



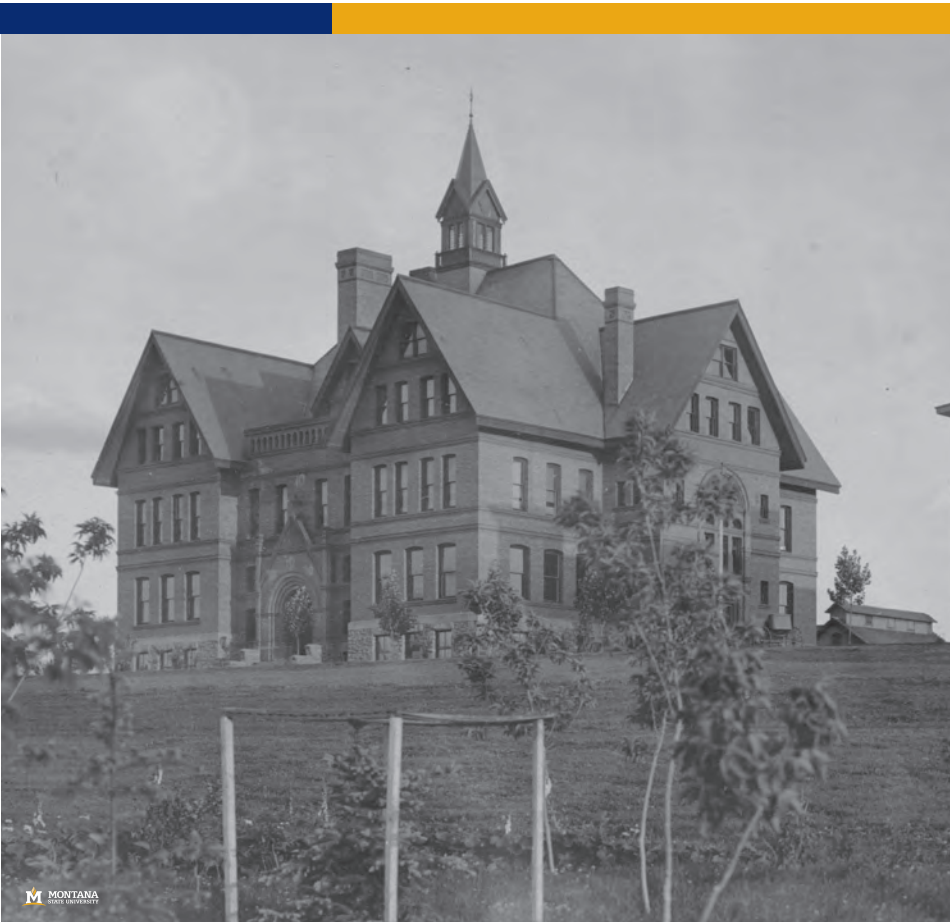
# Biennial Report to the Montana Preservation Review Board

on the Stewardship, Status and Maintenance Needs of  
the Heritage Properties of Montana State University

For the Reporting Cycle 2016-2017

In Compliance with Montana Code Annotated 22-3-424 (4)  
Montana State Antiquities Act

February 23, 2018



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        ~ AJM Johnson Hall (24GA1681).....

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## Executive Summary

### Stewardship Efforts

This report documents efforts to preserve the places that matter and to publicize these efforts. MSU has forty-three established heritage sites (this includes individual buildings and sites with a number of buildings or objects): twenty-five buildings on MSU's flagship campus in Bozeman, five sites, and three objects; four buildings on the Billings main campus; one building in Havre; and five sites located at Research Centers managed by MAES and dispersed throughout the state. MSU's total stewardship efforts during this report period is \$24,380,320 (see Appendix A).

For this cycle, MSU has identified nearly \$134 million specific preservation projects and maintenance needs for our heritage buildings. The highest priority need is still to renovate MSU Bozeman's decommissioned original gymnasium into an academic classroom building that will be known as Romney Hall.

### Future Considerations

During the preparation of this report, we identified a common misperception in the Antiquities Act that SHPO consultation is only required for formally accepted "heritage" properties (those with Smithsonian numbers), whereas consultation is required for projects proposed for all buildings older than fifty years. Per MCA 22-3-424, Duties of State Agencies (2) agencies are to "identify and develop, in consultation with the historic preservation officer, methods and procedures to ensure that the identification and protection of heritage properties and paleontological remains on lands owner by the state are given appropriate consideration in state agency decision making." This applies to all the campuses and to all proposed construction – whether managed by MSU Campus Planning Design & Construction (CPDC) or the State's Architecture & Engineering (A&E) Division of the Department of Administration.

It was also identified during the course of this report preparation that several of MSU's documented policies relating to treatment of historic properties have not been updated. Specifically, MSU's Heritage Building and Site Policy, originated in 2010, was scheduled for review every five years. This should be reviewed and updated. The Board of Regents Policy 1003.5 for the "Designation of heritage property and removal, demolition, or substantial alteration of University System property" does not correspond to the review requirements stated in the Montana State Antiquities Act and should be updated accordingly, in order to prevent conflict.

An MOA (Memorandum of Agreement) among SHPO, State A&E, and MSU would be an ideal vehicle to rectify the above two issues, by formalizing a compliant procedure.

### **Fort Assinniboine National Register Boundary Increase**

The State Historic Preservation Review Board reviewed the Fort Assinniboine National Register boundary increase on January 26, 2018, and forwarded it to the Keeper for listing in the National Register of Historic Places. The increase adds the MSU agriculture experiment buildings as contributing resources to the historic district. As with the Fort Ellis nomination, each of these large areas has only one Smithsonian number, thus the individual resources are not tracked as part of this reporting process. All work proposed for these properties requires SHPO consultation. The preparation of an individual property record form for each individual resource would facilitate the tracking, management, and consultation for each resource. It is conceivable that the MSU history and/or architecture departments could spearhead this effort – giving the students valuable real-life experience at a reduced cost to the university.

### **Use of Obsolete Properties**

MAES includes properties from prior historic forts – Fort Ellis and Fort Assinniboine. The buildings do not always coincide with the changing needs of the university and the improved methods for agricultural and research work. For instance, where some of the prior officers' quarters continue to function as residences, the Post Library at Fort Assinniboine (where the Northern Agriculture Research Center is located) was used as the main office until vacated in June 2011. The building is in good condition, yet unoccupied buildings fall more easily into disrepair. It is possible that MSU could consider transferring some of the Fort Assinniboine properties to the Montana Historical Society (MHS) and the Fort Assinniboine Preservation Association (FAPA), with provisional funding for maintenance.

### **Acknowledgments**

CTA Architects Engineers (CTA) has relied upon the facilities personnel at MSU's various campuses to compile the information required for this report. We are foremost grateful for the prior reporting efforts of Victoria Drummond, who has since retired, and to the management provided by MSU Assistant Planner Candace Mastel. The following individuals have been helpful in providing the data and insights needed to prepare this report:

- ~ Walt Banziger, Director - Campus Planning, Design & Construction (CPDC)
- ~ Mark Baumler, State Historic Preservation Officer – Montana State Historical Society (MSHS)
- ~ John Boughton, National Register Coordinator - MSHS



- ~ Pete Brown, Historic Architecture Specialist - MSHS
- ~ Candace Mastel, Assistant Planner - CPDC
- ~ Jason McGimpsey, Director of Facilities Services – MSU-Billings
- ~ Randy Stephens, University Architect - CPDC
- ~ Dan Stevenson, Associate Vice President – University Services
- ~ Dan Ulmen, Facilities Services Director – MSU-Northern

## Introduction

Montana State University (MSU) submits this report in accordance with the Montana Antiquities Act (MCA 22-3-421 to 22-3-442) requirement for reporting on the stewardship of heritage properties owned by the state. This is the fourth cycle for reports that are due to the preservation review board on the first Tuesday in February of every even-numbered year. This statute outlines the information required in this report.

Montana State University consists of four campuses – in Bozeman, Billings, Great Falls, and Havre - and the Montana Agricultural Experiment Station (MAES) Research Centers in Sidney, Huntley, Corvallis, Moccasin, Havre, Conrad, Kalispell, and Bozeman, as well as the Extension Service outlets throughout the state.

Section 22-3-421 defines heritage property “as any district, site, building, structure, or object located upon or beneath the earth or under water that is significant in American history, architecture, archaeology, or culture.” These are properties that both MSU and the State Historic Preservation Office agree upon. When not in agreement as to the heritage status of the property, it is considered “unresolved.”

## Methodology

This report has been prepared in the past by Victoria Drummond, MSU Associate University Planner. Since Victoria’s retirement in spring 2017, MSU-Bozeman has continued with SHPO consultation and engaged CTA Architects Engineers (CTA) to prepare this biennial report for the 2016-2017 cycle. MSU Campus Planning, Design & Construction (CPDC) staff has shared records with CTA, given them access to the facilities planners at MSU-Billings and MSU-Northern, provided condition information for the agriculture station sites, and given FCI (Facility Condition Inventory) data and project costs.

SHPO graciously provided national register nominations and eligibility paperwork for heritage buildings on all campuses and ag stations. MSU supplemented this with legends for the naming of the ag stations, as well as their on-line information about the history of the stations.

CTA has also coordinated with SHPO, to ascertain project consultations and to identify which forms should be submitted for this report. For example, Property Record Forms are only being submitted for those



properties whose level of integrity has changed since the last reporting cycle.

This report follows the order and content stated in the MCA 22-3-424 (4), yet is prefaced with a response to the board's and SHPO's review of MSU's report from the prior cycle.

This report has been reviewed by senior personnel of MSU's department of Campus Planning, Design & Construction and by MSU President Dr. Waded Cruzado.

## Response to 2016 Report Review

### General

MSU has submitted a Heritage Property Stewardship Report for each reporting cycle, beginning as mandated in 2012. With each reporting cycle, MSU strives to improve their heritage treatment and reporting. The Montana Historical Society provides feedback with each cycle, in a letter to the MSU President. In this section, we address the specific items raised in the May 9, 2016 letter to President Cruzado. These relate specifically to the 2016 report.

### Automatic Notification for Heritage Buildings

At the time of the last reporting cycle, MSU-Bozeman was developing a method of automatic notification upon submission of work orders for heritage building projects. MSU-Bozeman implemented a new asset management system in December 2017 and will continue to work towards an automated notification. In the meantime, the Campus Planning, Design & Construction continues to identify the physical needs by querying and sorting their database, for which there are numerous search tools available. A query for buildings greater than fifty years old facilitates the search for work proposed on potential heritage properties.

### Documentation & Evaluation

The SHPO letter encouraged MSU to develop a strategy to complete the documentation and evaluation of buildings greater than fifty years old. This comment pertains particularly to buildings of the mid-century, of an era and style slowly gaining recognition and respect.

MSU's campuses do contain a number of buildings built more than fifty years ago. A number of them might be heritage buildings; others are insignificant support utilitarian structures. In 2010, a consultant for the state surveyed four mid-century buildings at MSU-Billings and MSU-Northern. In 2013, MSU-Bozeman engaged a historian to survey the prime campus and twenty-three buildings/structures at Fort Ellis. In 2017, historians have prepared an application for a boundary increase and additional documentation for the National Register Historic District of Fort Assiniboine. While this latter nomination was not been reviewed by the Montana Preservation Review Board in 2017,<sup>1</sup> it yields valuable information about forty-nine resources at this fort where the Northern Agricultural Research Center is located.

MSU has been fortunate to have others document the heritage buildings, because funding to conduct these surveys has not been available. MSU has instead focused on maintaining the resources under their care. MSU

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<sup>1</sup> The Montana Preservation Review Board met January 26, 2018 to review the nominated expansion of Fort Assiniboine and agreed to forward it to the Keeper of the National Register for listing in the National Register of Historic Places.

understands that greater knowledge about their buildings will result in more enlightened care and is open to ideas that SHPO might provide as to how to develop a strategy to completion the documentation of the campuses and agriculture stations (MAES).

MSU has added a query to their database to identify buildings over fifty years old. This enables management to take this into account during project planning.

### **National Register Signage**

MSU-Bozeman continues to plan for the installation of National Register signage at the contributing buildings on the Montana State University Historic District. There is no funding for this effort; MSU has focused instead on required maintenance.

### **MSU-Billings Campus's McMullen Hall**

MSU appreciates and shares SHPO's congratulations on having McMullen Hall accepted into the National Register of Historic Places.

### **MSU-Billings Academic Support Center Demolition**

The SHPO letter reminded MSU that formal consultation with SHPO was required for the imminent demolition of the Academic Support Center, to mitigate the anticipated adverse effects. MSU staff indicates that they contacted SHPO about this project in 2013, yet it appears that formal consultation was never initiated. MSU now understands that formal consultation is required. In regards to the Academic Support Center demolition, MSU-Billings' Director of Facilities Services has stated that – prior to demolition in 2018 – all requirements of MSU's Board of Regents policy 1003.5 will be followed. Under this policy, MSU will notify SHPO of the planned action and allow time to comment.

### **SHPO Consultation for MSU-Billings and MSU-Northern**

SHPO recommended that staff overseeing projects at MSU-Billings and MSU-Northern review the consultation protocols for the State Antiquities Act. Correspondence during the preparation of this 2018 report reveals that staff at MSU-Northern was not aware of the need for consultation on properties (> fifty years old) not previously evaluated. This indicates a need for MSU to disseminate the statute requirements to all campuses.

In MSU's 2016 report (page 5), MSU indicated that a Preservation Plan was being prepared that would focus on methodology and processes to “improve the depth and timing of historical preservation projects in consultation with SHPO.” This plan was begun by MSU's Associate University Planner Victoria Drummond, who has since retired from MSU. Consequently the plan is currently in draft form. In the interim, MSU follows the *Heritage Building and Sites Policy* of the University Facilities

Planning Board (UFPB). This policy is available online at [www.montana.edu](http://www.montana.edu).

## Recommendation for Meeting about the Ag Stations

### *SHPO Offering*

SHPO recommended a meeting with the Historic Preservation Review Board and SHPO to discuss the preservation and continued use of the agriculture experimental stations before future conflicts arise. This statement was prompted by the looting at Fort Ellis in 2015.

The crux of this issue is that two of the agriculture stations are on historic forts that also have the potential for archaeological findings – Fort Ellis and Fort Assinniboine – as identified in their respective documentations (Montana Cultural Resources Information System Form from 2000 and National Register Nomination from 2017). With the imminent expansion of the Fort Assinniboine registration – and the concomitant increase from 19 to 44 contributing resources – this meeting would still be beneficial.

### *Fort Ellis Documentation*

After the looting of Fort Ellis in fall 2015 – covered in the prior biennial report - MSU's Department of Sociology and Anthropology applied for a permit (under the State Antiquities Act) to stabilize and restore the items that were disturbed. The goals of the proposed work were stated in the application: "...to stabilize and backfill the portion of Fort Ellis that was subject to unauthorized excavation in 2015...Currently, there are dozens of exposed artifacts and ecofacts, including animal bone, ceramic and glass artifacts, leather fragments, and metal objects, which appear to be consistent with late nineteenth century occupation of the site. In addition, one modern aluminum soda can was found in the pit, and presumably was left behind by those who engaged in the unauthorized excavation."<sup>2</sup> A 25 x 35 meter, 20 cm-depth area was surveyed by the professional crew.

MSU professors Jack Fisher, Nancy Mahoney, and Crystal Alegria began the field work in September 2016; the analysis was completed in October 2017. The MSU staff engaged students in the process, which included analysis of the data and artifacts they recovered from the site. On April 27, 2017, the faculty and students presented their findings as part of the Extreme History lecture series at the Museum of the Rockies.

The presentations and newspaper coverage have helped raise the understanding about the importance of this historic site and the efforts to protect it.

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<sup>2</sup> Nancy Mahoney, Application for Permit under the State Antiquities Act, September 10, 2016, page 2.

# Montana State University Resources

## General

Montana State University is comprised of four main campuses – at Bozeman, Billings, Great Falls College, and Havre (Northern) – and the following research centers, listed here to increase familiarity with them. These centers are referred to as “ag stations” that are part of the College of Agriculture and Montana Agricultural Experiment Station (MAES):

- ~ CARC: Central Ag Research Center (in Moccasin)
- ~ EARC: Eastern Ag Research Center (in Sidney)
- ~ Fort Ellis, approximately 3.5 miles east of Bozeman
- ~ HORT: Bozeman Horticulture Center at Bozeman Agricultural Research and Teaching Farm (BART)
- ~ LUTZ: Lutz Farm (11 miles northeast of Bozeman)
- ~ NARC: Northern Ag Research Center (at Fort Assinniboine in Havre)
- ~ NWARC: Northwestern Ag Research Center (in Kalispell)
- ~ SARC: Southern Ag Research Center (in Huntley)
- ~ VET: Bozeman Veterinary
- ~ WARC: Western Ag Research Center (in Corvallis)
- ~ WTARC: Western Triangle Ag Research Center (in Conrad)

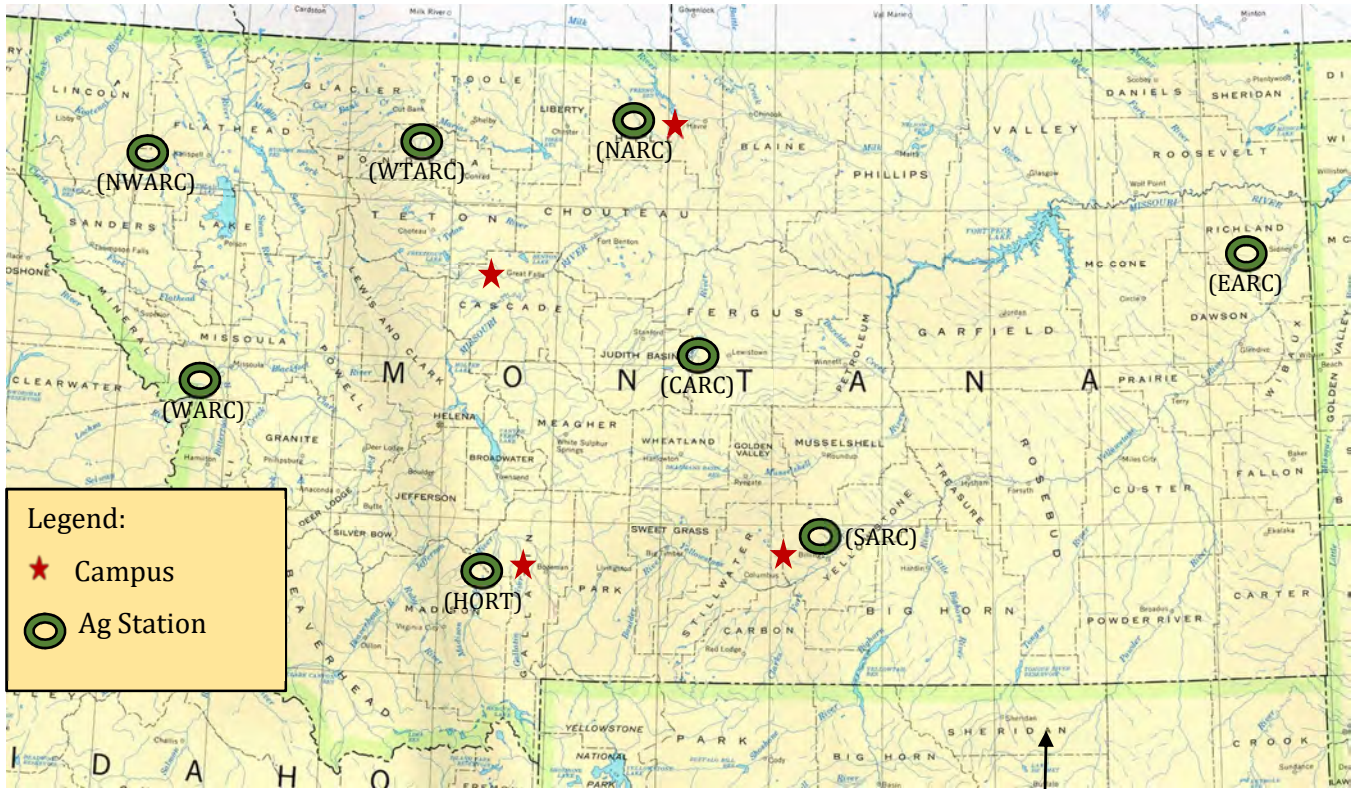


Figure 1: Map of Montana, depicting campus and ag station locations.

North ↑



The research centers are an integral part of the definition of this land grant institution, in fulfilling the agricultural research component explicitly stated in the establishment of (what became) MSU in 1893. Some of the centers are located on old private ranchland, two on old forts, and one (SARC) is an old BLM demonstration farm.

Much of MSU-Bozeman's main campus was listed as a National Register Historic District in 2013, McMullen Hall at MSU-Billings was listed in the National Register in 2015, and Fort Assinniboine was listed as a historic district in 1989. The Montana Historic Preservation Review Board reviewed the expansion (to a total of forty-four contributing resources) of Fort Assinniboine on January 26, 2018.

Table 1 on the following page contains the Smithsonian Trinomial reference number, building or site name, and date of construction of all documented heritage properties on the MSU campuses. This table has been expanded since the last report, to be more comprehensive. It now includes the five sites and three objects that contribute to the MSU Bozeman Campus Historic District.

The green highlighting references the MSU Bozeman historic district; light blue identifies the MAES properties; orange MSU-Northern; and purple represents MSU-Billings. Great Falls College MSU has no heritage properties to report upon, since no construction began at this two-year vocational technical center until 1975. These same properties are included – in the same order – in Appendix A: Condition and Stewardship Spreadsheet.

**TABLE 1: Heritage Properties of MSU Campuses**

<b>Smithsonian Number</b>	<b>Building Name</b>	<b>Construction/Occupancy Date</b>
24GA1893	MSU Historic District	1893-1967
	MSU Campus Cultural Landscape (site)	1893-1967
	Danforth Park Iris Garden (site)	1926; 1952
	Lewis & Clark Field (site)	1915
	Harrington Park Duck Pond (site)	1914
	Romney Green/Romney Oval (site)	1920
	“Untitled” bronze sculpture (object)	1960
	Gatton Field Gate (object)	1930
	Territory-State Dedication Marker (object)	1914
24GA0336	Hapner Hall	1959
24GA1629	Heating Plant	1922
24GA1681	AJM Johnson Hall	1954
24GA1763	Strand Union Building	1939;1957;1967; etc.
24GA1796	Danforth Chapel	1952
24GA1797	Langford Hall	1960
24GA1798	Reid Hall	1959
24GA1799	McCall Hall	1952
24GA1871	Hamilton Hall	1910
24GA1872	Hannon Hall	1955
24GA1873	Hedges Complex	1965-1967
24GA1874	Herrick Hall	1926
24GA1876	Johnstone Center	1955
24GA1877	Lewis Hall	1923
24GA1878	Linfield Hall	1909;1953
24GA1879	Montana Hall	1898
24GA1880	Plew Building	1952
24GA1881	Atkinson Quadrangle	1934
24GA1882	Renne Library	1949;1960
24GA1883	Roberts Hall	1922
24GA1884	Romney Hall (Gymnasium)	1922
24GA1885	Roskie Hall	1967
24GA1887	Taylor Hall	1894
24GA1889	Traphagen Hall	1919
24GA1892	Wool Laboratory	1947
24GA1894	Ft. Ellis MT Ag Experiment Station	1930
24GA0352	Ft. Ellis Military Site - Archaeological	1867-1886
24HL0329	Fort Assiniboine/NARC	1879-1967
24JT0162	Central MT Ag Experiment Stn, Moccasin	1907
24MA0262	Red Bluff Stage Stop (Isaacs/Wann Res.)	1880 (burned 2006)
24HL1382	MSU Northern Gymnasium	1955
24YL2054	McMullen Hall	1935
24YL1860	Apsaruke Hall	1957
24YL1861	P.E. Building (Alterowitz)	1961
24YL1859	Academic Support Center (2018 demolit'n)	1955



## Property Status and Condition

### General

The status and condition of each of the properties with Smithsonian numbers is included in the table in Appendix A: Condition and Stewardship Spreadsheet.

Montana State University maintains a database to track work required and work completed on properties. They have a substantial department of in-house expertise to work on all the buildings of the main campuses. As a result, the buildings are generally in good condition. We have used the condition definitions – for excellent, good, etc. – as defined by SHPO in “Montana State-Owned Heritage Property Reporting Form Instructions and Definitions.” While MSU dedicates a lot of time and energy to routine maintenance of their buildings, few are considered to be in “excellent” condition, since this implies that no maintenance is required.

### MSU-Bozeman

#### *Condition, Integrity & Status*

The integrity, status, and condition of the MSU-Bozeman buildings is similar to those listed in the prior reporting cycle. Two modifications in condition are worth noting:



*Figure 2: Danforth Chapel, January 11, 2018, at MSU-Bozeman. The wood fascias are wet, causing the paint to flake off. This might be indicative of ice melt getting behind the sheet metal drip cap.*

1. Danforth Chapel has been downgraded from excellent to good condition. Paint is flaking from wet wood fascia boards.
2. Romney Hall (Gym) has been downgraded from good to fair condition, The building was well-built, thus is stable; yet its electrical, mechanical, and plumbing systems are outdated and severely deficient; the building is not handicapped accessible; and

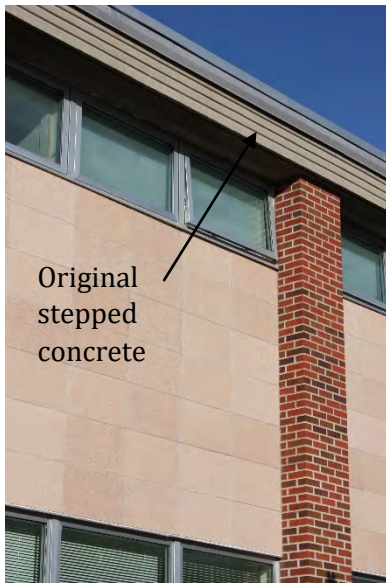


Figure 3: AJM Johnson Hall at MSU-Bozeman, with original parapet detail. Photograph taken October 20, 2011.

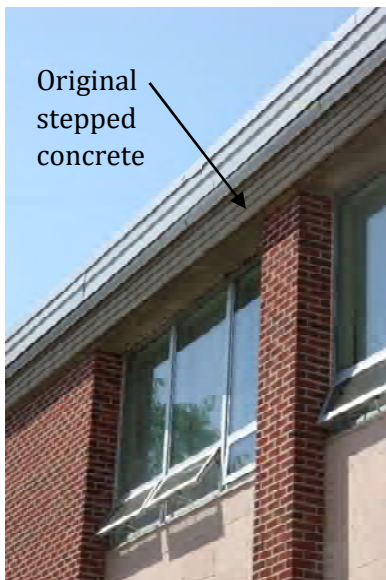


Figure 4: AJM Johnson Hall at MSU-Bozeman, with increased parapet height after roofing project completed in 2017.

several of its spaces (the pool, the racquetballs courts) no longer function for anything besides storage.

The buildings with “excellent” integrity remain the same as during the last reporting cycle:

- ~ Reid Hall
- ~ McCall Hall
- ~ Hannon Hall
- ~ Herrick Hall
- ~ Atkinson Quadrangle
- ~ Traphagen Hall
- ~ Wool Lab

The above buildings have not been modified by additions or the alteration of any of their significant details.

The remainder of the buildings have “good” integrity; most of them have been modified with additions necessitated for programmatic use.

#### *Adverse Effects*

Roofing work performed on AJM Johnson Hall in 2016 resulted in an adverse effect, in the loss of a primary original detail. Constructed in 1954 of a spare Modern Style, the original stepped concrete face of the parapet was a subtle detail that provided an elegant cap to the top of the building. Due to the addition of tapered insulation required by the energy code, the roof edge was built up and increased in height considerably during the reroofing project. Conceptually, the detail was changed from an edge flashing detail into a new parapet on this historic building. As a result, the original stepped profile is overpowered by the new metal parapet, downgrading the building’s integrity from good to fair, with the loss of this character-defining feature.<sup>3</sup>

The architect, the State A&E division, and MSU Campus Planning Construction & Design worked to lessen the design impact by incrementally stepping the face of the new sheet metal flashing.

#### *Nominations*

During this reporting cycle, no additional heritage properties were submitted for nomination, and no heritage properties were lost.

<sup>3</sup> Confirmed during phone conversation with Pete Brown at MT-SHPO, with Lesley Gilmore on January 22, 2018.

## MSU-MAES

### *Condition, Integrity & Status*

#### *Fort Ellis Ag Experiment Station*

The integrity, status, and condition of the agriculture buildings at Fort Ellis is unchanged from the last reporting cycle.

#### *Fort Ellis Military Site*

The integrity, status, and condition of the military buildings at Fort Ellis is unchanged from the last reporting cycle. There have been no other site disturbances since the last reporting cycle, and the disturbed area has been documented. Following the vandalism, the Montana State University Department of Sociology and Anthropology conducted salvage archaeology and created educational and public outreach opportunities for students and the community. With the assistance of MSU Anthropology undergraduates, the site was mapped and photographed, and diagnostic artifacts and faunal remains were systematically collected from the surface in October 2016. Under the direction of Jack Fisher and Nancy Mahoney, several students including Grace Dormanen, Adrian Bird Jr., and Danny Krause are cleaning, processing and analyzing artifacts. They presented their research results to the interested public for The Extreme Historic Project on April 27, 2017.



*Figure 5: Fort Ellis, historic photograph. Image provided by NPS.*

### *Fort Assinniboine*

The integrity and condition of the buildings at the resources at Fort Assinniboine range from good to fair, with the exception of the Field Officers Stable #2 (c.1880) which weathered a 2015 storm that collapsed its roof and the top portions of the masonry walls. This building is now in poor condition. MAES NARC provided \$5,000 to FAPA for maintenance during this cycle (as they had the previous cycle).<sup>4</sup>



*Figure 6: Fort Assinniboine - Field Officers Stable #2. The 2015 storm tore the roof off and the upper portions of the brick walls. Photograph courtesy of the Fort Assinniboine (Boundary Increase and Additional Documentation) nomination, page 107. Photograph taken between October 2015 and June 2016.*

### *Red Bluff Stage Stop*

The integrity, status, and condition of the Red Bluff Stage Stop continues as “failed” since its 2006 loss to fire. A commemorative bronze plaque remains at the site, as reported in 2006.

### *Central Ag Research Center*

The Farmstead House, built in 1908 a year after the ag station was established, is in good condition. This is an upgrade from “fair” in the last reporting cycle. The asphalt shingles on the hipped roof were replaced in 2016. The rest of the buildings remain in fair to good condition. Both large barns (dated 1911 and 1922) were renovated in 2009.

### *Adverse Effects*

There are no known adverse effects to report for MSU-MAES.

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<sup>44</sup> Repeat funding extension confirmed by Candace Mastel at MSU-Bozeman, via email February 6, 2018.



*Nominations*

The Fort Assinniboine Historic District is being expanded.



*Figure 7: Farmstead House (Buildings #4403) at the Central Ag Research Center in Moccasin. Photograph provided by MSU (powerpoint), dated 2011.*

**MSU-Northern**

*Condition, Integrity & Status*

The integrity, status, and condition of the MSU-Northern building – the Northern Gymnasium - is the same as that listed in the prior reporting



*Figure 8: 1955 construction photograph of the MSU-Northern Gymnasium designed by Ozzie Berg.*

cycle. It is ranked “good” for integrity and condition and “satisfactory” for status.

#### *Adverse Effects*

There are no adverse effects to report for MSU-Northern.

### **MSU-Billings**

#### *Condition, Integrity & Status*

The integrity, status, and condition of the MSU-Billings buildings is similar to those listed in the prior reporting cycle. Three of the four buildings are ranked “good” for integrity and condition and “satisfactory” for status.

The Academic Support Center, constructed in 1955, is scheduled for demolition in 2018. It is currently located between buildings that have been built around it. The Facilities Department of MSU-Billings indicated that they contacted Pete Brown of SHPO in 2013 and that they will follow Board of Regents policy 1003.5. This, however, does not constitute formal consultation with SHPO. This type of misunderstanding regarding the requirements of the State Antiquities Act is not uncommon. MSU will work harder to disseminate the need for formal consultation, and will commit to formal consultation prior to project initiation, for both known heritage buildings and those that have attained fifty years of age.

Petro Hall, constructed in 1966, at MSU-Billings reached the fifty-year mark in 2016. Any work planned for this 147,664-square-foot dormitory should be preceded with SHPO consultation. SHPO can then ascertain if it is a heritage property. If so, a Smithsonian number will be assigned and formal consultation will be required for proposed projects. It is our understanding that no exterior changes are planned, but that “Interior



*Figure 9: MSU-Billings - Petro Hall is an 8-story 500-room residence hall constructed in 1966.*

finishes and floor-floor renovations as part of current Auxiliaries master plan” are being completed.<sup>5</sup>

#### *Adverse Effects*

It is anticipated that the demolition of the Academic Support Center will be considered an adverse effect. MSU will coordinate mitigation efforts with SHPO.

#### **MSU-Great Falls**

The oldest building at the MSU-Great Falls campus was constructed in 1975. In 2025, when the building is fifty years old, MSU-Great Falls should consult with SHPO to review its heritage status and any work proposed on the building.



*Figure 10: The sprawling building complex constructed for MSU-Great Falls in 1975. Rendering courtesy of <http://gfcmsu.edu/about/history/index.html>, accessed January 15, 2018.*

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<sup>5</sup> Jason McGimpsey, MSU-Billings, email to Lesley Gilmore (CTA) January 9, 2018.



## Heritage Site Stewardship Efforts

### General

Montana State University is a collection of state-owned buildings on campuses that are similar to towns and cities, in that they operate and maintain infrastructure. In addition to the typical infrastructure of refuse collection and recycling, parking and transportation systems and facilities, performance venues, heating and cooling, sewer and water, irrigation, tree maintenance, snow removal, outdoor public art and memorials, this includes generation and distribution of power. It is all encompassing and requires dedicated and trained design, facilities, planning, and maintenance staff.

MSU's maintenance philosophy is directed at preventing unexpected and catastrophic failure of building systems and components. Therefore, approximately half of the annual maintenance budget is comprised of preventive and corrective scheduled and major maintenance. The balance combines custodial (the day-to-day cleaning) and infrastructure and ground maintenance. University Services' mission is to keep the institution operational, comfortable, safe, and aesthetically appealing.

Stewardship efforts undertaken by the University to improve the status of state-owned heritage properties is demonstrated by the \$24,380,320 expended in managing the historic integrity and condition of the buildings (\$13,081,472 for administration and operations; \$1,130,310 for heritage restoration; \$26,820 for heritage reporting efforts; and \$10,141,718 for routine maintenance). All stewardship efforts increase the value of heritage properties by insuring continued safe and comfortable use of the buildings. This is often a delicate balance between embracing the historic significance of the building and providing sufficient code compliance. MSU has the good fortune of an expanding student population and the concomitant continued need for these public buildings it is entrusted with.

Specific heritage preservation and protection projects in which SHPO consulted totaled \$1,130,310 (see Appendix A). Details on preservation projects for each campus and MAES are provided below.

### MSU – Bozeman

#### *General*

As the flagship campus, MSU Bozeman has experienced sustained growth. Stewardship includes appropriate funding of building operations and administration. MSU Bozeman University Services calculated a multiplier useful in determining an average cost per gross square foot that covers general administration and operations. The multiplier's variables include: Landscape & Grounds, Refuse Services, Utility O&M, Property Insurance and Custodial Services.

The greater the square footage, the greater the administration and operations costs. Consistent with the previous cycle, the three highest amounts for this report period – over one million dollars each – are buildings or complexes with intense utilization by students – often 24 hours a day, seven days a week.

Over this period, MSU continued to respond to maintenance needs dictated by weather and weathering – roof improvements and roofing – and the desire to present MSU in the best light for its 125<sup>th</sup> anniversary.

*Roberts Hall (24GA1883)*

In February 2017, a staff member was struck by falling snow/ice that slid off the north slope of the Roberts Hall roof. MSU Facilities immediately constructed a temporary covered entry to provide safe navigation from the sidewalk into the building. While this might be an isolated instance, dependent upon that particular snowfall and temperature sequence, MSU invested in a more permanent solution to minimize the reoccurrence of snowslides.

MSU hired CTA Architects Engineers Historic Preservation Services who, aided by their envelope specialist and structural engineer Beaudette Consulting Engineers, studied the roofing history, physical conditions, and snow behavior at Roberts Hall, Traphagen Hall, Herrick Hall, and Lewis Hall. All four buildings are of similar vintage (c.1920s) with similarly shaped roofs clad in straight barrel mission clay tiles. All four have had a preponderance of icicles and Roberts and Traphagen Halls' roof configurations were deemed to be potentially conducive to snow slides.



*Figure 11: MSU-Bozeman, Roberts Hall during installation of snow guards. November 21, 2017.*

Based upon CTA's study, MSU immediately proceeded with construction projects at Roberts Hall and Traphagen Hall. The solution – as part of a phased installation – began with installation of snow guards at judicious locations aimed at stopping the snow slides. The snow guard installation at Roberts Hall was completed in mid-December 2017.

*Traphagen Hall (24GA1889)*

Traphagen Hall's snowslide potential was studied as part of the Roberts Hall project (see description above). CTA prepared construction documents for the installation of snow guards along the east and west slopes of Traphagen Hall. This work has yet to be completed, as the contractor was impeded by snow and ice on the roof. It is anticipated to be completed by March 2018.

*Montana Hall (24GA1879)*

In anticipation of MSU's 125<sup>th</sup> anniversary, to be celebrated throughout 2018, MSU improved the public spaces of Montana Hall. The project – designed by CTA Architects Engineers and Beaudette Consulting Engineers– included:

1. Refinishing of the existing quarter-sawn white oak balustrade at the interior west stairway. This work was performed by painting experts on MSU Facilities' staff and took more than 1000 hours.
2. Removal of an inappropriate outside wall handrail at the interior west stairway, and replacement with a quarter-sawn white oak handrail and cleat designed to match the existing handrail and trim.
3. Removal of the metal treads from the oak treads and installation of a period-appropriate carpet at the west interior stairway.
4. Installation of period-appropriate carpet at the north interior stairway, the basement corridor, the first floor corridor, and the second floor corridor.
5. Replacement of the hollow metal doors between the west stairway and the public corridors with fire-rated quarter-sawn white oak doors with period-appropriate hardware and trim to match the original.
6. Replacement of the pipe metal handrails in the north interior stairway with a system of wood handrail on black metal support.
7. Removal of the exterior pipe metal handrails at the north and west (main) entries and replacement with period appropriate bronze handrails with lambs tongue terminations.
8. Replacement of surface-mounted fluorescent lighting in the west and north stairways with period-appropriate pendants.
9. Replacement of modern box type exterior light fixtures at the north and west (main) entries with period-appropriate pendant and sconces, respectively.



As evident by the list above, MSU has returned Montana Hall's public spaces to the appearance one would have experienced within the first twenty years of the building. Exterior historic photographs aided this effort. Unfortunately, interior historic photographs were not available.



Figure 12: MSU-Bozeman, Montana Hall, interior west stairway. October 2017.



Figure 13: MSU-Bozeman, Montana Hall, interior west stairway. January 11, 2018.



Figure 14: MSU-Bozeman, Montana Hall, interior north stair. May 12, 2017.

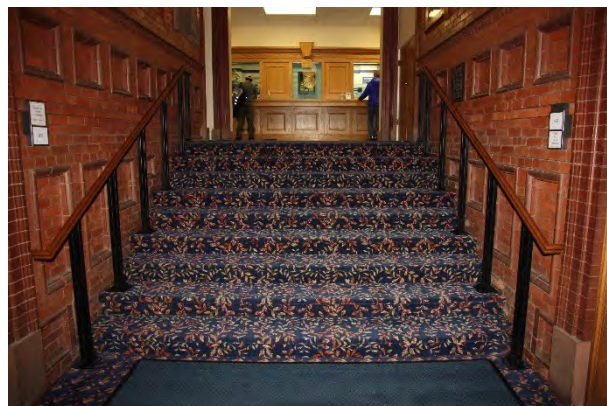


Figure 15: MSU-Bozeman, Montana Hall, interior north stair. January 11, 2018.

*Leigh Lounge – Strand Union Building (24GA1763)*

MSU engaged Kristi Miller of KMD Design, of Billings, to prepare a design for a period treatment to the historic Leigh Lounge in the Strand Union Building. The original drawings by Fred Willson (dated July 1939) included interior elevations and details for this exquisite space. The original stenciling at the coffered ceiling, the original pendant light fixtures, the fireplace mural, and the white oak paneling provided a warm and decorative backdrop for the new carpeting and furniture. This historic room is used for receptions and is famous for its use in the film “A River Runs Through It.”



*Figure 16: MSU-Bozeman, Leigh Lounge of the original portion of Strand Union Building. January 11, 2018.*



*Figure 17: MSU-Bozeman, Herrick Hall, 1933. Photograph provided by MSU, hres-parc-000330.*

*AJM Johnson Hall (24GA1681)*

The flat roof of AJM Johnson Hall was reroofed in 2016. In the effort to make the building more energy efficient, tapered insulation was installed over the existing roof deck. The insulation thickness at the edge of the parapet necessitated raising the height of the parapet by 15 inches. The existing zinc fascia and stepped concrete band was kept intact.

*Herrick Hall (24GA1874)*

MSU-Bozeman has been replacing light fixtures and interior fittings at Herrick Hall with replica and period fixtures. The current project, scheduled for spring 2018, is to replace exterior sconces at the main west entry with replicas of the original sconces (pictured to the right).

**MSU MAES**

*Fort Ellis Ag Experiment Station (24GA1894)*

The 1931 residence (#1), designed by Shanley, Willson & Hugenin, benefited from SHPO consultation before the last reporting cycle. The



planned demolition was cancelled and a historian documented – in a Montana Historic Property Record – the ag experiment buildings on site. The building remains on site and is used for storage until improvements can be made for habitation. A study was completed in 2017 to upgrade the residence for a station manager. The project is pending due to funding.



*Figure 18: Fort Ellis, Ranch House No. 1 (Building# 721), as designed by Shanley, Willson & Hugenin in 1931. Photograph provided by MSU (powerpoint).*



*Figure 19: Fort Assiniboine, Post Library (c.1889), previously used for offices by NARC. The building is now vacant.*

*Fort Assinniboine/NARC (24HL0329)*

Some of MSU's oldest historic properties are located at Fort Assinniboine. Some of the prior fort buildings have been repurposed for ag experiment station use. Others have proved insufficient for modern use and experimentation. For instance, the original post library from 1889 served as the main ag station office until June 2011, when a new metal-sided office and seed laboratory was constructed. Other new buildings include the Upper Calving Barn and the Cattle Research Lab Building. As these newer buildings are constructed and functions relocated into them, the older buildings are vacant. It is presumed that the maintenance will decrease and the current condition range of fair to good will degrade.

Five of the buildings are maintained by the Montana Historical Society and the Fort Assinniboine Preservation Association (FAPA): the three double cavalry stable guard/shops, the Ordinance Storehouse, and Stable #4 Recreation Hall. Only one of the guard/shops (#10) is in good condition. One is in poor condition; one in fair. The Recreation Hall is in fair condition.

As MAES vacates these buildings, a plan for shifting the care of them to the Montana Historical Society and FAPA should be investigated. Such an arrangement could include provision of some maintenance funding.



*Figure 20: MAES Fort Assinniboine, East Guard House (Building #5418), as maintained in good condition by FAPA.*



*Bozeman Area Research & Teaching (BART) Farm*

MSU-Bozeman engaged a historian to document the historic Animal Sciences Farm at 2730 West Garfield Street in Bozeman. The documentation, completed December 31, 2014, determined that the property was not eligible for listing in the National Register of Historic Places. SHPO's records indicate that the ruling is "undetermined," indicating that its status is still unresolved.

The 474-acres property includes the historic Stucky-Girvin Farmstead from the late 19<sup>th</sup> century, and more recent farm structures from 1968 through 2012. The Girvin farmhouse, garage, and barn were reroofed in 2012.



*Figure 21: MAES BART - the Girvin Farmhouse. May 3, 2012.*

## Maintenance Needs

### General

MSU is a dynamic and expanding institution of higher education. The four campuses and MAES operations form one university, but each entity has some autonomy in managing their operational responsibilities. The institution's mission is the same for all campuses: to educate students, create knowledge and art, and serve communities by integrating learning, discovery and engagement. Stewardship of buildings, and by extension preservation of facilities, is included in the University's missions, goals, and strategies.

MSU systematically tracks maintenance needs using MSU's FCI (Facilities Condition Inventory), a desktop computer application for collecting and tracking observable deferred maintenance needs. As a cyclical process, data are available on all state-funded buildings relative to their condition as well as the system and building components that require repair or replacement. Additionally, Campus Planning, Design and Construction (CPDC) maintains a Capital Project List that collects information on major maintenance projects such as roof replacements, building mechanical systems, as well as architectural preservation. All of these data are valuable and useful in preparing lists of priority projects for the Long Range Building Program (LRBP) reviewed by the State Legislature. For buildings that undergo an FCI assessment, their current FCI rating is included in the Condition and Stewardship Spreadsheet (Appendix A).

### MSU-Bozeman

Project estimates for prioritized maintenance and stewardship needs are on the Condition and Stewardship Spreadsheet (Appendix A). A few of these projects are also high priorities in the Long Range Building Program submitted for Legislative review as part of the governor's budget; however, most are tracked in the Capital Projects Database as "needs" and have not undergone any planning. Most of the projects have a code compliance component. None of these buildings are endangered and the status of all are ranked "satisfactory." In descending order of priority, the project descriptions are as follows:

- ~ **Romney Hall (24GA1884)**, known formerly as Romney Gymnasium, requires a whole building renovation to convert the decommissioned gymnasium into an academic center with classrooms and offices. It is the highest priority and the greatest stewardship potential.
- ~ **Reid Hall (24GA1798)** renovate entire building to improve code and life safety compliance that might include renovation of the open staircase. In the tier of the second highest priority.
- ~ **Hamilton Hall (24GA1871)** complete seismic stabilization of the third and fourth floors and upgrade the original dormitory spaces to accommodate classroom and offices; includes staircase

upgrades and roof and gutter repair. In the tier of the second highest priority.

- ~ **Montana Hall (24GA1879)** whole building renovation to improve code and life safety and insure another 100 years of dynamic use of the iconic building. In the tier of the second highest priority.
- ~ **Traphagen Hall (24GA1889)** provide roof moisture mitigation, and restoration of west and east entrances and east staircase for code compliance.
- ~ **Roberts Hall (24GA1883)** repair exterior masonry, replace windows, and renovate west entrance for code compliance and life safety.
- ~ **Culbertson Hall, one wing of Johnstone Center (24GA1876)** replace windows.
- ~ **AJM Johnson (24GA1681)** renovate main entrance, vestibule and open staircase.
- ~ **Lewis Hall (24GA1877)** accessibility upgrades.
- ~ **Linfield Hall (24GA1878)** upgrade north entrance.
- ~ **Plew Building (24GA1880)** replace windows, upgrade entrance for accessibility, and improve ability to use basement space.
- ~ **Taylor Hall (24GA1887)** repair masonry elements and restore main north entrance stairs and canopy.
- ~ **Danforth Chapel (24GA1796)** replace roof and paint fascias and siding.
- ~ **Heating Plant (24GA1629)** restoration of exterior masonry.
- ~ **Hedges Complex (24GA1873)** clean and seal coat exterior brick.
- ~ **Herrick Hall (24GA1874)** restore east entry overhang and replace roof; implement accessibility upgrades and life/safety improvements.
- ~ **McCall Hall (24GA1799)** replace windows.

## MSU MAES

As part of MSU, the MAES operations is unique in that it is not funded by student tuition dollars, mil levees, or special fees. It does receive Montana General Fund and Federal funding (Hatch Act). These funds go towards their principal mission of agricultural and natural resource research and outreach. Their diverse agricultural activities fuel economic sectors, sustain rural communities and create state tax revenues through marketable commodities and jobs.

The biggest challenge facing MAES is the inherited array of buildings and structures that do not accommodate the research and farm equipment of current technologies. MAES provides facilities maintenance and building needs as part of MSU's Long Range Building Program process for appropriations. Each of the Research Centers and farm locations in Bozeman have buildings that may qualify as Montana Heritage buildings,

but require funding for cultural resource evaluation, SHPO Property Record submittals and preservation efforts.

The priority maintenance needs for MAES sites and buildings are:

- ~ **Fort Ellis Military Site (24GA0352)** - security lighting and signage.
- ~ **Fort Assiniboine/NARC (24HL0329)** - projects to continue stabilization efforts and repair buildings and structures damaged by a 2015 storm event.

Documentation also continues to be a priority in managing condition deficiencies and historic preservation efforts. It was the intent of the (now retired) Associate Director for MAES, Barry Jacobsen, to continue documenting MSU MAES buildings and sites each reporting period. To that end, **Fort Ellis MT Experiment Station (24GA1894)** was the first and was completed in December 2013; and the **Animal Sciences Farm (24GA1903)** consisting of the developed core of the Bozeman Area Research & Teaching (BART) Farm on the MSU Bozeman campus operated by MAES, was investigated and a Property Record Form submitted to SHPO in December 2014, although its eligibility remains unresolved. The site includes the historic Towne and Girvin farmsteads of Gallatin Valley.

### MSU-Northern

Operation and Maintenance costs during the reporting period of the 1955 **MSU Northern Gymnasium (24HL1382)** totaled \$155,391. A new roof is the prioritized maintenance project for the building; however the cost has not yet been estimated.

### MSU-Billings

MSU Billings is appropriately maintaining these heritage properties by utilizing them in fulfilling the primary duties of the University. Their maintenance is incorporated into University planning and is funded appropriately. The priority preservation needs for the three buildings identified at MSU Billings are issues of standard building utilization and maintenance.

- ~ Due to the extensive use of the **Physical Education Building (24YL1861)** it ranks highest for preservation needs and stewardship projects include replacing the roof, masonry restoration, replace settling concrete at building entrances, replace the main gym floor and running track surface, and code and life safety improvements.
- ~ **Apsaruke Hall (24YL1860)** ranks second in priority and projects include replace the windows, masonry restoration, ceiling repairs and code and life safety improvements.
- ~ **McMullen Hall (24YL2054)** projects include accessibility improvements to building entrances and code and life safety improvements.

~ **Academic Support Center (24YL1859)** ranks last, due to its impending removal.

### Great Falls College MSU

There are no heritage buildings on this campus.

## Agency Compliance / Heritage Resource Management

### General

MSU has been making a concerted effort to continue the SHPO consultations for projects on all campuses. This is more successful at the Bozeman campus, given the greater concentration of personnel and the presence of a planner dedicated to compliance with the State Antiquities Act. This position was vacated, due to retirement, in spring 2017; MSU-Bozeman is hoping to refill the position in 2018.

In the meantime, the University Architect Randy Stephens and Campus Planning, Design & Construction Director Walt Banziger have engaged in SHPO consultations on the projects proposed for the Bozeman campus. These consultations are described below. Each project had a SHPO finding of “no adverse effect” except where noted otherwise.

### SHPO Consultations

#### *General*

Pete Brown and Mark Baumler of the MT SHPO confirmed the occurrence of the following consultations.<sup>6</sup>

#### *MSU-Bozeman*

##### *Herrick Hall*

MSU has consulted formally with SHPO for replacement of the exterior sconces of Herrick Hall (with replica fixtures to match those visible on historic photographs). This work is described in greater detail in Heritage Site Stewardship Efforts above.

##### *Strand Union Building and Leigh Lounge*

MSU has consulted informally with SHPO for work planned on the original exterior entry of the Strand Union Building and the work implemented in Leigh Lounge.

##### *Montana Hall*

MSU has consulted formally with SHPO for the exterior and interior handrail, and public space upgrades, as described in greater detail in Heritage Site Stewardship Efforts above.

MSU is working on a draft SHPO consultation letter for the second stair/elevator project that is in the planning stages for Montana Hall. This will provide for a second exit from the upper floors and provide accessibility to the upper floors.

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<sup>6</sup> Mark Baumler and Pete Brown, emails to Lesley Gilmore, January 11 & 12, 2018.

*Roberts and Traphagen Halls*

MSU has consulted formally with SHPO on the snow and ice guard installation, which is described in greater detail in Heritage Site Stewardship Efforts above.

*Taylor Hall*

MSU has consulted formally with SHPO for the proposed restoration of the exterior masonry of Taylor Hall. This work is described in greater detail in Maintenance Needs above.

*Brick Breeden Fieldhouse*

MSU has consulted formally with SHPO on replacement of windows.

*1106 S. 6<sup>th</sup> Street*

MSU has consulted formally with SHPO on the addition of an exterior ramp at this historic residence (now administrative offices for University Health Partners).

*Kellogg Center*

SHPO has records of having consulted on the porch at the Kellogg Center at 1501 South 3<sup>rd</sup> Avenue.

*Romney Hall (Gym)*

MSU engaged in informal SHPO review during the planning stages of the adaptive reuse of Romney Hall. This consultation began with conceptual design for using the building for a variety of classroom size and type. SHPO's historic architecture specialist Pete Brown attended several of the design meetings, held at various stages of programming and design. The project has been placed on hold (due to legislative funding constraints). It is hoped that the project will be funded by a future legislature and that formal consultation will begin.

*AJM Johnson Hall*

SHPO was consulted during construction of the 2016 roofing project at AJM Johnson Hall and ruled "no comment" due to the late nature of the consultation.

*MAES – Fort Assiniboine*

*Field Officers Stable #2*

SHPO consulted on the insurance claim for the storm damage to the Field Officers Stable #2.

*MSU-Billings*

MSU-Billings has scheduled demolition of the Academic Support Center (1955) for 2018. Since SHPO has no record of consultations on project at MSU-Billings during the reporting period, it is recommended that MSU-Billings open formal consultation with SHPO on this impending demolition.



*MSU-Northern*

No work was performed on the only heritage building at MSU-Northern - the Gymnasium. SHPO has no records of consultations on projects at MSU-Northern during the reporting period.

## Appendices

A: MSU Heritage Property Condition and Stewardship Spreadsheet

B: List of MSU Buildings 50 Years of Age and Older

C: Campus Facilities Data

D: Individual Heritage Property Forms

~ *AJM Johnson Hall (24GA1681)*

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**Appendix A  
CONDITION AND STEWARDSHIP SPREADSHEET  
MONTANA STATE UNIVERSITY**

Smithsonian Trinomial Number	City in Montana	Building or Site Name	Gross Square Feet	Condition, Integrity and Status						Stewardship Effort and Cost								
				Historic Use	Current Use	NHL or NRHP Status	Property Integrity	Property Status	Property Condition	Property Administration/ Operations (property specific)	Heritage Restoration/ Rehabilitation/ Repair Project Activity (SOI Standards)	Heritage Preservation/ Protection Project Activity	Heritage Research/ Documentation Project Activity	Regular/Routine Maintenance	Prioritized maintenance and stewardship needs	Prioritized maintenance and stewardship ranking (1- Highest to 5- Lowest)	MSU FCI Facilities Condition Index 0-4-Good 5-10 Fair 10+ Poor	
1	24GA0336	Bozeman	Hapner Hall	95,359	Woman's Residence Hall	Woman's Residence Hall	NRHP	Good	Satisfactory	Good	\$588,575.00			\$766.28	\$153,121.00	\$35,000.00	5	7.7
2	24GA1629	Bozeman	Heating Plant	11,113	Heating Plant for Campus	Heating Plant for Campus	NRHP	Good	Satisfactory	Good	\$6,870.00			\$766.28	\$112,175.00	\$35,000.00	5	1
3	24GA1681	Bozeman	AJM Johnson Hall	41,621	Academic Labs and Classrooms	Academic Labs and	NRHP	Fair*	Satisfactory	Good	\$256,893.00			\$766.28	\$672,445.00	\$530,000.00	3	16.8
4	24GA1763	Bozeman	Strand Union Building	187,503	College Student Union	College Student Union	NRHP	Excellent	Improving	Good	\$1,157,306.00	\$129,000.00		\$766.28	\$1,801,060.00	\$19,000,000.00	5	5.9
5	24GA1796	Bozeman	Danforth Chapel	1,560	Chapel	Non-Denominational Sacred	NRHP	Good	Satisfactory	Good*	\$9,629.00			\$766.28	\$1,086.00	\$75,000.00	5	2.1
6	24GA1797	Bozeman	Langford Hall	107,960	Men's Residence Hall	Men's Residence Hall	NRHP	Fair	Satisfactory	Good	\$666,351.00			\$766.28	\$186,554.00		5	5.4
7	24GA1798	Bozeman	Reid Hall	93,262	Academic Classrooms and Offices	Academic Classrooms and	NRHP	Excellent	Satisfactory	Good	\$575,632.00			\$766.28	\$191,124.00	\$33,000,000.00	2	14.1
8	24GA1799	Bozeman	McCall Hall	10,528	Academic Labs and Offices	State Agency Labs and Offices	NRHP	Excellent	Satisfactory	Good	\$64,981.00			\$766.28	\$63,997.00	\$200,000.00	5	13
9	24GA1871	Bozeman	Hamilton Hall	28,013	Woman's Residence Hall	Academic Classrooms and	NRHP	Good	Satisfactory	Good	\$172,902.00	\$3,000.00		\$766.28	\$77,247.00	\$6,500,000.00	2	14.2
10	24GA1872	Bozeman	Hannon Hall	90,748	Woman's Residence Hall	Woman's Residence Hall	NRHP	Excellent	Satisfactory	Good	\$560,115.00			\$766.28	\$1,017,743.00		5	7.5
11	24GA1873	Bozeman	Hedges Complex	335,995	Residence Hall, Dining Hall and Auxiliaries Administration Offices	Residence Hall, Dining Hall and Auxiliaries Administration Offices	NRHP	Fair	Improving	Good	\$2,073,828.00			\$766.28	\$988,230.00	\$780,000.00	5	No. Hedges 10.6 So. Hedges 7.6 Miller Dining 0.3
12	24GA1874	Bozeman	Herrick Hall	41,285	Academic Classrooms, Labs and Offices	Academic Classrooms, Labs	NRHP	Excellent	Satisfactory	Good	\$254,819.00	\$8,500.00		\$766.28	\$85,469.00	\$1,720,000.00	3	10.8
13	24GA1876	Bozeman	Johnstone Center	184,811	Residence Hall and Dining Hall	Residence Hall, Dining Hall,	NRHP	Good	Satisfactory	Good	\$1,140,690.00			\$766.28	\$438,112.00		3	Culbertson 9.1
14	24GA1877	Bozeman	Lewis Hall	44,420	Academic Labs, Classrooms and Offices	Academic Labs, Classrooms and Offices	NRHP	Good	Satisfactory	Good	\$274,169.00			\$766.28	\$334,907.00	\$1,030,000.00	4	12.7
15	24GA1878	Bozeman	Linfield Hall	72,154	Academic Labs, Classrooms and Offices	Academic Labs, Classrooms and Offices	NRHP	Good	Satisfactory	Good	\$445,349.00			\$766.28	\$469,216.00	\$535,000.00	4	9.1
16	24GA1879	Bozeman	Montana Hall	39,594	First Classrooms, Labs, Library and Admin	Executive Admin and Finance	NRHP	Good	Satisfactory	Good	\$244,382.00	\$390,000.00		\$766.28	\$451,653.00	\$28,000,000.00	2	12.6
17	24GA1880	Bozeman	Plew Building	18,086	Physical Plant Administration Offices and Utilitarian Shop	Facilities Services Administration Offices	NRHP	Good	Satisfactory	Good	\$111,630.00			\$766.28	\$202,843.00	\$1,060,000.00	4	1.4
18	24GA1881	Bozeman	Atkinson Quadrangle	42,240	Woman's Residence Hall	Residence Hall	NRHP	Excellent	Satisfactory	Good	\$260,714.00			\$766.28	\$101,517.00		5	21.4
19	24GA1882	Bozeman	Renne Library	158,895	Academic Library	Academic Library	NRHP	Good	Satisfactory	Good	\$980,732.00			\$766.28	\$654,279.00	\$295,000.00	3	8.9
20	24GA1883	Bozeman	Roberts Hall	62,508	Academic Labs, Classrooms and Offices	Academic Labs, Classrooms	NRHP	Good	Satisfactory	Good	\$385,812.00	\$87,277.00		\$766.28	\$222,051.00	\$2,705,000.00	3	3.0
21	24GA1884	Bozeman	Romney Hall (Gymnasium)	54,904	Gymnasium	Academic Classrooms and	NRHP	Good	Satisfactory	Fair*	\$338,878.00	\$127,000.00		\$766.28	\$1,098,372.00	\$32,000,000.00	1	17.0
22	24GA1885	Bozeman	Roskie Hall	92,659	Residence Hall	Residence Hall	NRHP	Fair	Satisfactory	Good	\$571,935.00			\$766.28	\$173,198.00		5	14.6
23	24GA1887	Bozeman	Taylor Hall	9,936	Academic Labs, Classrooms, Offices and	Academic Offices	NRHP	Good	Satisfactory	Good	\$61,327.00	\$23,000.00		\$766.28	\$57,611.00	\$175,000.00	4	26.7
24	24GA1889	Bozeman	Traphagen Hall	37,538	Academic Labs, Classrooms and Offices	Academic Labs, Classrooms	NRHP	Excellent	Satisfactory	Good	\$231,692.00	\$124,850.00		\$766.28	\$169,509.00	\$1,270,000.00	3	15.3
25	24GA1892	Bozeman	Wool Laboratory	7,449	Academic Labs and Offices	Academic Labs and Offices	NRHP	Excellent	Satisfactory	Good	\$45,977.00			\$766.28	\$5,324.00	\$140,000.00	5	19.7
26	24GA1894	Bozeman	Ft. Ellis MT Ag Experiment Station	Unk	Academic Agricultural Research	Academic Agricultural	NRHP	Fair	Improving	Fair				\$766.28		\$110,000.00	4	N/A
27	24GA0352	Bozeman	Ft Ellis Military Site - Archaeological	N/A	Federal Military Fort	Archeological Site	NRHP Eligible	Fair	Unk	Unk		\$24,875.00		\$766.28		\$21,000.00	2	N/A
28	24HL0329	Havre	Fort Assiniboine/ NARC	Unk	Federal Military Fort	Academic Agricultural	NRHP Eligible	Fair	Endangered	Fair		\$145,932.00		\$766.28		\$739,402.00	2	N/A
29	24JT0162	Moccasin	Central MT Agricultural Exp Station MAES, Moccasin	Unk	Farmstead	Academic Agricultural Research	NRHP Eligible	Fair	Mitigated	Good				\$766.28	\$412,875.00		5	N/A
30	24MA0262	Norris	Red Bluff Stage Stop aka Isaacs/Wann Residence	N/A	Stage Stop and Residence	Commemorative Site	NRHP Eligible	Unk	Unk	Failed				\$766.28			5	N/A
31	24HL1382	Havre	MSU Northern Gymnasium	58,028	Armory and Gymnasium	Gymnasium & Athletics	NRHP	Good	Satisfactory	Good	\$358,160.00	\$66,876.00		\$766.28			4	14
32	24YL1859	Billings	Academic Support Center	12,968	Academic Support, Computer Annex	Vacant, locked, not in use	NRHP	Fair	Endangered	Poor	\$80,041.00			\$766.28			5	16.5
33	24YL1860	Billings	Apsaruke Hall	20,254	Men's Residence Hall	Academic Labs, Classrooms	NRHP	Good	Satisfactory	Good	\$125,012.00			\$766.28		\$795,456.00	2	10.3
34	24YL1861	Billings	Physical Education Building	112,997	Physical Education	Physical Education	NRHP	Good	Satisfactory	Good	\$697,440.00			\$766.28		\$3,069,419.00	1	9.7
35	24YL2054	Billings	McMullen Hall	55,026	Academic Classrooms and Offices	Administration Offices and	NRHP	Good	Satisfactory	Good	\$339,631.00			\$766.28		\$360,000.00	4	2.4
											\$13,081,472.00	\$1,130,310.00		\$26,819.80	\$10,141,718.00	\$134,145,277.00		

\*Indicates that status differs from 2016 status.

Heritage Restoration / Rehabilitation / Repair Project Activity	\$1,130,310.00
All Stewardship, Administration, Operations and Routine Maintenance Expenditures TOTAL	\$24,380,319.80

<b>Montana State University Buildings Greater Than or Equal to 50 Years Old</b>				
<b>Smith. Number<sup>1</sup></b>	<b>Building Name</b>	<b>Construction/ Occupancy Date</b>	<b>Building Number</b>	<b>Gross Area (s.f.)</b>
MSU - Bozeman				
24GA1893	MSU Historic District	1893-1967		
	MSU Campus Cultural Landscape (site)	1893-1967		
	Danforth Park Iris Garden (site)	1926; 1952		
	Lewis & Clark Field (site)	1915		
	Harrington Park Duck Pond (site)	1914		
	Romney Green/Romney Oval (site)	1920		
	"Untitled" bronze sculpture (object)	1960		
	Gatton Field Gate (object)	1930		
	Territory-State Dedication Marker (object)	1914		
24GA0336	Hapner Hall	1959	336	95,524
24GA1629	Heating Plant	1922	303	11,616
24GA1681	AJM Johnson Hall	1954	113	41,622
24GA1763	Strand Union Building	1939;1957;1967; etc.	304	191,407
24GA1796	Danforth Chapel	1952	313	1,560
24GA1797	Langford Hall	1960	338	104,301
24GA1798	Reid Hall	1959	115	90,982
24GA1799	McCall Hall	1952	112	10,528
24GA1871	Hamilton Hall	1910	301	28,013
24GA1872	Hannon Hall	1955	331	90,748
24GA1873	Hedges Complex	1965-1967		
24GA1874	Herrick Hall	1926	109	41,286
24GA1876	Johnstone Center	1955	330	136,204
24GA1877	Lewis Hall	1923	103	44,188
24GA1878	Linfield Hall	1909;1953	104	69,938
24GA1879	Montana Hall	1898	101	35,595
24GA1880	Plew Building	1952	316	18,086
24GA1881	Atkinson Quadrangle	1934		
	Quad A Residence Hall	1934	370	6,866
	Quad B Residence Hall	1934	371	6,937
	Quad C Residence Hall	1934	372	7,381
	Quad D Residence Hall	1934	373	7,488
	Quad E Residence Hall	1934	374	7,009
	Quad F Residence Hall	1934	375	6,989
24GA1882	Renne Library	1949;1960	111	158,895
24GA1883	Roberts Library	1922	107	49,717
24GA1884	Romney Hall (Gymnasium)	1922	105	57,560
24GA1885	Roskie Hall	1967	344	92,663

<sup>1</sup> Smithsonian number provided for buildings with individual Property Record Forms, listed in ascending number order. Those buildings without Smithsonian numbers are listed alphabetically.

<b>Montana State University Buildings Greater Than or Equal to 50 Years Old</b>				
<b>Smith. Number<sup>1</sup></b>	<b>Building Name</b>	<b>Construction/ Occupancy Date</b>	<b>Building Number</b>	<b>Gross Area (s.f.)</b>
24GA1887	Taylor Hall	1894	108	9,938
24GA1889	Traphagen Hall	1919	102	37,433
24GA1892	Wool Laboratory	1947	405	7,450
	1605 South 5th	1957	538	1,043
	1102 South 6th	1950	526	4,411
	1106 South 6th	1950	527	1,854
	Agronomy Field House	1934	610	1,468
	Brick Breeden Fieldhouse	1958	114	184,452
	Deer Street	1957	562	6,760
	Facilities Butler Building	1958	319	4,328
	Facilities Conference Room Quonset	1946	328	971
	Facilities Custodial Lamp Storage	1951	349	971
	Facilities Custodial Quonset	1946	326	1,050
	Facilities Custodial Storage Quonset	1946	327	971
	Facilities Electricians' Quonset	1946	322	2,009
	Facilities Equipment Garage	1947	348	4,954
	Facilities Grounds North Storage	1959	420	384
	Facilities Grounds Shop	1960	339	2,406
	Facilities Grounds South Storage	1961	427	500
	Facilities Heat Plant Storage Quonset	1950	312	1,923
	Facilities Laborers' Quonset	1946	324	2,009
	Facilities Motor Pool Garage	1952	314	6,715
	Facilities Paint Booth/Shop	1947	309	2,399
	Facilities Plumbers' Quonset	1946	323	2,009
	Facilities Preventive Maintenance Quonset	1946	325	2,009
	Facilities Refrigeration Quonset	1946	321	2,009
	Facilities Storage Quonset	1951	350	971
	21 Faculty Court	1957	533	1,043
	22 Faculty Court	1957	534	1,043
	23 Faculty Court	1957	535	1,043
	24 Faculty Court	1957	536	1,043
	25 Faculty Court	1957	537	1,043
	Fox Street Houses (23)	1957	564	15,548
	Glacier Court Houses (42)	1957	563	28,392
	Gopher Street Houses (7)	1957	567	4,732
	North Hedges Residence Hall	1965	343	144,080
	South Hedges Residence Hall	1965	340	137,700
	Jefferson Court	1957	560	14,196
	Kellogg Center	1944	630	3,704
	Marsh Laboratory	1961	116	31,018
	Miller Dining Hall	1964	341	46,624
	Poultry Barn - Vacant	1943	631	6,837

<b>Montana State University Buildings Greater Than or Equal to 50 Years Old</b>				
<b>Smith. Number<sup>1</sup></b>	<b>Building Name</b>	<b>Construction/ Occupancy Date</b>	<b>Building Number</b>	<b>Gross Area (s.f.)</b>
	South 15 <sup>th</sup> Street Houses (10)	1957	566	6,760
	SOS Barn	1924	608	10,919
	Swingle Health Center	1957	346	22,213
	West Garfield Street Houses (2)	1957	565	1,352
<b>MSU - Northern</b>				
24HL1382	MSU Northern Gymnasium	1955	11	58,028
	Cowan Hall	1949	10	67,801
	Donaldson Hall - Offline 2	1936	3	32,745
	Hagener Science Center	1966	12	41,971
	Metals Technology	1945	5	11,211
	Pershing Hall	1932	2	14,360
<b>MSU - Billings</b>				
24YL2054	McMullen Hall	1935	1	55,026
24YL1860	Apsaruke Hall	1957	7	20,254
24YL1861	P.E. Building (Alterowitz)	1961	8	112,997
24YL1859	Academic Support Center <sup>2</sup>	1955	6	12,968
	Cisel Hall / Music	1951	4	40,521
	Petro Hall	1966		147,664
	Rimrock Hall	1962	14	91,762
	Science	1947	3	54,311
<b>MSU - Great Falls (none)</b>				
<b>MAES (Agriculture &amp; Experiment Stations)</b>				
24GA1894	Ft. Ellis MT Ag Experiment Station	1930	See individual bldgs. below	
24GA0352	Ft. Ellis Military Site - Archaeological	1867-1886		
24HL0329	Fort Assiniboine/NARC	1879-1967		
24JT0162	Central MT Ag Experiment Station, Moccasin	1907		
24MA0262	Red Bluff Stage Stop (Isaacs/Wann Residence)	1880 (burned 2006)		
24GA1894	Ft. Ellis MT Ag Experiment Station	1930		
24GA0352	Ft. Ellis Military Site - Archaeological	1867-1886		
	CARC Analytical Research Lab	1922	4413	1,200
	CARC Fertilizer Shed	1922	4417	208
	CARC Grain Bins 3-2800 Bu Butler	1965	4424	1,140
	CARC House	1908	4403	1,024
	CARC Implement Shed	1921	4414	3,680
	CARC Seed Lab	1911	4409	1,344
	CARC Storage Shed/Car Garage	1918	4406	480
	CARC Well House	1915	4405	80
	EARC Cold Storage	1951	8402	1,008

<sup>2</sup> The Academic Support Center is scheduled for demolition in 2018.



<b>Montana State University Buildings Greater Than or Equal to 50 Years Old</b>				
<b>Smith. Number<sup>1</sup></b>	<b>Building Name</b>	<b>Construction/ Occupancy Date</b>	<b>Building Number</b>	<b>Gross Area (s.f.)</b>
	EARC Granary/Grinding/Drying Lab	1963	8406	2,560
	EARC Laboratory	1955	8404	1,586
	EARC Machinery Shed	1957	8410	3,200
	EARC Machine Storage Shed	1935	8409	492
	EARC Superintendent Residence	1950	8401	1,037
	Ft. Ellis East Well (Rec. Map No. S02) <sup>3</sup>	c.1950	--	Unk.
	Ft. Ellis Garage (Rec. Map No. B04)	1933	728	Unk.
	Ft. Ellis Hay Shelter – West (Rec. Map No. S14)	1933	735	2,400
	Ft. Ellis Horse Barn/Lab (Rec. Map No. B05)	1931	722	2,232
	Ft. Ellis Loading Ramp (Rec. Map No. S12)	c.1950	--	--
	Ft. Ellis North Well & Water Storage Tank (Rec. Map No. S01)	c.1931	--	50
	Ft. Ellis Oil Shed (Rec. Map No. B09)	1933	740	100
	Ft. Ellis Outhouse (Rec. Map No. B03)	c.1933	--	18
	Ft. Ellis Post-and-Beam Pulley Structure (Rec. Map No. S04)	c.1950	--	Unk.
	Ft. Ellis Pump House (Rec. Map No. S07)	1931	743	75
	Ft. Ellis Ram Test Shed (Rec. Map No. B10)	1933	737	5,220
	Ft. Ellis Residence #1 (Rec. Map No. B01)	1931	721	2,129
	Ft. Ellis Residence #2 (Rec. Map No. B02)	1933	732	1,100
	Ft. Ellis Research Sheep Shed & Shop (Rec. Map No. B11)	1931	730	8,249
	Ft. Ellis Shearing/Working Facility (Rec. Map No. B12)	1933	729	2,988
	Ft. Ellis Implement & Cow Shed/Storage (Rec. Map No. B07)	1933	739	2,592
	Ft. Ellis Storage (Was Granary) (Rec. Map No. B06)	c.1910	723	3,301
	Ft. Ellis Store House (Rec. Map No. B08)	1933	731	120
	GIRVIN Farm Barn	c.1890 /1958	679	1,357
	GIRVIN Farm Granary	c.1890 /1958	681	614
	GIRVIN Farm Residence	c.1890 / 1958	676	2,399
	GIRVIN Residence 2-Car Garage	c.1920s/1958	675	857
	HARTMANN Log Bunk House	1929	2601	306
	HARTMANN Main House	1904	2605	2,400
	HARTMANN Ranch Frame Barn	1914	2602	3,200
	HARTMANN Ranch Pump	1965	2603	32
	HARTMANN Ranch Shop Shed	1927	2604	14,000
	Horticulture Farm Wood Office	1954	691	205

<sup>3</sup> "Rec." indicates Montana Historic Property Record prepared by Jessie Nunn, dated December 1, 2013.

<b>Montana State University Buildings Greater Than or Equal to 50 Years Old</b>				
<b>Smith. Number<sup>1</sup></b>	<b>Building Name</b>	<b>Construction/ Occupancy Date</b>	<b>Building Number</b>	<b>Gross Area (s.f.)</b>
	Horticulture Pump House	1954	624	152
	LUTZ Farm New Garage	1951	813	545
	NARC Bull Barn <sup>4</sup>	1904	5408	7,965
	NARC Center Guard House (Dbl. Calvary Stable Guard/Shop – Res. 11)	1905 <sup>5</sup>	5419	1,749
	NARC N. Duplex Apt 7 & 8 (Duplex Officers Qtrs – Res. 2) <sup>6</sup>	1879	5402	5,810
	NARC East Guard House (Dbl. Calvary Stable Guard/Shop – Res. 10)	1905	5418	1,749
	NARC Equipment Storage	1886	5417	1,000
	NARC Garage #1 (Officers Amusement Hall – Res. 6)	1886	5409	3,530
	NARC Garage #2 (2-Car)	1927	5422	420
	NARC Guard House (Guard House –Res. 5)	1905	5405	7,819
	NARC Living Quarters Apt. 9 Stn. Mgr. (Non- commissioned Officers Qtrs-Res.3)	1905	5401	2,052
	NARC Lower Calving Shed	1927	5423	576
	NARC Machine Shed & Old Shop	1937	5411	6,040
	NARC Office Bldg. (Post Library – Res. 4)	1889	5406	2,834
	NARC Pump House	1927	5413	312
	NARC Rec Building (Stable #4 Rec Hall – Res. 9)	1906	5414	7,922
	NARC Research Steer Barn	1927	5410	8,976
	NARC Six-Unit Apt-Staff Housing (Bachelor Officer Qtrs – Res. 1)	1880	5403	18,525
	NARC Soils Lab (Post Exchange – Res. 7)	1879	5404	5,214
	NARC Valve House	1927	5424	90
	NARC Warehouse (Ordinance House–Res. 8)	1884	5415	1,500
	NARC West Guard House (Dbl. Calvary Stable Guard/Shop – Res. 12)	1905	5420	1,749
	NWARC Crops Res/Office/Wet Lab	1957	6408	2,560
	NWARC Foreman's Residence	1925	6401	1,600
	NWARC Garage/Two Wet Labs	1963	6410	1,728
	NWARC Misc. Storage	1955	6413	100

<sup>4</sup> NARC includes historic Fort Assinniboine.

<sup>5</sup> Dates have been corrected to reflect the dates provided in the Fort Assinniboine (Boundary Increase and Additional Documentation) National Register Form, dated November 2017. The revised dates are the result of in-depth research.

<sup>6</sup> "Res." Indicates resource number from the Fort Assinniboine (Boundary Increase and Additional Documentation) National Register Form, dated November 2017. The list above includes only those resources previously included on this list; yet the building names have been supplemented to include their historic names. Upon acceptance of the National Register Form for inclusion in the National Register of Historic Places, the remaining resources should be included above. It is anticipated that this will occur in the next reporting cycle.

<b>Montana State University Buildings Greater Than or Equal to 50 Years Old</b>				
<b>Smith. Number<sup>1</sup></b>	<b>Building Name</b>	<b>Construction/ Occupancy Date</b>	<b>Building Number</b>	<b>Gross Area (s.f.)</b>
	NWARC Residence	1925	6402	1,000
	NWARC Shop	1963	6411	2,304
	Red Bluff Bottom Hopper Bin	1928	2419	240
	Red Bluff Cow Barn (Stone)	1880	2426	1,000
	Red Bluff Lumber Shed	1961	2423	656
	Red Bluff Sheep Office	1930	2438	600
	SARC Barn Ctr. Condemned Section	1916	3421	4,493
	SARC Lg. Bushel Bins (3)	1950	3456	11,400
	SARC Sm. bushel bins (3)	1950	3455	1,050
	SARC Cereal/Crops Lab	1928	3433	760
	SARC Drying Rn East Barn Complex	1916	3467	823
	SARC Feed Mill	1950	3457	240
	SARC Homesteader Hall Leased	1928	3411	3,200
	SARC Horse Barn/Machine Shed	1959	3438	3,737
	SARC Irrigation Pump House	1951	3420	48
	SARC Machine Shed #1	1916	3419	2,852
	SARC Machine Shed #2	1920	3464	4,500
	SARC Machine Shed #3	1948	3425	5,040
	SARC Pump House (Domestic)	1928	3409	189
	SARC Residence #3	1917	3403	1,784
	SARC Residence #4	1917	3404	2,182
	SARC East Residence Garage	1920	3423	672
	SARC West Residence Garage	1917	3424	620
	SARC Shop	1920	3415	2,200
	SARC Southern Annex Barn Complex	1916	3465	4,125
	SARC Truck Scale House & Scale	1960	3444	160
	SARC Western Annex Barn Complex	1916	3466	1,706
	VET Clinic Building	1960	426	2,527
	Veterinary Equipment Shed	1960	421	3,600
	Veterinary Loafing Shed	1960	422	3,600
	VET Quonset Livestock Shelter	1950	409	1,004
	VET Quonset Livestock Shelter	1950	410	1,970
	VET Shop Quonset	1953	413	960
	VET Storage Building	1941	627	1,000
	WARC Bio Laboratory	1910	7401	1,319
	WARC Garden Tool House	1925	7404	660
	WARC Grind Rm/ Greenhouse	1926	7405	1,383
	WARC Horticulture & Soils Lab	1956	7406	2,200
	WARC Main Office	1911	7403	2,304
	WARC Tractor Shed & Shop	1935	7409	2,520
	WARC Well House	1950	7412	120
	WARC West Residence	1921	7402	1,640

<b>Montana State University Buildings Greater Than or Equal to 50 Years Old</b>				
<b>Smith. Number<sup>1</sup></b>	<b>Building Name</b>	<b>Construction/ Occupancy Date</b>	<b>Building Number</b>	<b>Gross Area (s.f.)</b>
	WTARC – none (established 1977; housed in a “steel government building”)			
	<i>Miscellaneous Buildings</i>			
	Cold Storage Quonset	1949	612	700
	Poultry Barn -Vacant	1943	631	6,837
	Swine Center Shed	1958	683	255

## Appendix C

### Campus Facilities Data

Facilities' Area and Demographics of MSU campuses and MAES resources: Montana Board of Regents 2017 Data Reports of campus demographics; and data from individual campuses for facilities' areas. Note: MSU Bozeman data includes faculty, staff and students associated with MAES and Extension Services; however, the MAES Research Centers through the state are not included in the area calculation.

<i>Fall 2017</i>	<i>Students<sup>7</sup></i>	<i>Faculty and Staff</i>	<i>Campus Gross Area (S.F.)</i>
MSU Bozeman	16,703	4,082 <sup>8</sup>	4,517,209
MSU Billings	4,401	480 <sup>9</sup>	1,300,000 <sup>10</sup>
MSU Northern	1,154	177 <sup>11</sup>	595,745 <sup>12</sup>
Great Falls College MSU	1,691	230	206,514
MAES	Included in MSU Bozeman	Included in MSU Bozeman	Unknown
TOTAL	23,949	4,656	6,499,468

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<sup>7</sup> Headcounts provided by MUS Census Headcount online at [www.mus.edu/data/dashboards/census.asp](http://www.mus.edu/data/dashboards/census.asp), accessed January 24, 2018.

<sup>8</sup> This number includes 749 graduate assistants.

<sup>9</sup> Jason McGimsey, Director of Facilities Services MSU-Billings, via email to Lesley M. Gilmore, January 24, 2018.

<sup>10</sup> Ibid.

<sup>11</sup> Dan Ulmen, Facilities Services Director MSUN, via email to Lesley M. Gilmore, January 24, 2018.

<sup>12</sup> Ibid.



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# MONTANA HISTORIC PROPERTY RECORD

For the Montana National Register of Historic Places Program and State Antiquities Database

Montana State Historic Preservation Office  
 Montana Historical Society  
 PO Box 201202, 1410 8<sup>th</sup> Ave  
 Helena, MT 59620-1202

Property Address: **Montana State University Campus**

Historic Address (if applicable): **NA**

City/Town: **Bozeman**

Site Number: **24GA1681**

(An historic district number may also apply.)

County: **Gallatin**

Historic Name: **Math-Physics Building**

Original Owner(s): **Montana State College of Agriculture & Mechanical Arts**

Current Ownership  Private  Public

Current Property Name: **A.J.M. Johnson Hall**

Owner(s): **Montana State University--Administration**

Owner Address: **201 Main Hall / PO Box 172440  
 Bozeman, MT 59717-2440**

Phone: **406-994-2001**

Legal Location

PM: **Montana** Township: **2S** Range: **5E**

**NE ¼ SW ¼ NE ¼** of Section: **13**

Lot(s):

Block(s): **43**

Addition: **Capital Hill** Year of Addition: **1890**

USGS Quad Name: **Bozeman** Year: **1987**

Historic Use: Classrooms, Offices, Laboratories

Current Use: **Same**

Construction Date: **1954**  Estimated  Actual

Original Location  Moved Date Moved:

UTM Reference [www.nris.mt.gov/topofinder2](http://www.nris.mt.gov/topofinder2)

NAD 27 or  NAD 83(preferred)

Zone: **12** Easting: **496232** Northing: **5056930**

National Register of Historic Places

NRHP Listing Date:

Historic District: **Montana State University-Bozeman HD**

NRHP Eligible:  Yes  No

Date of this document: **July 1, 2013**

Form Prepared by: **Jessie Nunn / Consultant**

Address: **600 Meadowlark Lane, Livingston, MT 59047**

Daytime Phone: **406-208-8727**

MT SHPO USE ONLY

Eligible for NRHP: x yes

no Criteria: x A  B  C

D Date:

October 2013

Evaluator: K. Hampton

Comments:

**Modifications made as part of the 2018  
 biennial report cycle. January 24, 2018.**

# MONTANA HISTORIC PROPERTY RECORD

PAGE 2

## Architectural Description

Property Name: **Math-Physics Building** (A.J.M. Johnson Hall)

Site Number: **24GA1681**

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### ARCHITECTURAL DESCRIPTION

Architectural Style: **Other:** If Other, specify: **Modern**  
Property Type: **Education** Specific Property Type:

Architect: Architectural Firm/City/State: **J. G. Link & Company / Billings, MT; CTA (1996)**  
Builder/Contractor: Company/City/State: **Haggerty-Messmer Company (general); Walsh Plumbing & Heating Co. (plumbing & heating); Dahlstrom Electric Co.**  
Source of Information: **University Records, 53-0002 "Johnson, AJM"**

### Setting & Location

A.J.M. Johnson Hall is located on the south side of Centennial Mall and is immediately south of Renne Library and west of the Student Union. It serves as the eastern boundary of the spacious oval lawn north of Romney Gymnasium (Romney Field), open space that had been part of the 1917 George Carsley and Cass Gilbert Plan's north / south axial arrangement. Outside of the Italian Renaissance Revival style Romney Gymnasium and Traphagen Hall (located at the northwest corner of the lawn), the lawn is surrounded by Mid-Century Modern style buildings or additions including Reid Hall (1959) and the 1960 Renne Library addition to the north, the 1967 Student Union addition and A.J.M. Johnson Hall (1954) to the east and the recently-renovated Gaines Hall (1961; 2012) to the southwest. Overall, the area is characterized by academic buildings, service buildings and classroom buildings originally intended to serve a large percentage of the campus community.

### Summary

A.J.M. Johnson Hall, completed in 1954, is a two-story reinforced concrete building with a full basement designed in the Modern style by the Billings, Montana architectural firm, J. G. Link & Company. Its rectangular footprint extends 188' north/south and 69' east/west. The long east and west elevations are characterized by recessed rows of aluminum windows and pinkish-tan terra cotta spandrel panels between thin brick-clad columns. This pattern is repeated on the shorter north elevation to the west of a solid brick wall. A concrete basement addition constructed in 1968 extends approximately 20' to the north of this elevation. The south elevation, originally a solid brick wall with a centered entrance and second story window, was significantly altered in about 1996 with a protruding EIFS-clad, two-story entrance bay designed by the Billings, Montana architectural firm, CTA. All brick surfaces, including the elevator penthouse and southern stair tower, are clad in red face brick laid in a running bond. The building's reinforced concrete foundation is visible on all elevations. The flat roof's parapet was originally terminated with a graceful angled and stepped concrete cornice, a feature repeated with fewer steps (3) at the entry canopies. This elegant detail was concealed and built over during the 2017 reroofing project. Finally, a 60' x 50' observation deck is located near the south end of the building's flat roof. A solid wood fence was built around the observation deck in 1986.

### West Façade

The west façade of A.J.M. Johnson Hall is comprised of thirteen recessed bays defined by slender brick-clad columns, with the main entrance located in the third bay from the north. The two bays north of the entrance contain recessed brick panels on their first story. Three aluminum windows with small lower hopper units above four rows of cemesto panels stacked in six columns make up the second story. The entrance is reached by a short flight of brick-like steps and contains modern double aluminum-framed glass doors with sidelights and a large transom. The second story of the entrance bay is identical to the arrangement found in the northern bays. A window wall of twelve large glass panes divided by aluminum mullions lights the main staircase in the bay immediately south of the entrance. Each of the remaining nine bays contains an arrangement of aluminum windows and terra cotta panels on both stories. Each of the spandrel panels on the first floor is composed of terra cotta blocks arranged in six columns three blocks high. Three aluminum windows, identical to those found in the second story of the northern bays, are located above the terra cotta spandrel. On the second story the spandrel is taller with seven rows of terra cotta panels stacked in six columns. A row of three slender aluminum awning windows is located between the cemesto spandrel and the roofline. Slender louvered intake vents are located in the first and second story spandrels of the second, fourth, sixth and eighth bays from the south and in the first story spandrels of the third and seventh bays. Only the southernmost bay offers any variation, because it is three feet narrower. Here the central windows are more slender and there are only five columns of terra cotta panels in each spandrel. A long concrete window well added in 2000 extends along the bottom of the nine southern bays, providing light to the renovated basement.

### South Elevation

The south elevation was altered with the addition of a two-story, EIFS-clad entrance bay during a 1996 renovation, which coincided with the construction of the Engineering & Physical Sciences Building. At that time the physics department

# MONTANA HISTORIC PROPERTY RECORD

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Architectural Description

Property Name: **Math-Physics Building** (A.J.M. Johnson Hall)

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moved to the new building and A.J.M. Johnson Hall was converted to other uses. Originally, the elevation was a solid brick wall with a flush 10' tall stair tower offset to the west and a centered entrance containing double aluminum-framed glass doors and a transom. Paired aluminum windows with short lower hopper units in the second story and a two-light aluminum window in the stair tower were centered above the entrance. Currently only the stair tower window is still intact with the original entrance and second-story windows lost to the 1996 addition. This addition, which contains an elevator and small lobby, is offset to the west, and measures about 24' wide and protrudes approximately 7.5' to the south. The new entrance is very similar to the original with double aluminum-framed glass doors and a transom. It is protected by a flat-roofed metal canopy supported by engaged perpendicular walls. Paired aluminum windows with short lower lights are located in the second story. Most of the EIFS is brick red with tan panels on each side elevation and below and above the second story windows. Overall, the addition is sympathetic to the original Modern style of the building, without creating a false sense of history.

## **East (Rear) Elevation**

Like the west façade, the rear elevation of A.J.M. Johnson Hall has thirteen bays defined by slender brick columns. This elevation's entrance, however, is located in the fifth bay from the north. South of the entrance, the bays are identical to the south bays of the west façade with intake vents found on both stories of the third, fifth and seventh bays from the south and on the first story of the second, fourth and sixth bays. The entrance, which is reached by a modern concrete ramp to the north and steps to the south, contains modern double aluminum-framed glass doors with a transom. An aluminum window with a short lower hopper unit above a short brick wall is found immediately to the west. Both the entrance and the window are protected by a flat-roofed concrete canopy. The second story of the entrance bay is identical to the second story of the southern bays. The bay immediately north of the entrance is a solid brick wall (flush with the rest of the building's brick columns) punctured only by a second-story window in its south half and small louvered vent in the north half of its first story. Each of the three northernmost bays has three aluminum windows with short lower hopper units on both stories. These windows sit above cemesto panel spandrels of three rows on the first story and four rows on the second story. Highly visible on this elevation is the 10' tall brick-clad elevator penthouse. The 23' x 30' penthouse is setback approximately ten feet from the building's east wall and its south wall is even with the south edge of the solid brick bay (the fourth bay from the north).

## **North Elevation**

The north end of A.J.M. Johnson Hall contains four window bays divided by slender brick columns and flanked by solid brick walls of differing widths. The recessed bays have an identical arrangement of windows and cemesto panel spandrels as the northern three bays of the east elevation, except here the first and third bays from the west are narrower with only two windows and four columns of cemesto panels. The 1968 concrete basement addition, designed by O. Berg Jr. & Associates of Bozeman, Montana, is visible on this elevation. It rises approximately 2' above grade and extends 20' to the north of the main building.

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History of Property

Property Name: **Math-Physics Building** (A.J.M. Johnson Hall)

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## HISTORY OF PROPERTY

### Development of Montana State University Campus

Montana State University was founded on February 16, 1893 (four years after statehood) as Montana's land grant college under the Morrill Act of 1862. It has the distinction of being Montana's first legislatively-created public university, with the University of Montana in Missoula being created the following day. Initially called the Agricultural College of the State of Montana, the new college was situated on a 200-acre site, part of which had been platted as the Capital Hill Addition in a (failed) bid for the State Capital. Bozeman citizens raised funds to purchase half the land, and Gallatin County donated the other half, which included the County poor farm. The first purpose-built building on campus was the Agricultural Experiment Station (Taylor Hall) constructed in 1894. Main Hall (or Montana Hall), the centerpiece of the campus, was completed in 1898. The construction of the Neo-classical Revival style Agricultural Building (Linfield Hall) in 1909 further illustrated the primary role of agriculture at Montana State. In 1913, the college was renamed the Montana State College of Agriculture and the Mechanic Arts (MSC).

The college anticipated a period of expansion after World War I, and contracted with Montana architect, George Carsley, and nationally-known landscape architect, Cass Gilbert, to develop a campus plan, now known as the "1917 George Carsley / Cass Gilbert Plan." This plan, which exhibited a formal Beaux-Arts symmetry, was adopted by the Montana State Board of Education in 1920 and guided campus development until the outbreak of World War II. Its implementation was assisted by a \$5 million bond to fund building development programs on all of Montana's campuses. At MSC this resulted in the construction of several Italian Renaissance Revival buildings, including Roberts Hall, Traphagen Hall, Lewis Hall, Harrick Hall, Romney Gymnasium and the Heating Plant.

MSC continued to grow and evolve during the Great Depression and World War II. This was spurred in part by the growth of the Extension Service under the New Deal's Agricultural Adjustment Administration, an increase in unemployed students who enrolled in the years from 1932 to 1939 and expanded military training (including a flight school) during World War II. The 1935 "Quads," a women's dormitory financed through the Works Progress Administration, and the oldest portion of the Student Union, completed in 1940, were the era's most significant additions to campus. Both were designed by Bozeman architect, Fred F. Willson, in the Tudor Revival style. Slight deviations from the 1917 George Carsley / Cass Gilbert Plan during the mid-1940s resulted from a desire for new buildings alongside a need to curb paving and heating costs by reducing the space between buildings.

Along with colleges and universities across the nation, MSC expanded to accommodate students attending college under the "GI Bill" after World War II. The square footage of campus buildings doubled in the following decades. At this time, further departures were also made from the 1917 George Carsley / Cass Gilbert Plan as growth demanded expansion beyond its boundaries and within its open spaces. The Renne Library (1949) and the small Danforth Chapel (1952), MSC's first Modern style building, were the era's earliest additions to campus but several others followed during the 1950s and early 1960s. Four Mid-Century Modern dormitories were added to the northern end of campus and new academic buildings, including Reid Hall and the Math-Physics Building (AJM Johnson Hall), were erected in open spaces south of Garfield Street. Several older buildings also received significant Modern style additions, including Renne Library and Linfield and Lewis Halls. The result was a campus showcasing a dynamic blend of revivalist and modernist styles.

The college was re-named Montana State University (MSU) in 1965, and the high-rise dormitories (Hedges and Roskie Halls) that would symbolize the modern era were completed by 1967. More buildings were added in the 1970s as MSU replaced all of its temporary frame buildings with permanent structures. Growth slowed during the 1980s through the beginning of the 21<sup>st</sup> century in the core campus area, although a few new buildings (Visual Communications, the EPS Building and the Chemistry & Biochemistry Building) were added. Many older buildings have also undergone significant alterations in recent decades. Perhaps the greatest addition to campus during the contemporary period was Centennial Mall along what was once Garfield Street. In providing a strong east-west linear focus, the well-landscaped pedestrian mall was actually a return to the axial arrangement of 1917 George Carsley / Cass Gilbert Plan. Today the MSU campus represents a blend of early formal planning, post-war expansion and contemporary buildings that respond to current needs. It offers an excellent example of the evolution of campus planning in Montana. (Burlingame, in passim; Painter, Montana Property Record Form for Langford Hall.)



# MONTANA HISTORIC PROPERTY RECORD

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History of Property

Property Name: **Math-Physics Building** (A.J.M. Johnson Hall)

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## The 1948 Bond Issue & Post-World War Expansion

Montana State College (MSC) came out of World War II with an ambitious new President in Ronald R. Renne and a sharp increase in enrollment due to the G.I. Bill. While enrollment would fall briefly from its all-time high of 3,165 in 1947, it would never again reach prewar levels and by 1960 had reached almost 4,000. (MSU Website, Enrollment History). Once again, MSC needed to expand to meet a growing need for classroom and office space, as well as a need for facilities to serve the growing campus. Luckily, Montanans—many of whom were experiencing their own postwar boom—were ready to increase their investment in higher education. In 1948 they voted to increase the mill levy for higher education from 3.5 mills to 6 mills and to fund a \$5 million bond issue for buildings on all of Montana's campuses. (Burlingame, 186). Unfortunately, the money became bogged down in an argument over which college deserved what amount of money, with Northern Montana College putting forth a strong argument for a higher share after receiving virtually no state building funds since its inception. (Burlingame, 189). Funds were finally allocated four years later but, due to inflation, MSC's \$1.55 million did not stretch nearly as far as had been anticipated. Nevertheless, the college was still able to move forward with six construction projects: two greenhouses, an addition to the 1922 Engineering Shops (Ryon Labs), an addition to the 1909 Agricultural Building (Linfield Hall), a new Service Shop and a new Math-Physics Building. (Burlingame, 190). By March of 1952, Acting President P. C. Gaines (President Renne was on leave) could tell the *Exponent*,

We fully believe that all the buildings made possible by the 5 million dollar bond issue will be under construction before the summer is over. The additions to Ryon Laboratory and the Agricultural Building will partially relieve overcrowded conditions in the Engineering and Agriculture Divisions. The Math-Physics Building will provide a much more favorable location for the Mathematics Department. The new greenhouses and the Veterinary Research Laboratory will permit expansion of research work essential to Montana's agriculture. All of these improvements in facilities will give Montana State college a greater opportunity for service, through instruction and research, to the people of the state. (*Montana Exponent*, 3/13/1952, p. 11).

All building projects funded by the 1948 Bond Issue were constructed over the next two years, with the new Service Shops finished in 1952, the addition to the Agriculture Building (Linfield North) finished in 1953, and the largest of the projects, the Math-Physics Building (A.J.M. Johnson Hall), finished in 1954.

### The Math-Physics Building (A.J.M. Johnson Hall)

Ever since the first Chemistry Building was destroyed by fire in 1916, the Mathematics and Physics departments had been in search of a permanent and suitable home, that is, when not battling for their life at MSC. Both fields became degree programs in 1901, only to be combined in 1906 and then dropped entirely with the installation of the Chancellor System in 1916. (Burlingame, 44 and 50). The programs were temporary victims of a policy intended to eliminate cross-over with degrees offered at the University of Montana in Missoula. However, both were reinstated by the mid-1920s and by the 1930s the college administration was looking to fund a Math-Physics Building. An application for \$70,000 in federal emergency assistance from the Public Works Administration was apparently rejected, and the "Math-Physics Building" continued to make building proposal lists in 1939 and 1945. (Building Applications, PWA; 1939 Building Proposal List; 1945 Building Requests). In the meantime, both departments struggled to find suitable space. After the 1917 fire, the Physics Department moved into the basement of Montana (Main) Hall and later into the "Physics Annex," a frame building moved in from a nearby mine and attached to Montana Hall in 1947. Math students and faculty fared even worse in a "small stone building full of cracks that should be torn down." (1945 Building Requests). This building, located southeast of Montana Hall, was one of campus's oldest structures and had housed the electrical engineering laboratory, while its 1900 and 1914 additions housed a foundry and the campus service shops. After the construction of the Engineering Building and Shops (Roberts Hall and Ryon Laboratories) in 1922, Mathematics moved in to the original portion of the building, which became known as the "Old Engineering Building" or the "Mathematics Building." It was demolished in 1949 with the promise of new service and classroom facilities made possible through the 1948 Bond Issue. (Burlingame, 24).

While inadequacy of existing space was one reason given by President Renne for a new Math-Physics Building, the rising prominence of both programs within the curriculum at MSC was another. According to President Renne, both fields were vital to the study of engineering, agriculture, medicine, industry and the biological sciences, which were the historical and emerging foundations of applied education and research at MSC. As Renne explained in 1945, "statistical problems arise continually in all types of research. The Department of Mathematics could render a service of great importance," and, "many biological and engineering research problems cannot be successfully studied without much of the equipment, apparatus, instruments and services so essential to a well-equipped physical laboratory." (1945 Building Requests). In

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History of Property

Property Name: **Math-Physics Building** (A.J.M. Johnson Hall)

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short, a Math-Physics Building was a high priority. It was the only "department" building constructed between 1926 (Herrick Hall/Women's Building) and 1960 (Gaines Hall/Chemistry Building) and took precedent over a number of other desired projects including residence halls, buildings for Chemistry, Nursing and Health Services and a fieldhouse.

The College selected J. G. Link & Co. for the new Math-Physics Building, and the Billings, Montana firm returned drawings and specifications for a rectangular reinforced concrete structure designed in the quintessential Mid-Century Modern style. Contracts totaling \$503,570 were awarded to Haggerty-Messmer Co., Walsh Plumbing and Heating, and Dalstrom Electric in 1953 and construction apparently proceeded without incident because the departments were able to move into their new building over the 1953-1954 Christmas break. Mathematics only stayed in the building until 1962 when it moved to the second floor of the Library and then, in 1974, to the newly-completed Classroom-Office Building (Wilson Hall). The Physics Department was a longer tenant, vacating the building in 1997 for the newly-completed Engineering & Physical Sciences Building (EPS Building). The building is now known as A.J.M. Johnson Hall, named after head of the Physics Department from 1930-1961, and houses the Center for Computational Biology and the Physics Learning Center. (MSU Website, "A.J.M. Johnson Hall).

## **J. G. Link & Company**

John Gustave Link was born in Bavaria, Germany in 1870 and received his training at the Royal Academy of Landau before immigrating to the United States at the age of 17 and settling in Denver. There he worked for Frank H. Kidder (1887-1890), author of *The Architect's Handbook*, and architect William Fisher (1890-1893). Link won a national competition at the age of 22 for the design of the Minnesota State Capital. Hoping to capitalize on this experience, he moved to Montana in 1896 and settled in Butte, where he first formed a partnership with W. E. Donovan, under the name of Link & Donovan (1896-1900), and then with Joseph T. Carter (1900-1905). In 1906, he formed a partnership with Charles S. Haire. Based on the strength of his earlier award, Montana State Architect, John C. Paulson, commissioned Link & Haire to design the expansion of the State Capital in Helena. Link & Haire were considered Montana's leading architects during their 20 year partnership. They designed thousands of buildings statewide, both public and private, including 18 of Montana's 56 county courthouses. J. G. Link left the firm in 1926, practicing under his own name until the 1940s, when the firm became known as J. G. Link & Co. By 1947, Link's son, Elmer, served as Secretary of J. G. Link & Co. and he continued operation under that name after his father's death in 1954 and through the mid-1960s.

In addition to A.J.M. Johnson Hall, J. G. Link also designed the 1909 Neoclassical Revival Agriculture Building (Linfield Hall) at MSU during his long partnership with Charles S. Haire. His son, Elmer, and grandson, John, also designed many of MSU's laboratory buildings under the names J.G. Link & Company or E.F. Link & Associates, including the 1960 Cooley Laboratory, the 1961 Marsh Laboratory (located off the main campus) and the 1983 Central Laboratory Animal Facility (Tietz Hall). (Adapted from Painter, 58).

# MONTANA HISTORIC PROPERTY RECORD

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Information Sources/Bibliography

Property Name: **Math-Physics Building** (A.J.M. Johnson Hall)

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## Statement of Significance

Property Name: **Math-Physics Building** (A.J.M. Johnson Hall)

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### NATIONAL REGISTER OF HISTORIC PLACES

NRHP Listing Date: **NA**

NRHP Eligibility:  Yes  No  Individually  Contributing to Historic District  Noncontributing to Historic District

NRHP Criteria:  A  B  C  D

Area of Significance: **Education, Architecture** Period of Significance: **1954-1968**

### STATEMENT OF SIGNIFICANCE

A.J.M. Johnson Hall (Math-Physics Building) is a contributing building within the proposed Montana State University (MSU) Historic District, which is eligible for listing under Criteria A and C. It is historically significant for its association with post-World War II expansion at Montana State University. Along with the 1952 Service Shops, the 1953 addition to Linfield Hall (Agricultural Hall) and a handful of minor projects, A.J.M. Johnson Hall is also significant as a product of the \$5 million 1948 Bond Issue. It is also significant as the only "departmental" building constructed between 1926 and 1960, which is indicative of the growing importance of Math and Physics to the curriculum at MSU.

Architecturally, A.J.M. Johnson Hall is a significant example of Modern architecture on the MSU campus. Along with a handful of residence halls constructed during the 1950s (particularly Hannon, Hapner and Langford) and Reid Hall, it is one of MSU's most quintessentially Mid-Century Modern buildings. Nearby Gaines Hall also once served as an excellent example of the style, but a 2010 renovation has rendered it unrecognizable. The visual resonance of these Mid-Century Modern buildings depends upon repetitive patterns of materials and the arrangement of geometric forms, rather than on ornamentation. This can be seen in the west façade of A.J.M. Johnson Hall, which can be divided into three "cubes" that are further broken down into repetitive geometric patterns created with aluminum windows, pinkish cemesto spandrel panels and red brick piers. These buildings might be considered "generic" in contrast to those designed in a more distinctive branch of Modernism, such as International or New Formalism, but it is often the typical that best illustrates the aesthetic of the time. Furthermore, A.J.M. Johnson Hall is also significant as a late work of one of Montana's leading architects, J. G. Link, who died prior to its completion. Comparing this building to his 1909 Neo-Classical Revival Agriculture Building (1909) illustrates the great divide between historicism and modernism, as well as the design leaps talented architect like Link were able to make during the mid-20<sup>th</sup> Century.

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Integrity

Property Name: **Math-Physics Building** (A.J.M. Johnson Hall)

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## **INTEGRITY** (location, design, setting, materials, workmanship, feeling, association)

A.J.M. Johnson Hall retains fair integrity of design, location and materials. The most significant alteration occurred in 2017, when the parapet height was substantially increased to accommodate the tapered insulation of the new roofing. In the process, the elegant stepped concrete cornice was concealed. The new parapet – of increased height and outside the plane of the original cornice – was stepped to soften the impact. The cornice is now a heavy component that once was substantially lighter. This design, by Bechtel Architects, was part of a project managed by the State A&E department. Note that this cornice was modified in the past (date unknown), when a sheet metal coping (albeit shorter than the current one) was added to the top and outside face of the cornice. (See historic photograph on page 17.)

The second most significant alteration occurred in 1996, when a small EIFS-clad entrance addition designed by CTA was added to the center of the south façade. This addition is sympathetic to the original building with its rectilinear forms and patterns, and is clearly identifiable as new construction due to the use of contemporary materials. A third significant alteration was the replacement of the original windows. However, great care was taken to replace the windows with almost identical aluminum units and the change is extremely difficult to ascertain when looking at the building without prior knowledge. The building retains excellent integrity of location and setting. The 1917 Carsley / Gilbert Plan called for a “physics group” directly across an open courtyard from a “chemistry group,” on the south end of campus’s north/south axis. Today, A.J.M. Johnson Hall (the Math- Physics Building) sits across Romney Field from the 1920 Traphagen Hall (originally the Chemistry Building). In sum, the building readily conveys its architectural significance as one of campus’s most quintessential Mid-Century Modern buildings, as well as its associations with Post-World War II expansion and the 1948 Bond Issue.



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Photographs

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**A.J.M. Johnson Hall  
West Façade, Facing: SE  
Montana State University  
Jessie Nunn, November 3, 2012**



**MONTANA HISTORIC PROPERTY RECORD**

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Photographs

Property Name: **Math-Physics Building** (A.J.M. Johnson Hall)

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**A.J.M. Johnson Hall**  
**South Elevation, Facing: N**  
**Montana State University**  
**Jessie Nunn, November 3, 2012**

**MONTANA HISTORIC PROPERTY RECORD**

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Photographs

Property Name: **Math-Physics Building (A.J.M. Johnson Hall)**

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**A.J.M. Johnson Hall  
East Elevation, Facing: NW  
Montana State University  
Jessie Nunn, November 3, 2012**



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Photographs

Property Name: **Math-Physics Building (A.J.M. Johnson Hall)**

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**A.J.M. Johnson Hall  
East Entrance, East Elevation, Facing: NW  
Montana State University  
Jessie Nunn, November 3, 2012**

**MONTANA HISTORIC PROPERTY RECORD**

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Photographs

Property Name: **Math-Physics Building (A.J.M. Johnson Hall)**

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**A.J.M. Johnson Hall  
East Entrance, East Elevation, Facing: SW  
Montana State University  
Lesley M. Gilmore, July 24, 2017**



**MONTANA HISTORIC PROPERTY RECORD**

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Photographs

Property Name: **Math-Physics Building (A.J.M. Johnson Hall)**

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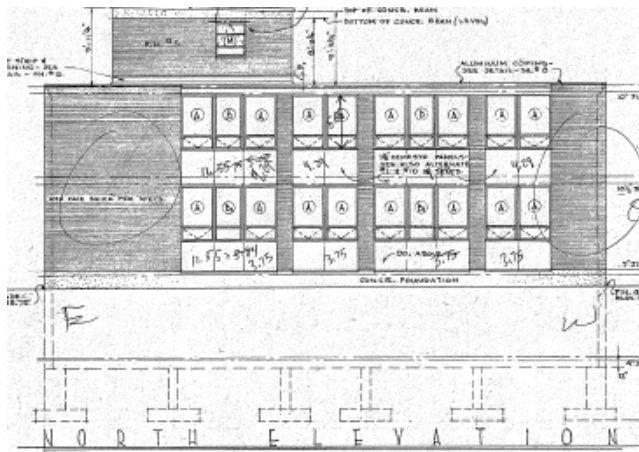
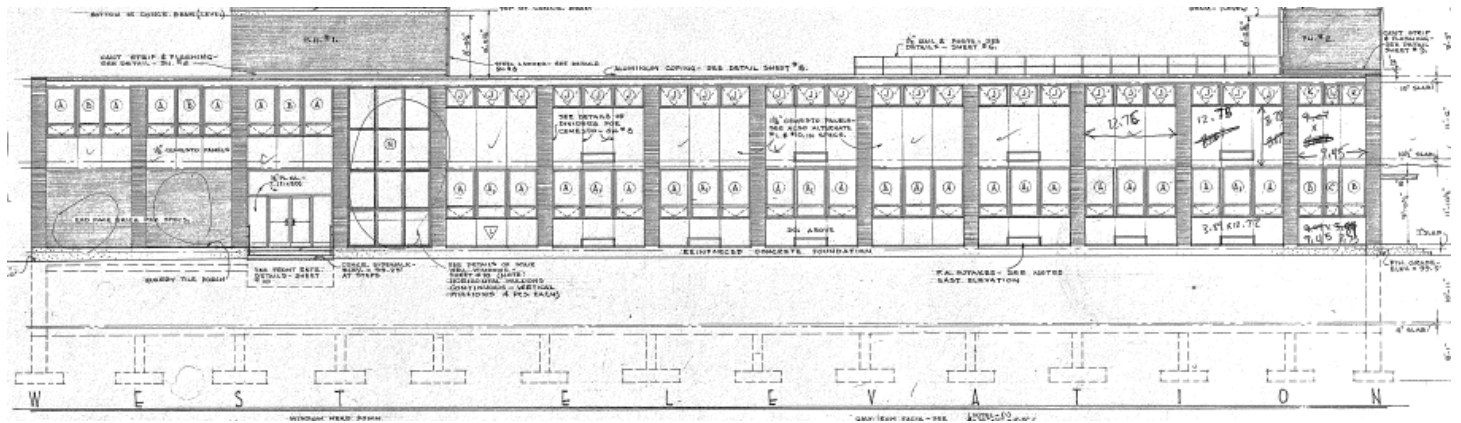
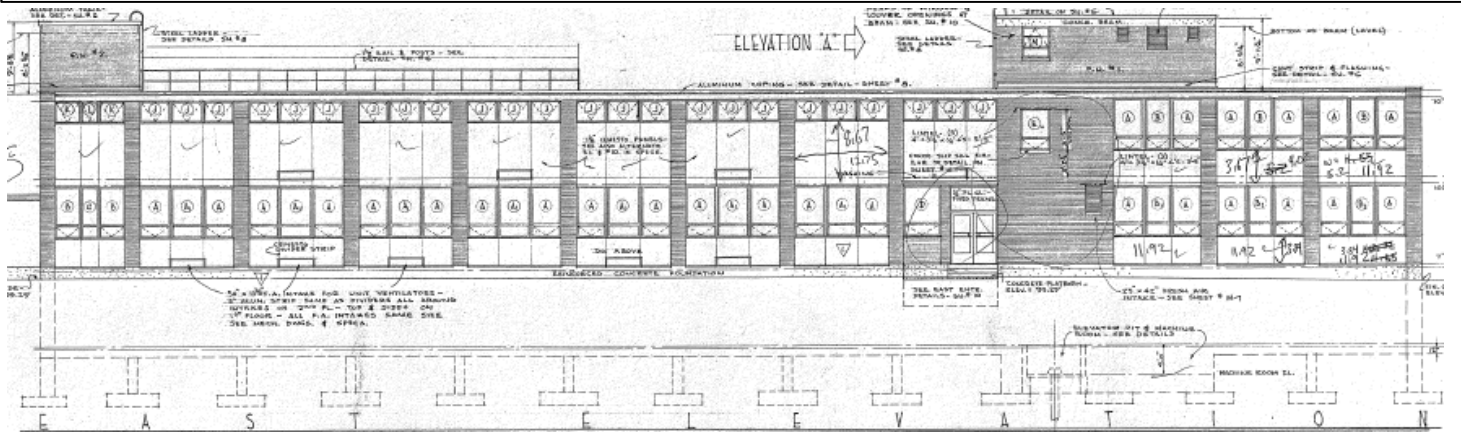
**A.J.M. Johnson Hall  
North Elevation, Facing: S  
Montana State University  
Jessie Nunn, November 3, 2012**

# MONTANA HISTORIC PROPERTY RECORD

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Photographs

Property Name: **Math-Physics Building (A.J.M. Johnson Hall)**

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East, West and North Elevations, "Mathematics-Physics Building," J.G. Link & Company, May 1952, Sheet 7.









MONTANA HISTORIC PROPERTY RECORD

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Topographic Map

Property Name: **Math-Physics Building (A.J.M. Johnson Hall)**

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