behind the drains.

Skylight Infill

The only remaining evidence of the original skylight is the wood deck infill visible from the interior.



Figure 87: Southeast Roof
(JP Cullen May 17, 2018)



Figure 88: North Roof Parapet
(River Architects May 3, 2018)