MEMORANDUM

TO: University Facilities Planning Board: Royce Smith - Chair, Walt Banziger - Vice Chair, Kregg Aytes, Kurt Blunck, City of Bozeman, Chris Catlett, ASMSU President, Ian Eastes, Michael Everts, Chris Fastnow, Greg Gilpin, Brett Gunnink, Keith Hamburg, Neil Jorgensen, ASMSU, Terry Leist, Robert Mokwa, Chris Kearns, Renee Reijo Pera, Fatih Rifki, Tom Stump, Julie Tatarka, Jim Thull, David Kack, Leslie Schmidt, and Nicole Redding

FROM: Candace Mastel, Planner; Campus Planning, Design & Construction

RE: **January 20, 2018** meeting of the University Facilities Planning Board to be held in the **Facilities Meeting Quonset** at **3:30 pm**

ITEM No. 1 – APPROVAL OF NOTES
Draft notes from February 6, 2017 to be distributed before next meeting (*March 6, 2018*).

ITEM No. 2 – EXECUTIVE COMMITTEE REPORT
Report on any current Executive Committee actions

ITEM No. 3 – CONSENT AGENDA **None**

ITEM No. 4 – RECOMMENDATION **Renne Library Circulation Desk Renovation**
Presenters: Grant Petersen

ITEM No. 5 – RECOMMENDATION **Student R&R Funds for Harrison Classroom and Instructional Labs**
Presenters: Grant Petersen

ITEM No. 6– RECOMMENDATION **Huffman Gun Storage Addition**
Presenters: Jaclyn Liebscher

ITEM No. 7 – INFORMATIONAL **Centennial Mall Bike Lane Demonstration Project**
Presenters: Candace Mastel & Matt Campbell (*student*)

HORIZON ITEMS

- **Interior Public Spaces Signage**
- **Turf Fields Facility Concept**
- **Renne Library Spaces & Technology Renovation**
- **External Building Signage Policy**
- **Master Planning Issues**
- **Revisit and Update Policies**
- **Second Phase of Garage Art**
- **Transportation Master Plan**
- **New Residence Hall Site Proposal**

CM/as
PC:

President Cruzado
Amber Vestal, President's Office
Maggie Hammett, President's Office
Julie Heard, Provost Office
ASMSU President
Lisa Hespen, VP Admin & Finance
Heidi Gagnon, VP Admin & Finance
Jennifer Joyce, VP Student Success
Leslie Schmidt, Asst.VP Research Office
Tony Campeau, Registrar
Robert Putzke, MSU Police
Becky McMillan, Auxiliaries Services
Julie Kipfer, Communications
Jody Barney, College of Agriculture
Susan Fraser, College of Agriculture
Robin Happel, College of Agriculture
Elizabeth Schmidt, College of Business
Candace Mastel, Campus Planning

UNIVERSITY FACILITIES PLANNING BOARD
(February 20, 2018)

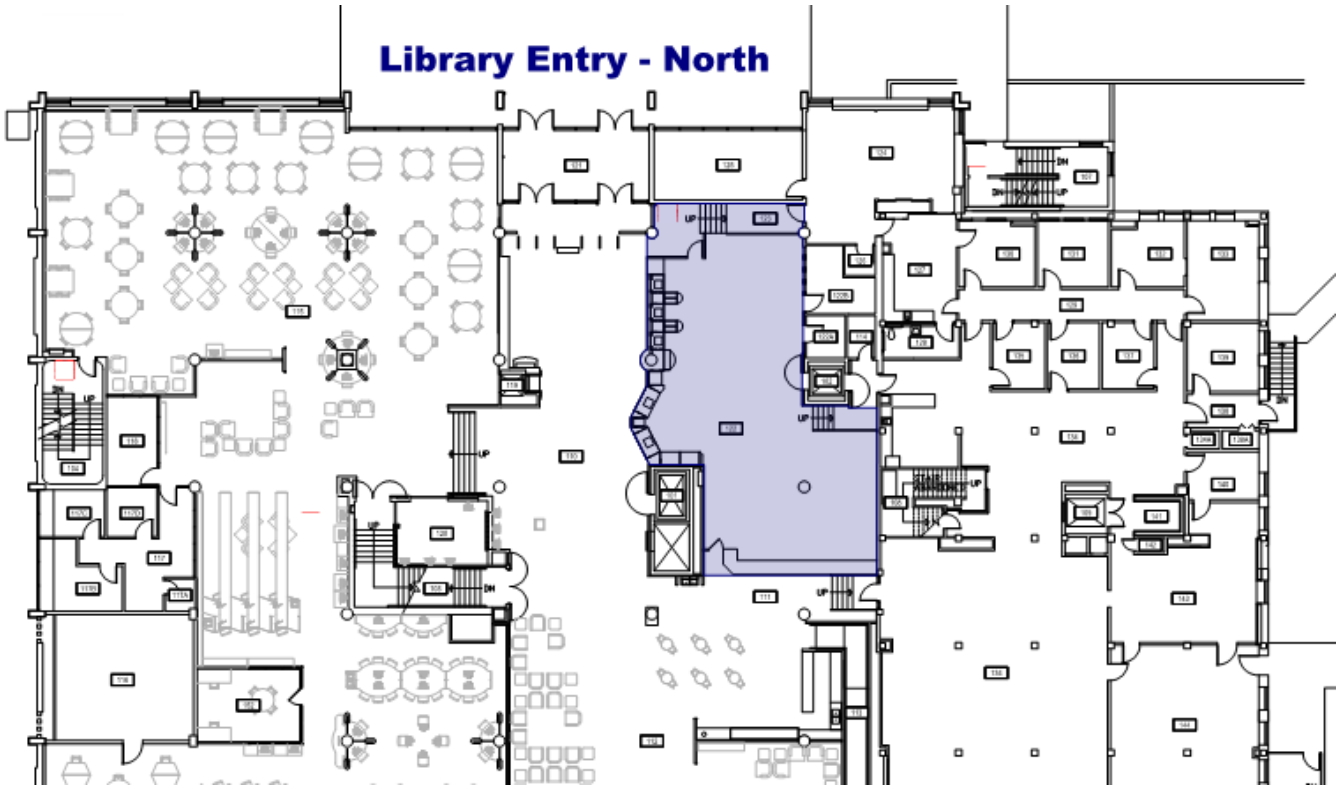
ITEM # 05	**Renne Library Circulation Desk Remodel**

PRESENTERS:

Grant Petersen – Project Manager, Campus Planning, Design and Construction

PROJECT PHASE:	**PLANNING**		**SCHEMATIC**		**DESIGN DOCUMENTS**	**X**	**CONSTRUCTION DOCUMENTS**	

VICINITY MAP:



STAFF COMMENTS:

As Montana State University continues to see enrollment growth, use of the Renne Library is also increasing. In an effort to improve student, faculty, staff, and community member access to Library resources, the circulation desk and adjacent spaces on the main floor require renovation. This renovation will improve the flow of users through the library, provide improved patron access to resources, and create a more welcoming environment.

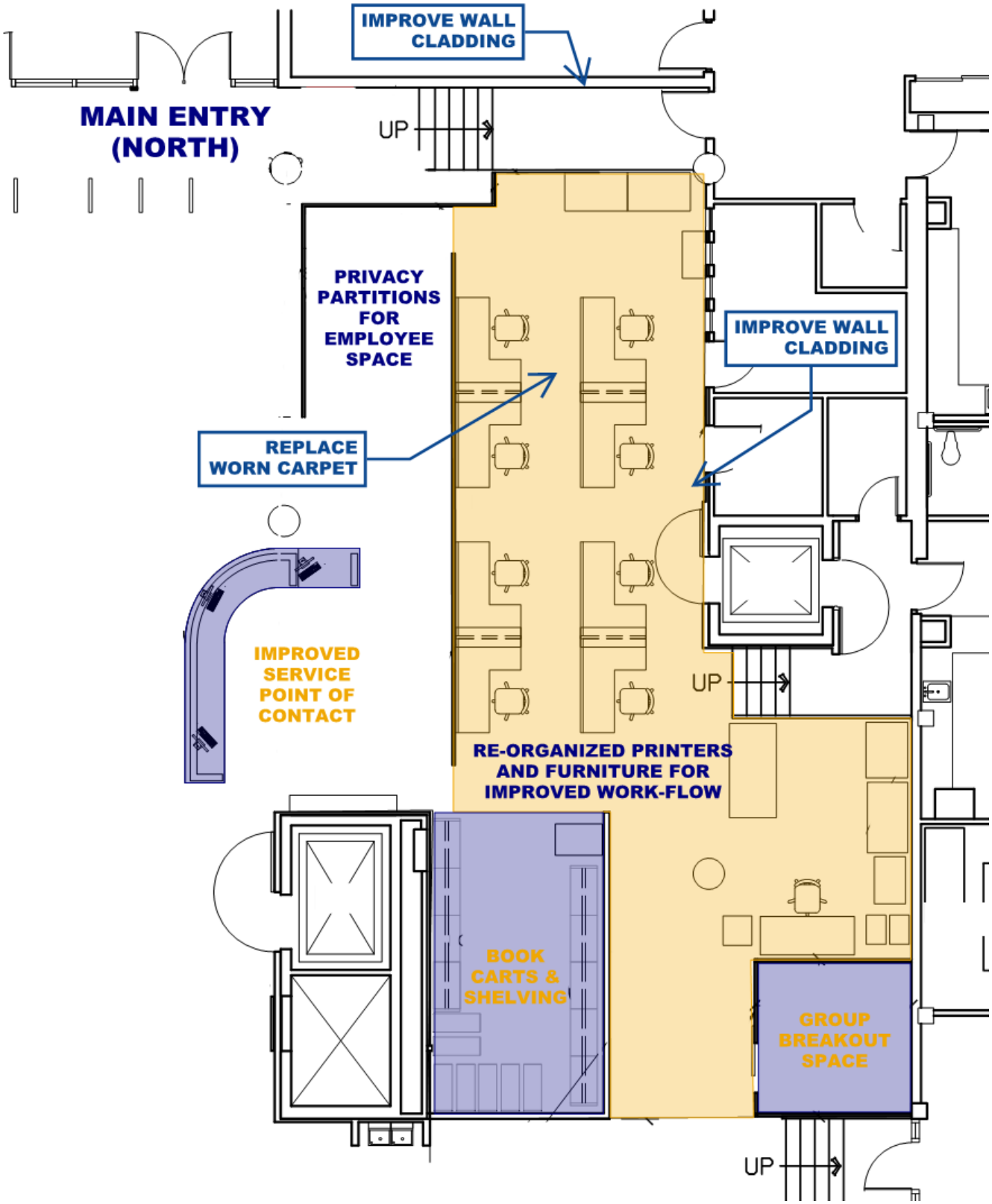
Library staff who use these spaces have been heavily involved in developing this plan for a circulation desk remodel and associated features. Project goals accounted for in this design include improving customer service interactions, providing quiet working spaces for employees, creating a new group

breakout space, and developing a welcoming sense of place. Best practices for design outlined in the Library Master Plan have been implemented here.

As an opportunity to streamline the design process, the University has elected to complete in-house design. Construction will occur during the Summer semester to minimize impacts on Renne Library users. A contractor will be selected this spring to meet the requirements of this construction schedule.

EXISTING SPACE:

NEW FLOOR PLAN:



DESIGN CONSIDERATIONS:

- Promote and improve access to resources
- Create a clear point of contact for patrons in need of information and resources
- Make resource access ADA friendly
- Improve work space environment for library employees and patrons
- Provide group collaboration space
- Improve seismic restraint of furniture and shelving

The Renne Library circulation desk is presented for recommendation of approval that the space-use, design, and layout are appropriate for construction of this project as illustrated here.

COMPLIANCE:	**YES**	**NO**
MSU POLICIES	**X**	
COMMITTEE OR APPROPRIATE REVIEW	**X**	
MASTER PLAN	**X**	
BOARD ACTION REQUIRED:		
Recommend approval of the proposed space-use, design, and layout.		

UNIVERSITY FACILITIES PLANNING BOARD
(February 20, 2018)

ITEM # 07	**Harrison Hall Remodel:** **Use of Student Fees for Classroom & Instruction Lab Space**

PRESENTERS:

Grant Petersen – Project Manager, Campus Planning, Design and Construction

PROJECT PHASE:	PLANNING	X	SCHEMATIC		DESIGN DOCUMENTS		CONSTRUCTION DOCUMENTS	

VICINITY MAP:

STAFF COMMENTS:

As Montana State University continues to see enrollment growth, classroom demand continues to expand. In an effort to improve student access to class space on campus, funding to construct Phase I of the Harrison Hall remodel project is being requested.

The Harrison Hall remodel project is focused on both expanding classroom space on campus, within existing building infrastructure, and developing lab space to serve the Hospitality program. **The class and instructional lab spaces proposed for Phase I (this request) will serve registrar administered courses and will not be limited to the Hospitality program.** This expansion of classroom square footage on campus will help decompress demand for class space across campus as a whole and will

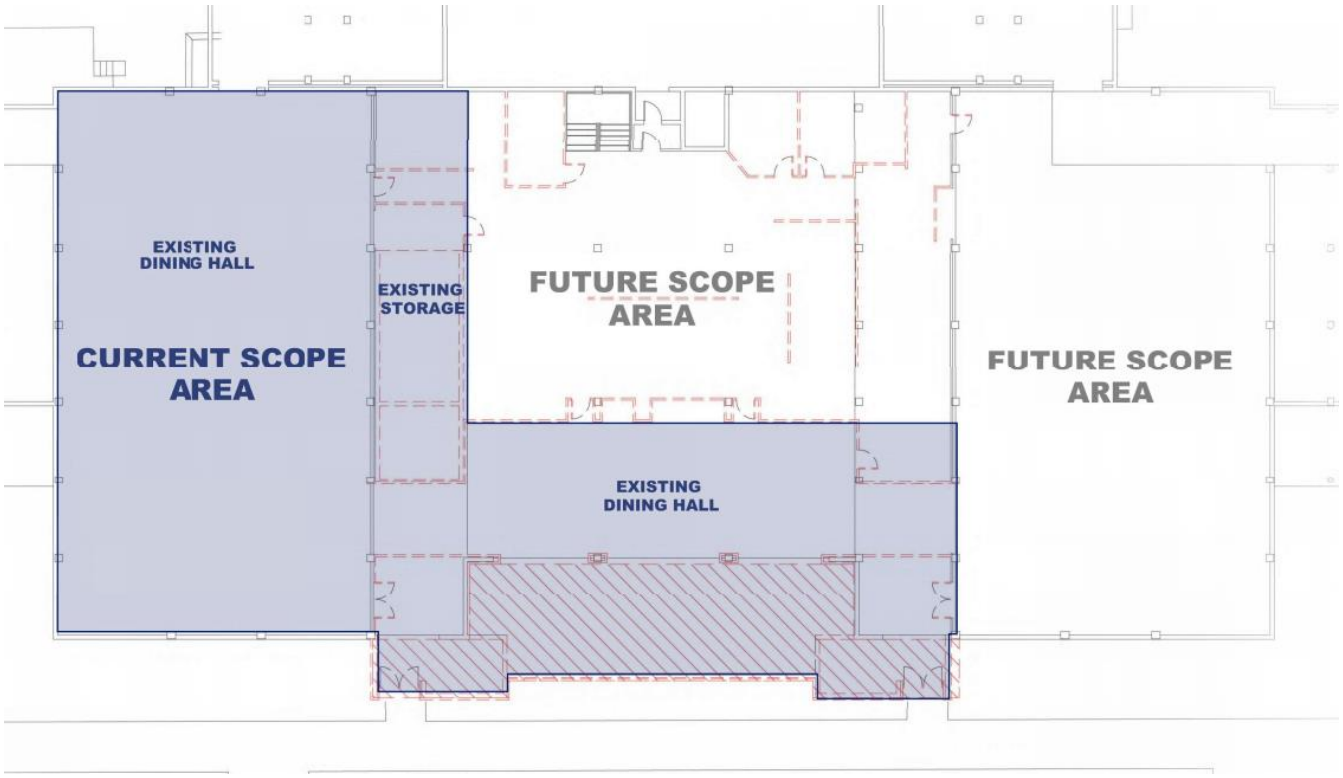
offer new rooms designed using the latest Classroom Design Guidelines with a focus on Active Learning principles. Room sizes will be finalized to accommodate current and anticipated demand for student capacities in classrooms across all academic programs, including the Hospitality program.

FUNDING:

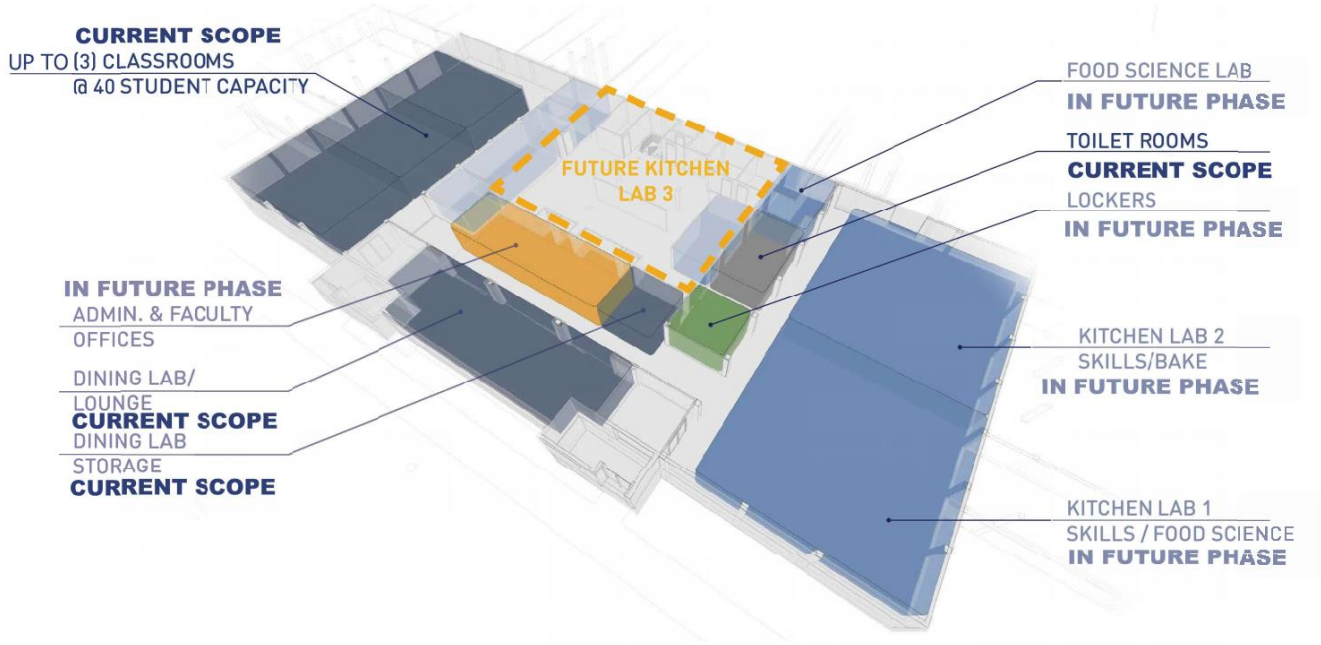
- $1M previously approved funds for class-lab improvements are requested to apply to this scope
- $1M additional funding is currently requested
- **$2M Total Harrison Hall Phase I Renovation to Provide Class and Instruction Lab Space**

PROCESS:
On February 14, 2018 the MSU Classroom Committee unanimously recommended the approval to request an additional $1M from Student Building Fee funds and ASMSU to fund this scope of work. Upon recommendation from UFPB, this request will be taken to ASMSU for recommendation of approval to the President.

SITE MAP:



CONCEPT PLAN:



PROJECT CONSIDERATIONS:

- Enhance classroom availability across campus and distribute class loads
- Plan for flexible space design
- Implement Active Learning principles
- Coordinate design to enhance future Phase II renovation focused on Lab spaces.

The Harrison Remodel classroom and instruction lab project is presented for recommendation of approval to request an additional $1M from Student Building Fee Funds and ASMSU to compliment the previously approved $1M of similar funds to provide a $2M project budget.

COMPLIANCE:	**YES**	**NO**
MSU POLICIES	**X**	
COMMITTEE OR APPROPRIATE REVIEW	**X**	
MASTER PLAN	**X**	
BOARD ACTION REQUIRED:		

Recommend approval of the request for an additional $1M from Student Building Fee funds and ASMSU for remodel of the Harrison Hall building to create classroom and instructional lab space.

UNIVERSITY FACILITIES PLANNING BOARD
February 20, 2018

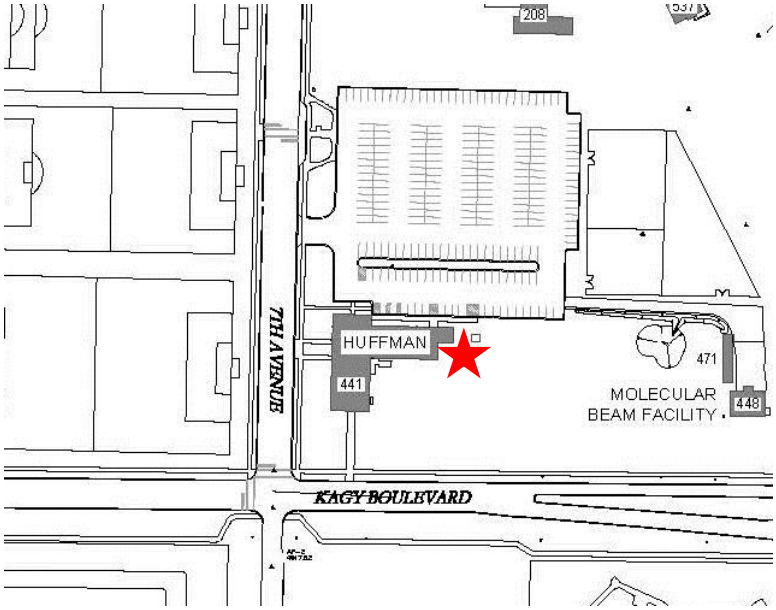
ITEM # 5	**Huffman Student Gun Storage Building Addition**

PRESENTERS:

Jaclyn Liebscher, Project Manager CPDC

PROJECT PHASE:	**PLANNING**		**SCHEMATIC**		**DESIGN DOCUMENTS**	**X**	**CONSTRUCTION DOCUMENTS**		

VICINITY MAP:



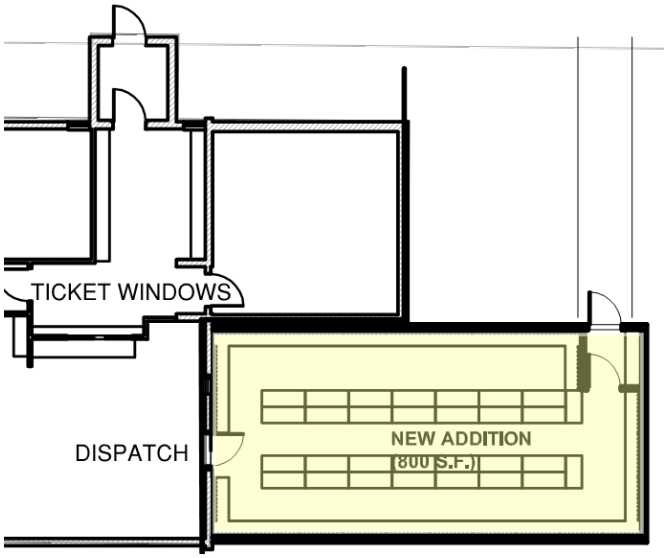
STAFF COMMENTS:

Currently, MSU stores student's weapons in non-centralized locations, typically within each Residence Hall. The student turns over their gun or bow to the Front Desk who then places it in a designated locked closet or room.

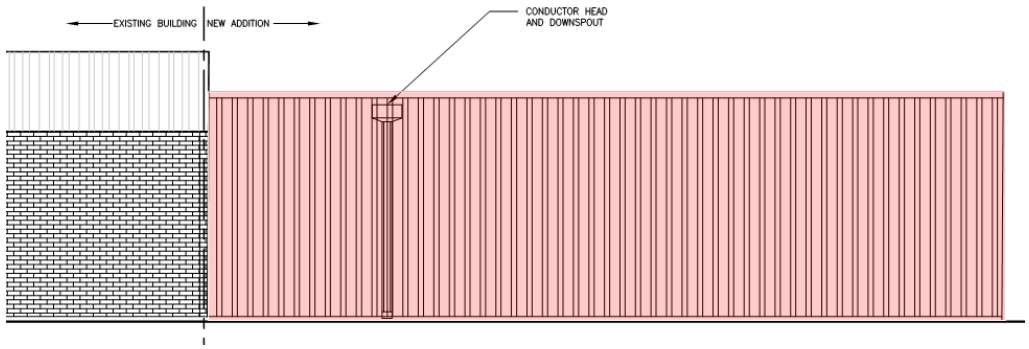
The proposed 800 square foot addition to the southeast of the current Police Station (*Huffman Building*) will create a central location for the cataloging and safe storage of up to 500 guns/bows. This will remove the immense responsibility for ensuring weapon safety and potential damage from the Residence Halls staff.

The addition will be a metal sided building with a shed roof. The view from South 7th Avenue is blocked by the existing building and large Spruce trees help to break up the view from Kagy Boulevard.

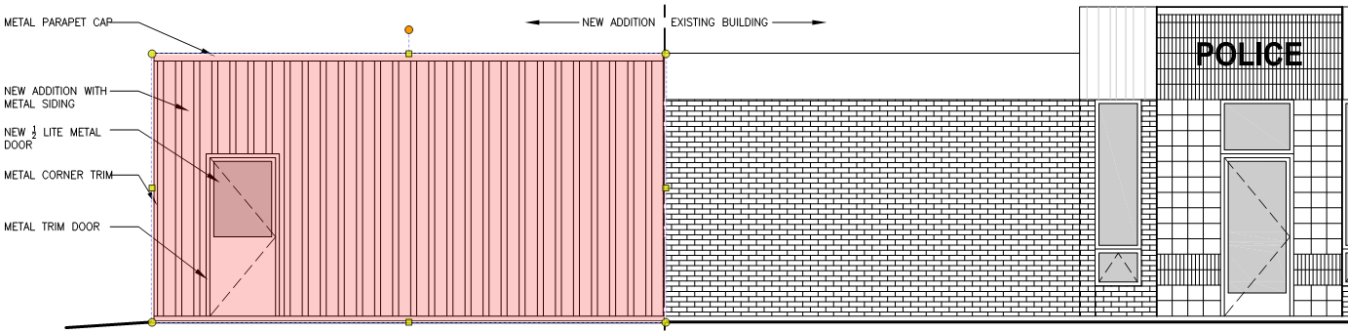
A trained Police Officer will handle the storage of weapons. The students will be able to store or remove their weapon from storage 24 hours a day, 7 days a week.



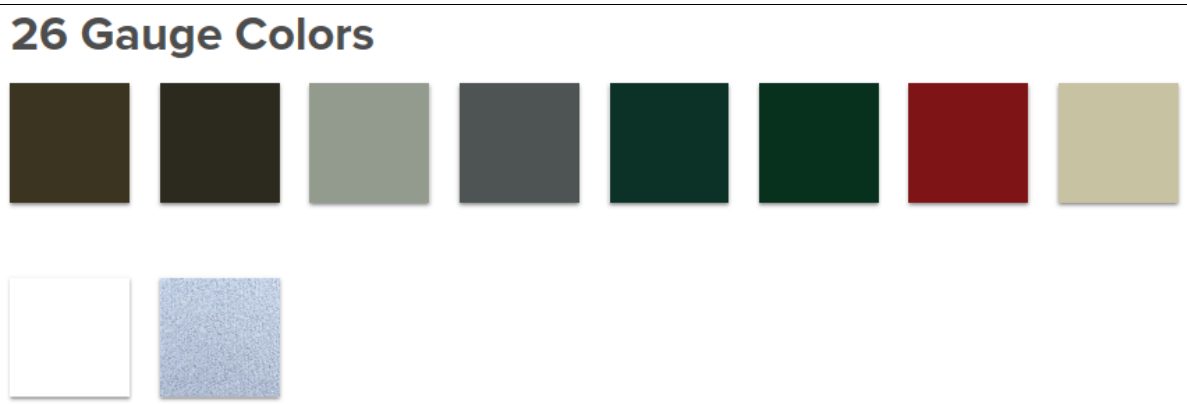
Proposed Floor Plan

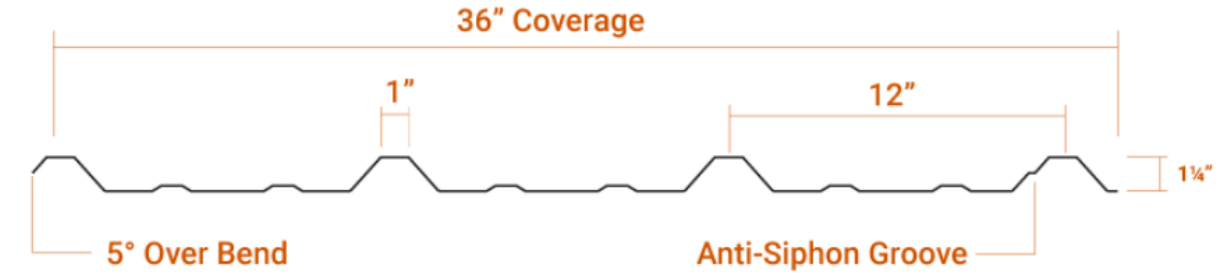


Rear view of addition from Kagy Blvd.



View from visitor parking in front of Huffman Building





Proposed Siding Material & Color Options

COMPLIANCE:	YES	NO
MSU POLICIES	X	
COMMITTEE OR APPROPRIATE REVIEW	X	
MASTER PLAN	X	
BOARD ACTION REQUIRED:		

Recommend approval of the proposed request to include an 800 sq. ft. addition to the southeast corner of the Huffman Building for gun storage for students.

UNIVERSITY FACILITIES PLANNING BOARD
February 20, 2018

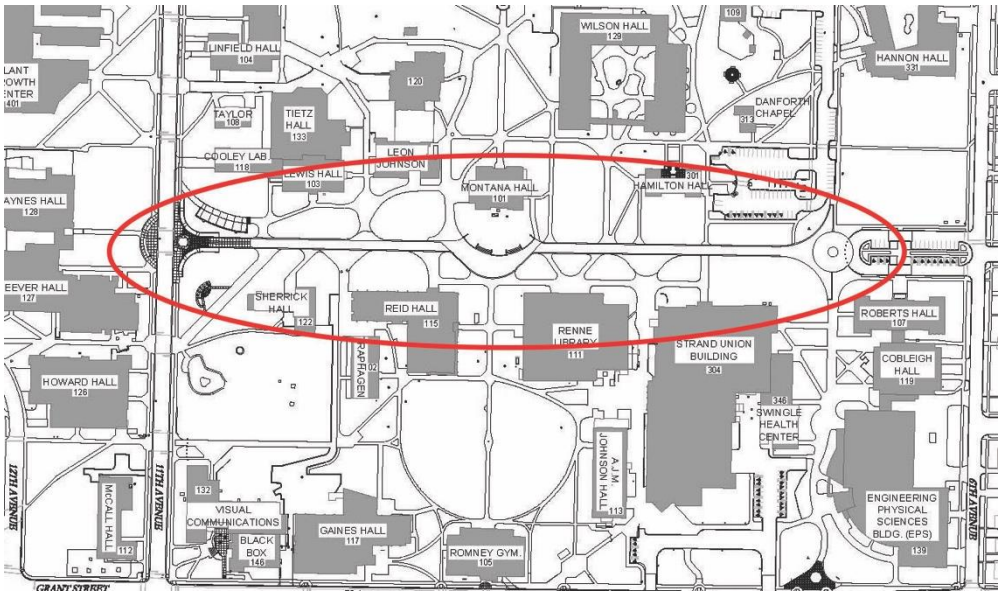
ITEM # 6	**Centennial Mall Bike Lane Demonstration Project**

PRESENTERS:

Candace Mastel, Assistant Planner

PROJECT PHASE:	**PLANNING**		**SCHEMATIC**	**X**	**DESIGN DOCUMENTS**		**CONSTRUCTION DOCUMENTS**	

VICINITY MAP:



STAFF COMMENTS:

The student organizations Institute of Transportation Engineers at MSU (ITE@MSU), Stoked on Spokes, and ASMSU have been working together to create a demonstration project to test and monitor specially delineated bicycle lanes on Centennial Mall. As UFPB knows, Centennial Mall does not currently have bicycle specific areas. Pedestrians, skateboards, bicycles, and other occasional vehicles mingle together and share the space. During class change times the mall can become congested and hard to navigate.

The students would like to plan and install temporary traffic enhancements and signage for at least a two-week period after spring break, to test a bicycle lane intended to separate faster moving bicycles from pedestrians. The demonstration project may be aligned with the Bike to Work/School Week that the campus celebrates as well as a larger Bozeman Commuter Challenge and a reveal of new rideshare and tracking software for the community.

In November of 2017 ASMSU passed a resolution supporting the student organizational-led effort to create this demonstration project. Campus Planning and Facilities Services have been working with the student organizations since last fall semester.

Attached is the proposal submitted by ITE@MSU, for your reference.

	YES	NO
MSU POLICIES	**X**	
COMMITTEE OR APPROPRIATE REVIEW	**X**	
MASTER PLAN	**X**	

BOARD ACTION REQUIRED:

No action necessary; for information only. Student organizations will follow university protocol for outdoor installations and coordinate with staff.

MSU Bike Lanes Pilot Project

A proposal by

ITE @ MSU

And

The Associated Students of MSU

Background

Transportation has become a major issue at MSU over the past several years. Significant growth over the last decade has created several congested and often dangerous avenues during peak travel times. Although the most commonly-discussed areas of congestion cater to vehicular traffic (such as parking lots or long vehicle queues along 11th Avenue), main pedestrian avenues such as Centennial Mall are also seeing heavy congestion during peak times. Since bicycles are allowed on all sidewalks through campus, this congestion creates a growing safety hazard.

Figure 1: A separated bike lane on a college campus, divided from pedestrian avenue by streetlights.

In 2017, the newest MSU Transportation master plan was released. The plan outlined many strategies to reduce and manage vehicular traffic—and, to a lesser extent, pedestrian and bicycle traffic—however it did not significantly address concerns of increasing bicycle and pedestrian traffic downtown, and the risks of these two modes sharing facilities. As more buildings are built throughout campus, drawing increased pedestrian and bicycle traffic and shifting traffic patterns, these concerns must be addressed to ensure MSU stays a safe campus for all commuters. With at least four buildings currently in an active design or construction phase (Norm Asbjornson Hall, a new dining hall, a new residence hall, and Romney Hall), and many others being actively planned throughout campus, this is an ideal time.

Figure 2: Two-way bike lane on a California college campus. Appears to allow up to 4 bicyclists to ride side-by-side, allowing adequate room for passing in either direction.

The concept for this project came from ASMSU resolution 2017-R-19 that supported the implementation of bike lanes on campus. It was passed by the ASMSU senate in November 2017 after student senators received feedback from various campus entities including the Office of Sustainability and the bicycle task force.

Project Overview

The purpose of this project is to design a design a series of bike lanes and other traffic enhancements for pedestrians and bicyclists and test them during a temporary "pilot study." This study will allow university stakeholders to measure the impacts of these new additions and enhancements on traffic throughout campus and determine whether implementing them on a permanent basis is a feasible solution.

For the purposes of this pilot study, the project area will primarily consist of the main pedestrian avenue through campus (Centennial Mall), and any secondary routes to major buildings (such as the SUB), that are deemed important enough to include in the study. If this study yields beneficial results, a later study could encompass a larger area of campus.

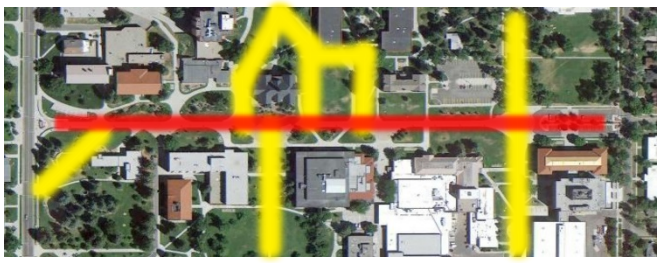


Figure 3: Approximate project area and potential routes to receive biking enhancements. Centennial mall is highlighted in red, and auxiliary routes that directly connect the mall to other areas of campus are shown in yellow.

Project Team

The project team will primarily consist of students affiliated with either interested student organizations including the Institute of Transportation Engineers @ MSU, Stoked on Spokes, and ASMSU. ITE @ MSU is a student club under the Department of Civil Engineering whose mission is to support the field of transportation engineering and promote transportation initiatives throughout MSU. The club consists of both undergraduate and graduate students majoring in transportation engineering, however it is open to all majors. Stoked on Spokes is a new club that promotes biking throughout MSU and the Bozeman community.

Throughout the project, the project team will receive input and guidance from various professionals throughout campus including professors from the Department of Civil Engineering and staff from the Western Transportation Institute and Campus Planning, Design, and Construction. The team will also work closely with ASMSU to ensure that a wide range of students (represented by ASMSU senators and executives) will be regularly consulted on proposed traffic improvements.

The project team anticipates working on this project solely on an extracurricular, volunteer basis. Funding will only be sought for this project if materials are needed during the study (such as materials to mark out bike lanes, or relevant data collection equipment). Through this project, ITE @ MSU hopes to provide opportunities for interested students to participate in a real-world engineering studies.

Stakeholders

The primary stakeholders for this project are MSU students, faculty, staff, and any other community members who commute through the MSU campus. This project will likely be highly visible and has the potential to noticeably impact stakeholders who commute through the determined project areas.

These stakeholders will be represented by several different on-campus entities. Students will primarily be represented by ITE @ MSU and ASMSU, who are currently leading this project. Surveys may be later employed to receive feedback by a wider group of students.

Campus Planning, Design, and Construction and the Western Transportation institute will serve as the primary liaisons to MSU faculty and staff. The MSU Sustainability office and their bike task force will remain involved with the project as well. Any relevant university committees (including UFPB and PTAC) will remain informed as well.

Scope of Work

This project will consist of four phases, which are described below. This scope is subject to change based on recommendations by mentors, faculty, and staff, or based on constraints of the project team (i.e. midterms, finals, etc.)

Phase 1: Bike Facilities Design

In the first phase, the project team will work to determine appropriate locations to install bike lanes and other traffic enhancements within the previously described project area. To begin, several brainstorming sessions will be held with interested students. Relevant traffic metrics (such as pedestrian and bicycle volumes) will also be collected and mapped. This will allow the team to determine areas that see significant congestion or a high number of conflicting movements between bicycles and pedestrians.

Phase 2: Design of Pilot Study

In the second phase, the project team will design the pilot study and determine how to best implement the bike lanes as designed during phase 1. Proper execution of this phase will ensure that the actual study runs smooth.

Phase 3: Pilot Study Implementation

In this phase, the actual study will be performed. To begin, volunteers will assist with installing the bike lane markings and any other traffic enhancements. These will remain for likely several weeks. During this time, researchers will observe and collect metrics over several different days and various traffic conditions. This phase will be performed once all snow has melted to ensure that a high volume of bicycles are commuting through campus. Upon completion of this phase, all traffic devices and markings will be removed.

Phase 4: Compile Results and Make Recommendation

Finally, the project team will compile the results of the study and make recommendations to the university. A project report and presentation will likely be generated. Recommendations may include the use (or not) of bike lanes and other traffic control enhancements in various areas of campus, and/or new university policies that should be implemented regarding pedestrians and bicycles (such as prohibited bike areas that see heavy pedestrian traffic).

Figure 4: Temporary bike lanes may utilize cones, similar to what is shown in this photo.

Bike Lanes

Although the exact specifics of the bike lanes design will be determined during phase 1, all elements will be temporary, cheap, and easy to install/remove. Elements of the temporary bike lanes may include traffic cones, paint, chalk, and temporary signs. Most supplies will likely be borrowed from the Western Transportation Institute, which currently owns a trailer full of traffic control supplies for "tactical urbanism" installations.

Figure 5: Example of possible signage for the temporary bike lanes.

At this time, it is anticipated that there will be no formal enforcement of bike lane usage. A major goal of the bike lanes design will be to make them appealing to bicyclists without threat of enforcement. Student volunteers may be on-hand during the first few days of the pilot study to inform commuters about their presence, however a major aspect of the study will be to determine the number of students who voluntarily use the bike lanes vs. the number of students who avoid them.

Given that the final design and layout of the bike lanes won't be determined until phase 2, the project team will return to UFPB and other relevant university offices once the final design has been finished to receive final approval to proceed with the study. Any concerns or suggestions received during this process will be addressed before proceeding with the implementation of the bike lanes.

Figure 6: The use of temporary paint and chalk may look similar to what is shown in this photo.

Installation and Removal

Installation of the bike lanes at the beginning of phase 3 will occur over one weekend day using approximately 5 student volunteers. Throughout the duration of the study, one student a day will be responsible for checking on the bike lanes 1-2 times throughout the day and fixing things such as out of place cones or damaged signs. Removal of the bike lanes at the end of phase 3 will likely take the same amount of time and effort. Care will be taken to ensure that all sidewalks are left *exactly* as they were prior to the study.

Study Metrics

Although the full parameters of the study will be determined during phase 2, some potential study metrics are listed below. A major metric will be the overall volume of bicycles utilizing the lanes throughout the day. The volume of bicycles *not* utilizing the bike lanes will also be recorded to determine level of utilization of the bike lanes.

A survey distributed either outside near the bike lanes or online to a sample of MSU students will also be conducted to gauge student opinion in this project. Metrics collected in the survey may include students' overall support for on-campus bike lanes and the perceived level of safety as a pedestrian or bicyclist.

Schedule

The current anticipated timeframe for this project is throughout the Spring semester. Phases 1 and 2 will likely occur throughout the months of January, February, and March and may proceed concurrently. Phase 3 (the actual study) will occur in April over the course of two weeks (an approximately 3-week window of time has been allotted in Figure 7 to allow for weather or logistical problems). Phase 3 will likely be scheduled in conjunction with other biking/sustainability events on campus to capitalize on publicity. All deliverables for this project are anticipated to be completed by finals week, however this may be extended into the summer depending on the classwork of the project team.

Activity	Date
Spring 2018 Semester Begins	Jan 10
Approval & Proposal Writing Process	Jan 10 - Feb 19
Tentative Approval from UFPB	Feb 20
Phase 1: Bike Lanes Design	Feb 21 - Mar 13
Phase 2: Pilot Study Design	Mar 13-Apr 2
Secondary Approval from UFPB	Apr 3
Phase 3: Pilot Study	Apr 7 - Apr 28
Phase 4: Report Generation & Analysis of Results	Apr 29 - May 12
Tentative Delivery of Study Results	May 12

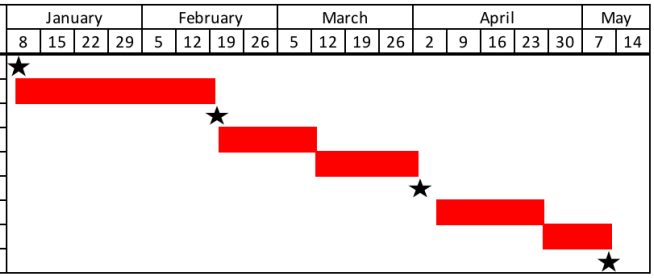


Figure 7: Gantt chart representing proposed schedule for this project.