Fiscal Year 2023
Capital Outlay Plan \& Project Request

October 14, 2021

## President's Letter:

This plan is intended to outline projects which will support the very best learning and working environment possible for our students, faculty, staff and community. Each project and associated capital expenditure is intended to improve and enhance, not just maintain, the delivery of education, and enhance the College's presence in the community. The document focuses on opportunities to develop not only the traditional delivery of credit classes but the focus Bay College is expanding on in workforce development with the Manufacturing Hub.

Each of these projects formally represents continuing discussions regarding developments that will move the College's teaching and learning environment further into the future.

Sincerely,
Oama \& Coleman
Laura L. Coleman, Ph.D.
President

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Bay College Mission Statement

## Section I. Overall Mission of Bay College

Located in the heart of Michigan's beautiful Upper Peninsula, Bay de Noc Community College (commonly known as Bay College) has provided quality higher education for more than 50 years. Founded in 1962, Bay College is known in the region for its superior teaching and abundant learning. The campus is situated on 150 acres and serves approximately 2,500 credit students each year, including those completing baccalaureate and master degree programs sponsored by partnering universities.

From its modest beginning with a limited curriculum, Bay College has expanded its offerings in response to the needs of the local communities served. The College continues the tradition of providing occupational programs aimed at giving students the skills to enter the work force, community service, and transfer programs, which are designed to allow students to begin their postsecondary education and explore career interests at Bay College, later applying their degree at a major college or university.

Co-located on the College's campus, the local YMCA provides recreational and wellness opportunities, as well as child care for local residents, college employees and students.

Since the early 1970's, Bay College has had a presence in Dickinson County, where in those early years courses were offered to assist students enrolled in nursing degree programs. Facility limitations severely restricted course offerings through the early years. However, enrollment increases supported the notion that interest in higher education in Dickinson County remained strong. The voters in Dickinson County approved a one mill tax increase to support the construction, maintenance and operation of a new $67,000 \mathrm{sq}$. ft . facility, matching the State of Michigan's construction funds of $\$ 6$ million. Groundbreaking was held in the spring of 2006 and the facility opened in the fall of 2007. Through a unique contractual relationship with the Dickinson County Board of Commissioners, the College has been able to move forward in offering a strong core of transfer degrees and occupational programs to support the local workforce.

Bay College has a strong history of dedicating itself to offering academically excellent and affordable public education in our region. The College prepares students to be continuous learners who succeed upon transfer, work effectively in the contemporary workplace, and function as citizens and leaders in their communities.

## MISSION OF THE COLLEGE

Bay strives to create an environment of Student Success, Community Success and Culture of Success.

## VISION

Bay College is the regional college of choice where people thrive, workforces excel, communities connect and lives transform.

## CULTURAL BELIEFS

- I Am Change
- Respect
- Let's Talk
- Feed Me
- Clarify Expectations
- Stay Focused


## OBJECTIVES

- Advance Academic Excellence
- Strengthen the College Experience (into, through, and beyond)
- Bolster External Stakeholder Engagement
- Amplify Culture of Accountability
- Cultivate Financial Stability


## VALUES

- Quality Commitment
- Collective Accountability
- Collegial Relationships
- Community Engagement
- College Vitality
- Data Informed
- Diversity, Equity and Inclusion
- Financial Stability


BAY


Instructional Programming

## Section II. Instructional Programming

## DESCRIPTION OF EDUCATIONAL PROGRAMS:

Bay College offers students educational programs in various areas and levels. The Associate of Arts degree and the Associate of Science degree are designed for students planning to transfer to a four-year college or university. The Associate of Applied Science degree and Certificate programs provides students with an occupational-focused terminal award. The following is a list of academic programs and areas of study provided by Bay College in Fall 2021.

Students can graduate with a certificate or a degree in the following areas:

## Certificate Programs

Accounting
Automotive Maintenance Technician
Automotive Master Technician
Certified Medical Assistant
Corrections Officer
Early Childhood Education
Emergency Medical Technician (EMT)
Entrepreneurial Small Business
Health Careers
Mechatronics
Microsoft Office Specialist
Office Assistant
Practical Nurse
Private Security
Sustainability
Water Technology
Welding
Associate in Applied
Science
Accounting
Agriculture
Automotive Technology
Business
Computer Information Systems:
Programming \& User Support
Computer Information Systems:
Software/Network Support
Computer Network Systems \& Security
Corrections
Criminal Justice
Early Childhood Care \& Education
Environmental Management
Geographic Information Systems
Human Services
Law Enforcement
Magnetic Resonance Imaging
Technologist
Marketing
Mechatronics and Robotics Systems
Nursing
Occupational Studies
Office Systems/Administrative Assistant
Office Systems/Medical Office Specialist
Paramedic
Water Resource Management
Water Resource Management 1+1

## (Transfer)

Associate in Arts
Associate in Arts, concentration in:

## Art \& Design

Business Administration
Criminal Justice
Network Administration
Social Work

Associate in Science
Associate in Science, concentration in:
Pre-Engineering
Pre-Molecular Biotechnology
Pre-Natural Resources
Pre-Professional Health
Transfer Areas of Interest
Associate in Arts (AA)
Athletic Training/Sports Science
Automotive Engineer Technology
Automotive Management
Communication
Computer Science
Construction Management
Early Childhood Education
Education
Elementary
Secondary
Special
Engineering Technology
Electrical
Industrial
Mechanical
Surveying
English
Entertainment/Sports
Promotion
Fire Science
History
Homeland Security
Journalism
Law, (Pre)
Liberal Arts
Mathematics
Music
Nursing Transfer Completion
Political Science
Psychology
Public Administration
Recreational Management
Social Work
Sociology
Speech Communication
Theater
Women's \& Gender Studies
AA - Art \& Design
AA - Business
Administration
Accounting
Business Administration
Computer Information Systems

Associate in Arts (AA) cont.
Economics
Finance
Management
Marketing

## AA - Criminal Justice

Corrections
Law Enforcement
Security
AA - Network
Administration
Computer Network \& Systems
Network Computing
Associate in Science (AS)
Architecture
Biology
Chemistry
Clinical Lab Technology
Physics
Zoology
AS - Pre-Engineering
Chemical
Electrical
Mechanical
Paper Science

## AS-Pre-Biotechnology

Biochemistry
Biotechnology
Genetics
AS - Pre-Natural Resources
Environmental Science
Fisheries \& Wildlife Management
Forestry
AS - Pre-Professional Health
Dentistry (Pre)
Medicine (Pre)
Occupational Therapy
Optometry (Pre)
Pharmacy (Pre)
Physical Therapy (Pre)
Veterinary Medicine (Pre)

## Articulation Agreements

The College has formal articulation agreements which provide a value-added component to a traditional transfer guide. In some cases, these articulated agreements allow for students to have a seamless admission into their chosen transfer degrees. Bay College has formal agreements with the following colleges and universities:

Central Michigan University - Mount Pleasant, Michigan
Chamberlain University - Downers Grove, Illinois
Davenport University - Grand Rapids, Michigan
Eastern Michigan University - Ypsilanti, Michigan
Finlandia University - Hancock, Michigan
Indiana Wesleyan University - Marion, Indiana
Kennebec Valley Community College - Fairfield, Maine
Lake Superior State University - Sault Ste. Marie, Michigan
Michigan State University - East Lansing, Michigan
Michigan Technological University - Houghton, Michigan
Northern Michigan University - Marquette, Michigan
Oakland University - Rochester, Michigan
Palmer College of Chiropractic - Davenport, IA
University of Wisconsin - Green Bay - Green Bay, Wisconsin
Articulation agreements/Transfer Guides have also been established between the following Michigan Community Colleges and Bay College for entry into our A.A.S. in Water Resource Management:

Alpena Community College - Alpena, Michigan
Glen Oaks Community College - Centreville, Michigan
Gogebic Community College - Ironwood, Michigan
Grand Rapids Community College - Grand Rapids, Michigan
Kalamazoo Valley Community College - Kalamazoo, Michigan
Kellogg Community College - Battle Creek, Michigan
Lake Michigan College - Benton Harbor, Michigan
Lansing Community College - Lansing, Michigan
Macomb Community College - Warren, Michigan
Montcalm Community College - Sidney, Michigan
Muskegon Community College - Muskegon, Michigan
North Central Michigan College - Petoskey, Michigan
St. Claire County Community College - Port Huron, Michigan
West Shore Community College - Scottville, Michigan

## University Programs at Bay de Noc Community College

The following university programs offer courses toward completion of their degrees on Bay's campus in cooperation with Lake Superior State University - Sault Ste. Marie, Michigan.

Bachelor of Science Accounting
Bachelor of Science Business Administration-Entrepreneurship
Bachelor of Science Business Administration-Generalist w/a declared minor
Bachelor of Science Business Administration-International Business
Bachelor of Science Business Administration-Management
Bachelor of Science Criminal Justice-Corrections with Law Enforcement Minor
Bachelor of Science Criminal Justice-Generalist
Bachelor of Science Criminal Justice-Law Enforcement Certification
Bachelor of Science Early Childhood Education with Sociology Minor
Bachelor of Science Early Childhood Education ZS Endorsement
Bachelor of Science/Bachelor of Arts-General Studies
Bachelor of Science Nursing Completion
Bachelor of Arts/Science - General Studies

## Workforce Development Activities

The Certified Nursing Assistant program is currently our most popular workforce development program, due primarily to the high demand for CNAs and CNA training across the Upper Peninsula. We also regularly offer training for Microsoft Office, team building, leadership, communication, DiSC profiling, human resources, digital photography, and safety in the workplace. Recently, we have added a Clinical Medical Assistant training that helps to fill some need in the community for Certified Medical Assistants. In addition, Bay has partnered with a local agency to offer an Offender Success program for former inmates to learn basic manufacturing skills.

Bay College has articulated agreements with International Brotherhood of Electrical Workers (IBEW) and the International Brotherhood of Boilermaker Unions to accept and award apprenticeship program curriculum for Advanced Standing credit and blends their curriculum with college courses to complete an Associate Degree in General Studies.

We serve as a testing site for ASE, ServSafe, and PAN testing. We can also custom-design many training programs to fit the unique needs of any company or organization, many times offering these trainings directly at the employer's site. Lastly, the M-TEC has a wide variety of rooms available for rental to assist local industry with training events or meeting activities.

## Adult Education Focus

In 2011, Bay College was a founding member of a group that created an Adult Literacy Council. The focus of this group is to help adults prepare for the reading, writing, and math requirements associated with attending college. Additionally, we have an ongoing partnership with the local adult basic education/GED provider and Michigan Works, to provide intensive enrollment and advising services for those recently obtaining GEDs. This partnership received a state award in 2012 attributed to doubling the number of GED recipients attending Bay College. We are also active participants in the Veterans Council and have been named a Military Friendly School.

## Continuing or Lifelong Educational Programming

Bay College has and will continue to provide many continuing or lifelong educational programming opportunities, once COVID-19 pandemic restrictions have been relaxed. These include digital photography, computer classes, Lego robotics, and a wide variety of lifelong education courses available online from Ed2Go. Bay College continues to deliver continuing education seminars, workshops and conferences for small- to medium-sized businesses including dental, optometry, healthcare, and safety, as well as online trainings and workshops.

## Partnerships with Intermediate School District

Bay College is a founding member of the Delta County College Access Network (DCCAN). DCCAN is a network of educators, business leaders, community agencies, and philanthropic institutions, all interested in creating a culture within the county where young people expect to attend education beyond high school, and are positioned to succeed in post-secondary education. The College's leadership in DCCAN has led to stronger partnerships with K-12 districts, and many opportunities for students to learn more about higher education.

We have multiple articulation agreements with the Delta Schoolcraft ISD and provide on campus learning experiences for K -12 students including summer robotics camp, College nights, Financial Aid nights, Career Day at Bay, $5^{\text {th }}$ grade Friday visits, $8^{\text {th }}$ grade Career Exploration visits, College 101, Bay is the Way Day, and admission visits to 25+ area high schools. Many of these programs have been stalled due to COVID-19 restrictions and will be restarted once we are able.

Area high schools continue to seek out Bay College for dual enrollment opportunities. The number of dual enrolled students continues to increase each year. We now have students enrolled from 33 local and regional high schools, and this enrollment is over $24 \%$ of our fall student population.

The development of several Early College partnerships has strengthened our relationship with local districts. We now have Early College partnerships with the Delta Schoolcraft Intermediate School District, the Dickinson Iron Intermediate School District, Escanaba High School, MidPeninsula High School, Big Bay de Noc High School, Menominee High School, Stephenson High School, Carney Nadeau High School, and Bark River-Harris High School. There are also other schools interested in applying for Early College status in the future. We currently have over 200 students enrolled in the Early College program from several local schools. The Early College program is over $11 \%$ of our fall student population, resulting in over $35 \%$ of our fall enrollment consisting of dual enrolled and early college students from local high schools.

## Community Activities

Many programs for the community were halted due to the COVID-19 social distancing and limited meetings, but are expected to return when they are able. We look forward to welcoming back to the Escanaba and Bay West campuses senior citizens educational and social programs. Additionally, the college hosts a Math/Science Colloquia Series designed to promote STEM opportunities. Speakers address current topics in the STEM field. The Marquette Symphony Orchestra performs six times a year at Bay College's Besse Art Center. Theater productions are provided in the Besse Center each year. Bay College supports Strings on the Bay, which consists of local musicians.

The College sponsors a film series and student art shows annually. The Besse Art Center and Hartwig Gallery have rotating art presentations from Bay College's art inventory and have 6-8 art shows per year highlighting regional artists promoted to students and the community in Escanaba. Bay West hosts 3-5 artist exhibits annually, as well as the Art for All event each June. Eight to ten entertainers a year are brought in for students and promoted within the community.

The Bay College soccer fields are used by the area youth soccer league and walking trails and labyrinth are available for public use. The YMCA is housed on the campus and is open to the public. The PTK student group is involved with community service experiences. Bay West serves as the polling site for the Iron Mountain Second Precinct special, primary, and general elections.

Bay College hosts a Career Closet on the Escanaba and Iron Mountain campus. The Career Closet is a community resource for career and interview apparel for students and community members, free of charge. The clothing is donated by the surrounding community to benefit students and community members who may not be able to afford proper interview or work
apparel.
Bay College also hosts a food pantry on the Escanaba and Iron Mountain campuses. The food pantry was a collaborative effort across campus by administration, staff, the faculty association, and local community members. Students and community members are able to utilize the food pantry during posted operating hours.

## Economic Development Impact

An Economic Impact study completed in 2010 indicated Bay College has a $\$ 100$ million annual impact on Delta County. This is due to the education that has been delivered to over 140,000 students in the past 50 years, allowing citizens to work in higher paying jobs requiring job skills attained at Bay College. Having an educated work force encourages employers to move to Delta and Dickinson County and to stay in Delta and Dickinson County. Additionally, the College is one of the biggest employers in the County.

## Geographic Service Delivery Area(s)

Bay College serves Delta and Dickinson counties as well as surrounding counties in the Upper Peninsula. Many students from Northern Wisconsin also attend our campuses. Additionally, over sixty-eight percent of enrolled students take at least one online course, allowing us to cover the entire Upper Peninsula and beyond.


## BAY COLLEGE



Staffing and Enrollment

## Section III. Staffing and Enrollment

a. Current full and part-time student enrollment by academic program

| Degree Seeking Students | Fall 2017 | Fall 2018 | Fall 2019 | Fall 2020 | Fall 2021 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1,383 | 1,324 | 1,308 | 1,282 | 1,224 |

By Degree Program

| Associate in Arts | 436 | 432 | 443 | 571 | 632 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Associate in Science | 152 | 164 | 178 | 169 | 123 |
| Associate in Applied Science | 613 | 617 | 584 | 441 | 351 |
| Certificate | 182 | 111 | 103 | 101 | 118 |
| By Enrollment Status | 730 | 716 | 711 | 724 | 608 |
| Full Time | 653 | 608 | 597 | 558 | 616 |
| Part Time |  |  |  |  |  |
| By Course Location (Duplicate Count) | 911 | 870 | 834 | 796 | 690 |
| Escanaba | 337 | 298 | 298 | 256 | 224 |
| West | 671 | 744 | 752 | 887 | 864 |
| Online | 26 | 6 | 5 | 0 | 0 |
| Other | 1 | 10 | 62 | 29 | 5 |
| By Age Range | 726 | 724 | 733 | 762 | 596 |
| Less than 18 | 233 | 212 | 173 | 167 | 176 |
| $\mathbf{1 8}$ to 21 | 132 | 124 | 105 | 101 | 119 |
| $\mathbf{2 2}$ to 25 | 179 | 148 | 146 | 137 | 199 |
| $\mathbf{2 6}$ to 29 | 82 | 76 | 66 | 68 | 101 |
| $\mathbf{3 0}$ to 39 | 24 | 22 | 16 | 16 | 24 |
| $\mathbf{4 0}$ to 49 | 6 | 8 | 7 | 2 | 4 |
| $\mathbf{5 0}$ to 59 |  |  |  |  |  |
| $\mathbf{6 0}$ and $\mathbf{0 v e r}$ |  |  |  |  |  |


| Occupational |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A. Certificate Program | D | MQ | SC | OL | 2017 | 2018 | 2019 | 2020 | 2021 |
| 1. Accounting | x |  |  | x | 4 | 5 | 6 | 5 | 4 |
| 2. Automotive Maintenance Technician | x |  |  |  | 0 | 2 | 2 | 5 | 9 |
| 3. Automotive Master Technician | x |  |  |  | 0 | 1 | 3 | 4 | 6 |
| 4. Certified Medical Assistant | X |  |  |  | 0 | 0 | 0 | 7 | 13 |
| 5. Corrections Officer | x |  |  |  | 5 | 7 | 3 | 1 | 0 |
| 6. Early Childhood Care \& Education | x |  |  |  | 27 | 5 | 4 | 3 | 3 |
| 7. EMT - Basic |  |  |  |  | 9 | 6 | 5 | 4 | 5 |
| 8. Entrepreneurial / Small Business | x |  |  | x | 4 | 6 | 3 | 3 | 4 |
| 9. Health Careers | x |  |  |  | 13 | 17 | 11 | 10 | 8 |
| 10. Mechatronics | x |  |  |  | 3 | 5 | 3 | 2 | 6 |
| 11. Microsoft Office Specialist | x |  |  | x | 1 | 1 | 2 | 1 | 3 |
| 12. Office Assistant | x |  |  |  | 3 | 0 | 1 | 0 | 0 |
| 13. Practical Nursing | x |  |  |  | 59 | 12 | 22 | 20 | 29 |
| 14. Private Security | X |  |  |  | 0 | 1 | 1 | 0 | 0 |
| 15. Sustainability | x |  |  |  | 1 | 1 | 0 | 0 | 0 |
| 16. Water Technology |  |  |  | x | 0 | 0 | 1 | 4 | 4 |
| 17. Welding | x |  |  |  | 53 | 42 | 36 | 32 | 24 |
| B. Associate Degree | D | MQ | SC | OL | 2017 | 2018 | 2019 | 2020 | 2021 |
| 1. Accounting | X |  |  |  | 22 | 24 | 21 | 15 | 18 |
| 2. Accounting/Computer Spec. | x |  |  |  | 1 | 0 | 0 | 0 | 0 |
| 3. Agriculture | X |  |  |  | 0 | 0 | 1 | 1 | 2 |
| 4. Automotive Technology | X |  |  |  | 13 | 22 | 21 | 12 | 6 |
| 5. Business | x |  |  | x | 49 | 57 | 51 | 43 | 59 |
| 6. Computer Information Systems: Programming and Use | $x$ |  |  |  | 9 | 5 | 3 | 6 | 9 |
| 7. Computer Information Systems: Software/Network Su\| | X |  |  |  | 7 | 9 | 4 | 32 | 6 |
| 8. Computer Network Systems \& Security | X |  |  |  | 35 | 29 | 48 | 32 | 26 |
| 9. Corrections | x |  |  |  | 4 | 3 | 3 | 1 | 0 |
| 10. Criminal Justice | X |  |  |  | 0 | 0 | 17 | 36 | 35 |
| 11. Early Childhood Education | x |  |  |  | 22 | 26 | 24 | 25 | 26 |
| 12. Environmental Management | X |  |  |  | 2 | 1 | 4 | 2 | 2 |
| 13. General Studies | X |  |  |  | 179 | 203 | 183 | 100 | 19 |
| 14. Geographic Information Systems | X |  |  |  | 6 | 4 | 4 | 3 | 5 |
| 15. Human Services | x |  |  |  | 26 | 19 | 22 | 15 | 7 |
| 16. Law Enforcement | X |  |  |  | 22 | 24 | 14 | 2 | 0 |
| 17. Magnetic Resonance Imaging Technologist | X |  |  |  | 0 | 0 | 0 | 1 | 0 |
| 18. Marketing | X |  |  | x | 3 | 6 | 7 | 9 | 6 |
| 19. Mechatronics and Robotics Systems | X |  |  |  | 18 | 16 | 20 | 16 | 11 |
| 20. Nursing | X |  |  |  | 132 | 118 | 94 | 79 | 80 |
| 21. Occupational Studies | X |  |  |  | 0 | 0 | 0 | 0 | 2 |
| 22. Office Systems/ Administrative Assistant | X |  |  |  | 3 | 6 | 10 | 10 | 11 |
| 23. Office Systems/Medical Office Specialist | X |  |  |  | 25 | 18 | 10 | 3 | 0 |
| 24. Paramedic | X |  |  |  | 13 | 6 | 6 | 15 | 9 |
| 25. Water Resource Management | x |  |  |  | 22 | 21 | 17 | 15 | 12 |

$\mathrm{D}=$ Dickinson Campus, $\mathrm{MQ}=$ Marquette, $\mathrm{SC}=$ Schoolcraft, $\mathrm{OL}=$ Online

## b. Project enrollment patterns over next five years

Overall, Bay College expects enrollment to decline another 2 to $5 \%$ in the next five years. Assumptions used for this analysis include smaller high school graduating classes and declining unemployment rates in our service area. The decline in incoming students will be partially offset by the continuing expansion of Early College programs with more high schools, while Dual Enrollment of high school students is expected to remain stable. Additionally, enrollments for older students are expected to increase slightly with Reconnect Program enrollees.

Currently, over 70\% of Bay College's degree seeking students take online classes, with $29 \%$ of students enjoying all of their courses delivered in a full online format. There are also numerous courses that are being offered in hybrid environment, where a high percentage of the course is completed in the online environment, with minimal on campus visits required during the semester.

We continue to focus on growing our existing programs and studying areas where new programs may be needed in our local service area. We continue to utilize available studies and tools, specifically the Michigan Department of Technology, Management and Budget website for Michigan Bureau of Labor Market Information and Strategic Initiatives, to help identify future occupations for our specific labor market. We also have a committee dedicated to our Focus on the Future initiative, looking at up and coming programs, as well as best practices and enhancements in our program delivery, diversity and equity enhancements and student support services.
c. Evaluate enrollment patterns over last five years


d. Provide instructional staff/student and administrative staff/student ratios

|  | Fall 2017 | Fall 2018 | Fall 2019 | Fall 2020 | Fall 2021 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Degree Seeking Student | $\mathbf{1 , 3 8 3}$ | $\mathbf{1 , 3 2 4}$ | $\mathbf{1 , 3 0 8}$ | $\mathbf{1 , 2 8 2}$ | $\mathbf{1 , 2 2 4}$ |
| by employee types |  |  |  |  |  |
| Full-Time Faculty | 44 | 41 | 41 | 37 | 36 |
| Part-Time Faculty | 87 | 77 | 74 | 76 | 75 |
| Administrative Staff | 87 | 89 | 91 | 90 | 84 |
| Student to Faculty Ratio | 13 to 1 | 14 to 1 | 16 to 1 | 17 to 1 | 18 to 1 |
| Student to Administrative Staff* | 13 to 1 | 12 to 1 | 13 to 1 | 15 to 1 | 16 to 1 |

e. Project future staffing needs based on five-year enrollment estimates and future

Bay expects to reduce current employee levels over the next five years using reallocation of resources as a model.
f. Identify current average class size and projected average class size based on institution's mission and planned programming changes

|  | Fall 2017 | Fall 2018 | Fall 2019 | Fall 2020 | Fall 2021 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Degree Seeking Students | $\mathbf{1 , 3 8 3}$ | $\mathbf{1 , 3 2 4}$ | $\mathbf{1 , 3 0 8}$ | $\mathbf{1 , 2 8 2}$ | $\mathbf{1 , 2 2 4}$ |
| Term section and Course Date |  |  |  |  |  |
| Number of courses | 201 | 192 | 193 | 184 | 188 |
| Number of sections | 407 | 414 | 386 | 360 | 345 |
| Average class size | 12.6 | 12.6 | 13.4 | 13.9 | 15.3 |
| Average CR Hours/ Student | 10.5 | 10.9 | 10.9 | 10.9 | 10.4 |
| Average CT Hours/ Student | 12.1 | 12.4 | 12.2 | 12.2 | 11.7 |
| Course Capacity \% | $69 \%$ | $64 \%$ | $70 \%$ | $71 \%$ | $\mathbf{7 2 \%}$ |



## BAY COLLEGE



Facility Assessment

## Section IV. Facility Assessment

Bay de Noc Community College first opened its doors to students in the Fall of 1963 in downtown Escanaba. The College currently consists of two campuses located in Escanaba, Michigan and Iron Mountain, Michigan. The 150-acre main campus in Escanaba includes 12 buildings that total nearly 355,000 square feet with six major parking lots offering over 1,274 parking spaces and 42 handicap spaces. The 25 -acre campus in Iron Mountain includes a core building with 66,700 square feet and a separate storage building and one major parking lot, providing 304 spaces, 8 for handicap accessibility.

## A. Summary Description of Each Facility

## 1. MS 100 - Math and Science Building

Constructed in 1968, the Math and Science building was the first building constructed at the current Bay College site. A college greenhouse was added to the structure in a 1999 expansion. The building is currently 18,302 square feet and contains a greenhouse, three science laboratories, three classrooms, including two ITV classrooms, and 14 faculty offices. The building was renovated in summer 2016 to improve student circulation corridors, add collaboration areas, and improve classrooms. Boilers and circulation pumps were replaced in 2020. The exterior of the facility is brick and the overall condition of the building is good.

## 2. CB 200 - Catherine Bonifas Building

The Catherine Bonifas Building was constructed in 1970. Art and ceramics classrooms and administrative offices were added in 1999. Boilers were replaced in 2020. In 2021 fin-tube heating was updated, 2 roof top air handling units were added and new LED lamp posts were added to the North parking lot. The building is currently 28,428 square feet and contains an art classroom, a public art gallery, a ceramics classroom, nine general use classrooms, a board room, 16 administrative and support offices, and 20 faculty offices. The exterior of the facility is brick and the overall condition of the building is fair.

## 3. PEC 300 - Physical Education Center (formerly YMCA)

The PEC was constructed in 1970. A pool was added in 1989 and a fitness center in 1996. A 6,048 square foot addition was added to the building in 2019 for the Bay College athletes. This addition includes 4 offices, a training room, home and visiting locker rooms, a coach's locker room, a laundry facility, as well as storage for athletic gear. In 2021 the furnace and gym louvers were replaced, gym lighting was updated and
the weight room was renovated to add batting cages for the baseball and softball programs. The building is now 38,823 square feet including a basement to provide access to the pool mechanics. The building contains a gymnasium, pool, fitness center, 2 daycare rooms, and 6 administrative offices. The exterior of the facility is metal and brick and the overall condition of the building is good.

## 4. BHAT 400 - Besse Health and Technology (formerly known as HATC 400 - Health and Applied Technology Center)

The Besse Health and Technology building was constructed in 1974. In 2002 the combined chemistry/water technology labs were renovated. In 2014 the nursing lab and lecture areas were renovated and 880 sq. ft was added. In 2015 the computer networking and
security labs were renovated as well as a separating the chemistry lab from the water technology lab and providing Water Technology with its own dedicated space. Boilers were replaced in 2020 and in 2021 fin-tube heating was added and controls for 13 chemistry lab fume hoods were upgraded. The building is currently 50,565 square feet and contains automotive labs, a GIS lab, a Mechatronics lab, Water Technology lab and simulation area, nursing labs and simulation area, 3 computer networking and security labs, a large workroom for various lab activities, large lecture hall, chemistry labs, a Workforce Development \& Training lab, 6 administrative and support offices, 21 faculty offices, and 6 general use classrooms. The exterior of the facility is brick and the overall condition of the building is good.

## 5. SC 500-Student Service Center

The Student Service Center was constructed in 1970. A book store was added in 1999 and a kitchen in 2008. New boilers were installed in 2020 and in 2021 new fin-tube heating was added and the air handler over the Café was replaced. The building is currently 25,832 square feet and contains a kitchen with a café open to the public, a book store, student support services, human resources suite, counseling services, a small meeting/conference facility, and 20 administrative and support offices. The exterior of the facility is brick and the overall condition of the building is good.

## 6. SA 600-Student Apartments (North and South)

The student apartments were constructed in 1973. In 2021 an asbestos abatement project was completed. The north and south buildings total 21,100 square feet and consist of 21 four-person and 8 two-person
apartments. The exterior of the facility is brick and the overall condition of the buildings is fair.

## 7. BESSE 700 - Besse Center for Performing Arts

The Besse Center was constructed in 2008. A later addition connected the Learning Resource Center to the Student Service Center. The Besse Center is 13,343 square feet and contains a performing arts theatre, public art gallery, cashier's office, and an Art Coordinator's office. An additional 800 square feet was added in the summer of 2016 to expand a pinch point in a gallery corridor. The exterior of the facility is metal and the overall condition of the building is good.

## 8. HUB 800 (formerly known as LRC 800 - Learning Resource Center)

The HUB was constructed in 1987 and significantly renovated in 2016 at which time the building was renamed. The building is 37,457 square feet and contains a library, a computer classroom, the Student Success Center, Online Learning and Instructional Technology, Academic and Certification Testing, student gathering and study space, 19 support offices, art gallery storage, and a conference room. The exterior of the facility is metal and the overall condition of the building is good. In 2017 the exterior metal siding panels were sealed.

## 9. JHUC 900-Joseph Heirman University Center

The Joseph Heirman University Center was constructed in 1999. In 2021 a new building humidification system was installed and hallway lights were converted to LED. The building is 40,600 square feet and contains a computer lab open to the public, a catering kitchen, 3 large multipurpose conference rooms, 2 small seminar rooms, 6 computer classrooms, 4 general use classrooms, the EMT/Paramedic lab and classrooms, 9 administrative and support offices, 12 faculty offices, Workforce Development \& Training offices and computer lab, and an onsite University partner office suite. The exterior of the facility is metal and the overall condition of the building is good.

## 10. SHIP/WELD 1000 - Shipping \& Receiving and Welding

Originally used as a diesel shop, the Shipping and Receiving building was constructed in 1974. A welding laboratory was added in 1989 with the original addition renovated in 2015 doubling the size of the welding lab. The building is 26,250 square feet and contains two welding classrooms, two welding labs, a machine tool lab, 2 faculty offices, a large shipping and
receiving area, and a large outdoor storage area. The exterior of the original facility is metal and the overall condition is fair, however the new addition is in very good condition.

## 11. MAINT 1100 - Maintenance Building (Building 1 and Building 2)

The 2 Maintenance Buildings were constructed in 1970. The buildings total 17,878 square feet and contain a mechanical lab, 1 conference room, 6 support offices, 3 cold storage bays, 1 warm storage bay, and an extensive fenced exterior storage area. The exterior of the building is metal and the overall condition of the building is fair.

## 12. YMCA 2000 (formerly known as M-TECH 2000 - Michigan Technological Education Center)

The M-TEC building was constructed in 1999. For 22 years it housed Bay's Workforce Development \& Training Center. On February 15, 2021 the College entered into a 50-year lease with the Northern Lights YMCA to house the Delta Program Center. The YMCA completed a major renovation summer 2021 and opened for business in the fall. The building is 42,170 square feet. The exterior of the facility is aluminum and the overall condition of the building is good.

## 13. Extension Building

The Extension Building was constructed in 1972. The 5,000 square foot building is currently being leased by a private company. In 2021 a major renovation of the exterior was completed including the replacement of the wood façade with a metal façade, installation of new windows, cleaning and sealing of the wood siding and repair of the parking lot. The exterior of the facility is wood and metal and the overall condition of the building is good.

## 14. Bay College West Campus - Iron Mountain

The West Campus was constructed in 2006. The building is 66,700 square feet and contains a biology lab, a chemistry lab, a nursing simulation lab, a computer lab open to the public, a testing center, a large conference hall, 2 art galleries, 11 administrative and
support offices, 19 faculty offices, 10 general use classrooms, 3 ITV classrooms, a computer network and systems lab, and 4 computer classrooms. The exterior of the facility is metal and the overall condition of the facility is very good.

## 15. Bay College West Campus Maintenance

West Campus Maintenance Facility was constructed in 2009. The 1,800 square foot building is a storage and maintenance work area. The exterior of the building is metal and the overall condition is very good.

## B. Building and/or Classroom Utilization Rates

The 2021 fall semester classroom utilization rates are presented here. Reports are gathered from Bay's Academic Scheduling system and represent a reporting period from the first day of class, August 30, 2021 to the date the report was run October 7, 2021. Only classrooms and academic events are represented. Peak utilization represents M-F 10:00AM - 3:00PM, Off Peak utilization covers M-F 8:00AM - 10:00AM and $3: 00 \mathrm{PM}-5: 00 \mathrm{PM}$, and evening is represented by any class taught from 5:00PM - close.

## Besse Center (BESSE - 700)

 Location700 Besse Center Auditorium

## Besse Health and Technology (BHAT - 400)

 Location400 Mechatronics Lab

402E ITV Lab

402F Lab

402H Lab

403 WaterTech Dry Lab

403A WaterTech Classroom

403B Mix Sim

405 Automotive Classroom

408 Classroom

410 Classroom

413A Chemistry Lab

413B Chemistry Computer Lab

413C Water Chemistry Lab

414 Automotive Lab

420 Lecture Classroom

421 Lecture Auditorium

423 Lecture Classroom
424C Nursing Lab

Reporting Period: MTWThF, 8/30/2021 thru 10/7/2021 (29 days)
Peak Utilization 10AM-3PM All figures are percentages

| $8 a$ | $9 a$ | $10 a$ | $11 a$ | $12 p$ | $1 p$ | $2 p$ | $3 p$ | $4 p$ | $5 p$ | $6 p$ | $7 p$ | $8 p$ | $9 p$ | 10p | Average |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| 8a | 9a | 10a | 11a | 12p | 1p | 2 p | 3p | 4p | 5p | 6p | 7p | 8p | 9p | 10p | Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
|  |  | 34.5 |  | 41.4 | 34.5 | 41.4 | 34.5 |  |  |  |  |  |  |  | 31.0 |
|  |  | 31.6 |  | 41.4 | 34.5 | 41.4 | 34.5 |  |  |  |  |  |  |  | 30.6 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
|  |  | 79.3 | 66.1 | 39.7 | 79.3 | 79.3 | 79.3 |  |  |  |  |  |  |  | 70.5 |
|  |  | 48.9 | 37.9 | 12.6 | 17.2 | 37.9 | 37.9 |  |  |  |  |  |  |  | 32.1 |
|  |  | 83.3 | 75.9 | 50.9 | 45.7 | 24.1 | 32.8 |  |  |  |  |  |  |  | 52.1 |
|  |  | 34.5 |  |  |  | 37.9 | 37.9 |  |  |  |  |  |  |  | 18.4 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
|  |  | 34.5 | 20.7 | 20.7 | 20.7 | 41.4 | 37.9 |  |  |  |  |  |  |  | 29.3 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
|  |  | 31.6 |  | 58.6 | 51.7 | 76.4 | 31.0 |  |  |  |  |  |  |  | 41.6 |
|  |  | 64.7 | 17.2 |  |  | 3.4 | 3.4 |  |  |  |  |  |  |  | 14.8 |
|  |  | 41.4 | 41.4 | 41.4 | 41.4 | 41.4 | 35.1 |  |  |  |  |  |  |  | 40.3 |

424N Nursing Lab

426 Nursing Lab

## Catherine Bonifas Building (CB-200)

## Location

200 A Painting Classroom
200 D Classroom
200E Art Lab

218 Classroom

221 Classroom
222 Classroom
225 ITV Classroom
231 Classroom
232 Early Childhood Lab
233 Classroom

HUB - 800
Location

862 Multi-purpose

870 Computer Lab
Joseph Heirman University Center (JHUC - 900) Location

901 Classroom
903 Classroom

908A Computer Classroom
908B Computer Classroom
908C ITV Computer Classroom

908D Graphics Design Lab

$79.3 \quad 79.3$
79.3 $3 \quad 79.3$ 79.3

$\square$

909 Classroom

911 Classroom
952A North Conference Room

961 Classroom

963 ITV Classroom

972A High Bay North EMT

EMT/Paramedic Ambulance

## Math Science Building (MS - 100)

 Location110 Physics Classroom/Lab

112 Life Science Lab

116 Biology Lab

123 Classroom

124 ITV Lecture Classroom

125 ITV Lecture Classroom
Physical Education Complex (PEC - 300) Location

305 Classroom

360 Classroom

## Welding (WELD - 1000)

Location

1010 Welding Classroom

1011 Welding Classroom


| 8a | 10a | 11a | 12p | 1p | 2p | 3p | 4p | 5p | 6p | 7p | 8p | 9p | 10p | Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 26.4 | 58.6 | 55.2 | 15.8 | 62.1 | 51.7 |  |  |  |  |  |  |  | 45.0 |
|  | 20.7 | 17.2 |  | 20.7 | 17.2 |  |  |  |  |  |  |  |  | 12.6 |
|  | 34.5 | 14.4 |  |  | 20.7 | 17.2 |  |  |  |  |  |  |  | 14.5 |
|  | 33.6 | 66.1 |  | 66.1 |  |  |  |  |  |  |  |  |  | 27.6 |
|  | 59.5 | 79.3 | 59.5 | 59.5 |  |  |  |  |  |  |  |  |  | 43.0 |
|  | 48.9 | 3.4 | 1.7 |  | 79.3 | 26.4 |  |  |  |  |  |  |  | 26.6 |


| $8 a$ | $9 a$ | $10 a$ | $11 a$ | $12 p$ | $1 p$ | $2 p$ | $3 p$ | $4 p$ | $5 p$ | $6 p$ | $7 p$ | $8 p$ | $9 p$ | $10 p$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

West Campus
Location
8a 9a
10a 11a 12p 26

07 ITV Classroom

114 General Classroom

115 ITV Classroom

118 Classroom
119 Lecture

127 Lecture

129 Chemistry Lab

140 Nursing Lab

141 Nursing Lab

150 Biology Lab

231 Lecture Room (side A)

231 Lecture Room (side B)

234 Lecture

236 ITV Classroom

244 ITV Classroom

245 Lecture

251 Computer Classroom

252 Computer Classroom

257 ITV Computer Classroom

264 CNSS Computer Classroom


Reporting Period: MTWThF, 8/30/2021 thru 10/7/2021 (29 days)
Off-Peak Utilization 8AM-10AM
All figures are percentages

Besse Health and Technology (BHAT - 400) Location

400 Mechatronics Lab
402E ITV Lab

402F Lab
402H Lab
403 WaterTech Dry Lab

403A WaterTech Classroom

403B Mix Sim

405 Automotive Classroom

408 Classroom

410 Classroom

413A Chemistry Lab

413B Chemistry Computer Lab
413C Water Chemistry Lab

414 Automotive Lab

420 Lecture Classroom

421 Lecture Auditorium

423 Lecture Classroom

424C Nursing Lab

424N Nursing Lab

426 Nursing Lab


| Catherine Bonifas Building (CB-200) Location | 8a | 9a | 10a | 11a | 12p | 1p | 2p | 3p | 4p | 5p | 6p | 7p | 8p | 9p | 10p | Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 200 A Painting Classroom |  |  | 20.7 |  |  |  |  |  |  |  |  |  |  |  |  | 6.9 |
| 200 D Classroom |  | 29.3 | 30.2 |  |  |  |  |  |  |  |  |  |  |  |  | 19.8 |
| 200E Art Lab |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
| 218 Classroom |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
| 221 Classroom | 79.3 | 72.7 | 79.3 |  |  |  |  |  |  |  |  |  |  |  |  | 77.1 |
| 222 Classroom |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
| 225 ITV Classroom |  |  | 87.4 |  |  |  |  |  |  |  |  |  |  |  |  | 29.1 |
| 231 Classroom | 6.9 | 6.9 | 6.9 |  |  |  |  |  |  |  |  |  |  |  |  | 6.9 |
| 232 Early Childhood Lab |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
| 233 Classroom |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
| HUB - 800 <br> Location | 8a | 9a | 10a | 11a | 12p | 1p | 2p | 3p | 4p | 5p | 6p | 7p | 8p | 9p | 10p | Average |
| 862 Multi-purpose |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
| 870 Computer Lab |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
| Joseph Heirman University Center (JHUC - 900) Location | 8a | 9a | 10a | 11a | 12p | 1p | 2p | 3p | 4p | 5p | 6p | 7p | 8p | 9p | 10p | Average |
| 901 Classroom |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
| 903 Classroom |  |  | 66.1 |  |  |  |  |  |  |  |  |  |  |  |  | 22.0 |
| 908A Computer Classroom |  | 20.7 | 31.0 |  |  |  |  |  |  |  |  |  |  |  |  | 17.2 |
| 908B Computer Classroom | 15.8 | 58.6 | 62.6 |  |  |  |  |  |  |  |  |  |  |  |  | 45.7 |
| 908C ITV Computer Classroom | 17.2 | 34.5 |  |  |  |  |  |  |  |  |  |  |  |  |  | 17.2 |
| 908D Graphics Design Lab |  |  | 20.7 |  |  |  |  |  |  |  |  |  |  |  |  | 6.9 |
| 908E Computer Classroom | 17.2 | 44.8 | 15.5 |  |  |  |  |  |  |  |  |  |  |  |  | 25.9 |
| 908J Classroom |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |



961 Classroom

Math Science Building (MS - 100) Location

110 Physics Classroom/Lab

112 Life Science Lab

116 Biology Lab

123 Classroom

124 ITV Lecture Classroom

125 ITV Lecture Classroom

Physical Education Complex (PEC - 300) Location

305 Classroom

360 Classroom
8a 9a


Welding (WELD - 1000)
Location
8a 9a
10a
$6.9 \quad 41.4$
43.7
$13.8 \quad 9.2$

015 Welding Lab

1020 Welding Lab

| 107 ITV Classroom | 34.5 |  |  | 11.5 |
| :---: | :---: | :---: | :---: | :---: |
| 114 General Classroom |  |  |  | 0.0 |
| 115 ITV Classroom |  |  |  | 0.0 |
| 118 Classroom |  | 41.4 | 41.4 | 27.6 |
| 119 Lecture | 20.7 | 17.2 |  | 12.6 |
| 127 Lecture |  | 34.5 | 79.3 | 37.9 |
| 129 Chemistry Lab |  |  |  | 0.0 |
| 140 Nursing Lab |  |  |  | 0.0 |
| 141 Nursing Lab | 37.9 | 37.9 | 37.9 | 37.9 |
| 150 Biology Lab |  |  | 20.7 | 6.9 |
| 231 Lecture Room (side A) | 17.2 | 14.4 | 34.5 | 22.0 |
| 231 Lecture Room (side B) |  |  |  | 0.0 |
| 234 Lecture |  |  |  | 0.0 |
| 236 ITV Classroom |  |  | 79.3 | 26.4 |
| 244 ITV Classroom |  | 48.9 |  | 16.3 |
| 245 Lecture |  |  | 41.4 | 13.8 |
| 251 Computer Classroom | 19.0 | 28.4 | 31.6 | 26.3 |
| 252 Computer Classroom |  |  |  | 0.0 |
| 257 ITV Computer Classroom |  |  |  | 0.0 |
| 264 CNSS Computer Classroom |  |  |  | 0.0 |

## Besse Center (BESSE - 700) <br> Location

700 Besse Center Auditorium

Besse Health and Technology (BHAT - 400) Location

400 Mechatronics Lab

402E ITV Lab

402F Lab

402H Lab
403 WaterTech Dry Lab

403A WaterTech Classroom

405 Automotive Classroom

408 Classroom

410 Classroom

413A Chemistry Lab

413B Chemistry Computer Lab

413C Water Chemistry Lab

414 Automotive Lab

420 Lecture Classroom

421 Lecture Auditorium

423 Lecture Classroom

424C Nursing Lab

424N Nursing Lab

Reporting Period: MTWThF, 8/30/2021 thru 10/7/2021 (29 days) Off-Peak Utilization 3PM-5PM All figures are percentages


426 Nursing Lab

Catherine Bonifas Building (CB-200)
Location

200 A Painting Classroom

200 D Classroom

200E Art Lab

218 Classroom

221 Classroom

222 Classroom

225 ITV Classroom

231 Classroom

232 Early Childhood Lab

233 Classroom

HUB - 800
Location

862 Multi-purpose

870 Computer Lab

Joseph Heirman University Center (JHUC - 900) Location

901 Classroom

903 Classroom

908A Computer Classroom

908B Computer Classroom

908C ITV Computer Classroom
908D Graphics Design Lab
908E Computer Classroom


908J Classroom

909 Classroom

911 Classroom

952A North Conference Room

961 Classroom

963 ITV Classroom

972A High Bay North EMT

972B High Bay South EMT

EMT/Paramedic Ambulance

Math Science Building (MS - 100) Location

110 Physics Classroom/Lab

112 Life Science Lab

116 Biology Lab

123 Classroom

124 ITV Lecture Classroom

125 ITV Lecture Classroom

Physical Education Complex (PEC - 300) Location

305 Classroom

360 Classroom

## Welding (WELD - 1000) <br> Location

1010 Welding Classroom

1011 Welding Classroom

1015 Welding Lab



## Besse Health and Technology (BHAT - 400)

 Location400 Mechatronics Lab

402E ITV Lab

402F Lab

402H Lab

403 WaterTech Dry Lab

403A WaterTech Classroom

403B Mix Sim

405 Automotive Classroom

408 Classroom

410 Classroom

413A Chemistry Lab

413B Chemistry Computer Lab

413C Water Chemistry Lab

414 Automotive Lab

420 Lecture Classroom

421 Lecture Auditorium

423 Lecture Classroom

424C Nursing Lab

424N Nursing Lab

426 Nursing Lab

Reporting Period: MTWThF, 8/30/2021 thru 10/7/2021 (29 days)
Evening Utilization 5PM -10PM
All figures are percentages
8a 9a 11a

12p 1p 2p 3p
8a 9a 10a 11a 12p 1p 2p 3p 4 4p
34.5
$20.7 \quad 20.7$
$37.9 \quad 37.9 \quad 31.6$ ..... 17.9
24.1$17.2 \quad 14.4$5.3
$20.7 \quad 17.2$ ..... 6.3
$\begin{array}{lll}6.9 & 6.9 & 5.7\end{array}$3.3

| 8a | 9 a | 10a | 11a | 12p | 1p | 2p | 3p | 4p | 5p | 6 p | 7p | 8p | 9p | 10p | Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
|  |  |  |  |  |  |  |  |  | 34.5 | 20.7 |  |  |  |  | 9.2 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
| 8a | 9a | 10a | 11a | 12p | 1p | 2p | 3p | 4p | 5p | $6 p$ | 7p | 8p | 9p | 10p | Average |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
| 8 a | 9a | 10a | 11a | 12p | 1p | 2p | 3p | 4p | 5p | 6 p | 7p | 8p | 9p | 10p | Average |
|  |  |  |  |  |  |  |  |  |  | 17.2 | 17.2 | 12.9 |  |  | 7.9 |
|  |  |  |  |  |  |  |  |  | 31.6 |  |  |  |  |  | 5.3 |
|  |  |  |  |  |  |  |  |  | 3.4 |  |  |  |  |  | 0.6 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
|  |  |  |  |  |  |  |  |  |  | 41.4 | 20.7 |  |  |  | 10.3 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.0 |

911 Classroom

961 Classroom

963 ITV Classroom

972A High Bay North EMT
972B High Bay South EMT

EMT/Paramedic Ambulance

Math Science Building (MS - 100) Location

110 Physics Classroom/Lab

112 Life Science Lab

116 Biology Lab

123 Classroom

124 ITV Lecture Classroom

125 ITV Lecture Classroom
Physical Education Complex (PEC - 300) Location

305 Classroom

360 Classroom

Welding (WELD - 1000)
Location

1010 Welding Classroom

1011 Welding Classroom
1015 Welding Lab

1020 Welding Lab

## West Campus

Location5.2

| 107 ITV Classroom |  |  |  |  | 0.0 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 114 General Classroom |  |  |  |  | 0.0 |
| 115 ITV Classroom |  |  |  |  | 0.0 |
| 118 Classroom |  |  |  |  | 0.0 |
| 119 Lecture | 17.2 |  |  |  | 2.9 |
| 127 Lecture | 41.4 | 34.5 |  |  | 12.6 |
| 129 Chemistry Lab |  |  |  |  | 0.0 |
| 140 Nursing Lab |  |  |  |  | 0.0 |
| 141 Nursing Lab |  |  |  |  | 0.0 |
| 150 Biology Lab |  |  |  |  | 0.0 |
| 231 Lecture Room (side A) |  |  |  |  | 0.0 |
| 231 Lecture Room (side B) |  |  |  |  | 0.0 |
| 234 Lecture | 20.7 | 15.5 |  |  | 6.0 |
| 236 ITV Classroom |  |  |  |  | 0.0 |
| 244 ITV Classroom | 37.9 | 31.6 |  |  | 11.6 |
| 245 Lecture | 31.6 |  |  |  | 5.3 |
| 251 Computer Classroom |  |  |  |  | 0.0 |
| 252 Computer Classroom |  |  |  |  | 0.0 |
| 257 ITV Computer Classroom | 41.4 | 20.7 |  |  | 10.3 |
| 264 CNSS Computer Classroom | 34.5 | 41.4 | 41.4 | 34.5 | 25.3 |

## C. Mandated Facility Standards for Specific Programs

Bay College meets general space requirements as noted in federal accreditation standards. This includes meeting higher levels of space and equipment standards for specific programs such as Early Childhood Education, Nursing, Automotive, Biology and Chemistry laboratories, EMT/Paramedic, Welding, Water Technology, and Mechatronics. Bay College is at capacity for meeting programmatic needs and will require additional space for program growth.

## D. Functionality of Existing Structures and Space Allocation to Program Areas Served

## a. MS 100 - Math and Science Building

Serves academic division Math and Sciences and contains a greenhouse that supports both academic and community activities.

## b. CB 200-Catherine Bonifas Building

Serves primarily the Arts \& Letters and Social \& Behavioral Sciences academic divisions. The Early Childhood Education program is supported in this building.
Administration is also located in this building.

## c. PEC 300 - Physical Education Complex

Supports students in providing physical activities and wellness opportunities. Supports college athletics. The pool area of this building is leased to the local YMCA.

## d. BHAT 400 - Besse Health and Technology

Serves academic divisions Allied Health \& Wellness, Applied Science, Technology, Math \& Science, Mechatronics, and provides general use of several classrooms. This building also provides a dedicated training lab for the Workforce Development \& Training group as well as a leased space for a local hospital's off-site training facility.

## e. SC 500 - Student Center

No academic divisions have specific space allocations in this building. It serves students in a support capacity and houses Student Services, Human Resources, the Café, Food Pantry, Career Closet, and the Bookstore.

## f. SA 600 - Student Apartments

Provides student housing, no direct academic allocations.

## g. BESSE 700 - Besse Center for Performing Arts

Serves Arts \& Letters academic division, mostly Theater, as well as Music.
h. HUB 800 (formerly known as LRC $\mathbf{8 0 0}$ - Learning Resource Center)

No academic divisions have specific space allocations in this building. It serves students in a support capacity and provides one general use computer classroom and one multipurpose classroom along with ample study space, collaboration space, and hospitality. Academic Support Services, including TRiO, tutoring, accessibility, and online learning reside in this building as well as academic and certification testing through the Testing Center and the college's Library.

## i. JHUC 900 - Joseph Heirman University Center

Serves Business \& Technology and Allied Health academic divisions, Graphic Arts, and Workforce Development \& Training, as well as provides general use of several classrooms. This building also provides classroom and office space for University partners.

## j. SHIP/WELD 1000 - Shipping \& Receiving and Welding

Serves Technology division, specifically the Welding and Machine Tool classes.

## k. MAINT 1100 - Maintenance Building

No academic divisions have specific space allocations in this building. It serves students in a support capacity.

## I. YMCA 2000 (formerly known as M-TEC 2000 - Michigan Technological Educational Center)

This building is no longer serving academic programs nor Workforce Development \& training. All College programs have been moved to other locations. The local YMCA is occupying this space under a 50 -year lease.
m. Extension Building

No academic divisions have specific space allocations in this building. This is a leased building.
n. Bay College West Campus - Iron Mountain

Single campus building serves all academic divisions, including Welding courses taught in collaboration with the local ISD.

## o. Bay College West Campus Maintenance

No academic divisions have specific space allocations in this building. It serves students in a support capacity.

## E. Replacement Value of Existing Facilities

The replacement value for each building is shown below.

| Building | Building Value |
| :--- | ---: |
| MS 100 | $5,422,100$ |
| CB 200 | $8,054,300$ |
| PEC 300 | $10,133,700$ |
| BHAT 400 | $15,732,800$ |
| SC 500, BESSE 700, HUB 800 | $30,688,400$ |
| SA 600 \# 1 | $2,546,700$ |
| SA 600 \# 2 | $2,988,800$ |
| SHIP/ WELD 1000 | $3,788,900$ |
| MAINT 1100 | 951,900 |
| JHUC 900 | $12,523,000$ |
| MTEC 2000 | $5,009,700$ |
| West Campus | $14,165,800$ |
| West Campus Maintenance | 102,000 |
| Extension Center Building | $1,117,200$ |
| Soccer Fields Building | 68,500 |
| Salt Storage | 29,700 |
| Career Closet Portable | 8,200 |
| Cold Storage Pole Building | 69,900 |
| MAINTENANCE STORAGE | 456,900 |
| Total | $\mathbf{1 1 3 , 8 5 8 , 5 0 0}$ |

## F. Utility System Condition

The condition of each building is reflected in the following table:

MS 100 - MATH AND SCIENCE BUILDING

| Building Exterior | Description | Comments/Condition |
| :--- | :--- | :--- |
| Walls | Face brick on concrete block. Metal fascia <br> (painted). | Sound condition of existing walls |
| Windows | Aluminum frames with insulating glass. Glazed <br> greenhouse panels on aluminum frame with <br> vent window system. | Degraded, requires replacement |
| Doors/Frames | Hollow metal doors and frames. <br> Main entrances aluminum. | Fair condition |
| Roof | EPDM ballasted membrane | Replaced in 2016 during renovation <br> project |
| Building Interior | Description | Comments/Condition |
| Walls | Concrete block partitions. Face brick <br> in vestibules. | Very good, repair and paint summer <br> 2016 |
| Floors/Coverings | Terrazzo tile and concrete in corridors. <br> Ceramic tile in bathrooms. Vinyl tile in <br> offices and carpet in classrooms. | Terrazzo tile is in good condition, <br> concrete in excellent condition. Carpet <br> in classrooms replaced in summer 2016 |
| Doors/Frames | Hollow metal / wood. | Partial renovation in 2016 introduced <br> several new doors/frames and <br> repainting of existing door frames |
| Ceiling | Suspended acoustical throughout. | Fair in science labs. Excellent <br> condition in corridors renovated in <br> 2016 |
| Electrical | Description | Comments/Condition |
| Medium Voltage <br> Connection and main <br> Transformer | Fed from 3 single phase 25kVA <br> transformers in cabinet outside building. | Transformers are 30+ years old. <br> Medium voltage cable into cabinet is <br> about 25 years old. Condition of <br> equipment is marginal. Should plan <br> replacement in near future. |
| Interior Lighting | Fluorescent and LED | Equipment is 30+ years old, and is <br> satisfactory for the present. Needs <br> to be upgraded if building usage <br> changes. |
| Building Service <br> Equipment and <br> Panels | Consists of one 400A, 3-phase 208Y/120V <br> Cutler Hammer main panel board. Multiple <br> branch panels. | In 2016 renovated areas all <br> receptacles upgraded |
| Exterior Lighting | Over doors | Upgraded corridor and classroom <br> lighting to LED in summer 2016. Non- <br> renovated spaces remain fluorescent. |
| Emergency and Exit <br> Lighting | Systems | Good-Replaced 2010 |
| Computer Wiring | CAT 6 wiring has been installed. | Sata panel updated |
| Marginal |  |  |


| Plumbing | Description | Comments/Condition |
| :--- | :--- | :--- |
| Water/Sewer | Municipal | Good condition |
| Piping/Valves/Fitting |  | Satisfactory. Some leak stains in <br> mechanical areas. |
| Domestic Hot Water | Gas water heater | New in 2014 |
| HVAC | Description | Comments/Condition |
| Fuel | Natural gas | (2) Riello AR1000 boilers (2) Grundfos CRE <br> pumps |
| Boilers | Fin radiation, cabinet heaters, unit ventilators, <br> and air handling units with heating coils. <br> pumps in 2020. |  |
| Heating Type | Fair |  |
| Ventilation | Outside air-thru unit ventilators and air <br> handling units. Exhaust system in toilets, lab <br> fume hoods, and greenhouse addition. | Fair |
| Air Conditioning/ Coils | Cooling coils in unit ventilators. | Partial cooling - Good |
| Temperature Controls | Pneumatic controls |  |

## CB 200 - CATHERINE BONIFAS BUILDING

| Building Exterior | Description | Comments/Condition |
| :--- | :--- | :--- |
| Walls | Face brick on concrete block. Metal fascia. | Good |
| Windows | Aluminum sash | Need replacement in 83\% of building, <br> $17 \%$ replaced in 1999. |
| Doors/Frames | Wood / hollow metal | Excellent on new addition. <br> Marginal on original building. |
| Roof | EPDM ballasted membrane | Year new: 2014 |
| Building Interior | Description | Comments/Condition |
| Walls | Concrete block partitions. Drywall in <br> administrative. Brick in vestibules. <br> Glass partition walls. | Fair |
| Floors/Coverings | Terrazzo in corridors. Ceramic tile in <br> bathrooms. Carpet in administrative, faculty <br> offices, classrooms. Vinyl tile in service areas. | Fair, dated and cracking |
| Doors/Frames | Wood / hollow metal | Fair |
| Ceiling | Suspended acoustical throughout | Fair |


|  | Renovation/addition in 1999 | Seating in large lecture hall needs replacement and redesign of room is necessary for student learning and ADA. |
| :---: | :---: | :---: |
| Electrical | Description | Comments/Condition |
| Medium Voltage Connection and Main Transformer | Fed from 3 single phase 25 kVA transformers in cabinet outside building. MV connection from northernmost electrical vault. | Transformers and medium voltage cable are 35 years old. Requires assessment and upgrade. |
| Secondary voltage and Building Main Service Equipment | Main panel is 400A, 3-phase, 208Y/120V ITE switchboard. | Equipment is $35+$ years old. Requires assessment and upgrade. |
| Branch and <br> Distribution Panels | Most equipment is original (1970). | Replacement needed for future expansion. |
| General Receptacles |  | Fair |
| Interior Lighting | T-8 fluorescent fixtures with electronic ballasts | Fair |
| Exterior Lighting |  | Added (6) new LED lamp posts to North parking lot in 2021. West parking lot needs upgrades. |
| Emergency and Exit Lighting |  | Satisfactory - meets codes |
| Computer Wiring | CAT 6 network cable has been installed throughout. | Excellent |
| Security and Special Systems | Fire alarm panel installed. | Replaced 2011 |
| Plumbing | Description | Comments/Condition |
| Water/Sewer | Municipal | Fair. Needs Upgrade |
| Piping/Valves/Fitting |  | Fair. Needs Upgrade |
| Domestic Hot Water | Gas water heater | Fair. Needs Upgrade |
| HVAC | Description | Comments/Condition |
| Fuel | Natural gas | Good |
| Boilers | (2) Riello AR1500 boilers. | Replaced boilers in 2020. |
| Heating Type | Fin radiation, cabinet heaters, air handling units with heating coils. Hot water - pumped distribution. | Updated fin-tube heating and added (2) rooftop units in 2021 that provide auxiliary heat for offices 204-217. |
| Ventilation | Fresh air-thru-air handling units. Exhaust systems-toilets, janitor room, kiln. | Unsatisfactory |
| Air Conditioning/ Coils | Chilled water coils added to air handling units in 1999. | fair |
| Temperature Controls | Original Honeywell pneumatic controls with Robert-Shaw used in recent renovation | Unsatisfactory |

## PEC 300 - Physical Education Complex

| Building Exterior | Description | Comments/Condition |
| :---: | :---: | :---: |
| Walls | Face brick on concrete block 1st 7 ft .26 gauge steel panels to gym height 30 ft . addition: Face brick on concrete block. Upper 4 ft . metal fascia. | Original siding is in good condition. New addition for Bay College athletic locker rooms in 2019. |
| Windows | Aluminum sash/wood | Needs replacement on original building. Excellent on new addition in 2019. |
| Doors/Frames | Aluminum frame entry with vestibule | Energy efficiency upgrades needed to this entry. |
| Roof | Insulated PVC overlay on everything except pool addition | Roof over gym and YMCA facilities is new in 2015. Roof over pool and exercise area in satisfactory condition (assessed 2021). Roof over athletic addition new in 2019. |
| Building Interior | Description | Comments/Condition |
| Walls | Concrete block partitions throughout. Ceramic tile wall finish in locker rooms. Ceramic tile wainscot and textured concrete block in pool. Few gypsum board partitions. | Acceptable. Removed glass partition wall to make room for batting cages in exercise/weight room area in 2021 |
| Floors/Coverings | Upgraded tile in corridors and CR's. Ceramic tile in locker rooms, spa/sauna, corridor, and pool. Hardwood in gymnasium. Carpet in fitness center, child care center, offices. Rubber floor in weight room. | Acceptable interior finishes with a completed refinishing of the gym floor in summer 2021. |
| Doors/Frames | Hollow metal / wood | Fair |
| Ceiling | Suspended acoustical throughout. Exposed tees in pool. | Fair. Removed drop ceiling in exercise/weight room area to make room for batting cages. |
| Electrical | Description | Comments/Condition |
| Medium Voltage Connection and Main Transformer | Consists of 3 single phase 50kVA transformers in cabinet outside 100 building. | Transformers and MV cable are 2530 years old. Equipment shares cabinet with 100 building. Should relocate closer to PEC and replace equipment in near future. |
|   <br> Secondary  <br> voltage and <br> Building Main <br> Service  <br> Equipment  | Consists of 1-800A switch, underground secondary run, and 1-800A 208Y120V distribution panel. | Main underground feeder is quite long for the voltage. Main distribution panel has two empty breaker spaces left. Very little room for expansion. |
| Branch and |  | All branch panels are full |
| General Receptacles |  | Good |
| Interior Lighting | Most are newer fluorescent with T8 lamps. | Needs LED retrofits and energy efficiency. Updated Gym lighting in 2021. |


| Exterior Lighting |  | Needs updating, safety issue. |
| :--- | :--- | :--- |
| Emergency and Exit <br> Lighting |  | Satisfactory - meets codes |
| Computer Wiring | CAT 5 wiring throughout. | Satisfactory |
| Security and Special <br> Systems | Fire alarm system needs updating | Satisfactory |
| Plumbing | Description | Comments/Condition |
| Water/Sewer | Municipal | Sewer drains slow outside of building <br> and needs updating. |
| Piping/Valves/Fitting |  | Satisfactory |
| Domestic Hot Water |  | Satisfactory |
| HVAC | Natural gas | Comments/Condition |
| Fuel | High efficient | Replaced in 2008-2010, with the <br> exception of boilers below the pool <br> area, which require replacement. |
| Boilers | Fin radiation, cabinet heaters, convectors <br> High efficient forced air in Gym | Satisfactory <br> Good 2010-2012. Replaced furnace <br> for classroom areas in 2021. |
| Heating Type | Satisfactory. Replaced Gym louvers in <br> 2021. |  |
| Ventilation | There is no A/C in the gym and A/C is |  |
| insufficient in many areas of the |  |  |
| building. |  |  |

## BHAT 400 - Besse Health and Technology

| Building Exterior | Description | Comments/Condition |
| :--- | :--- | :--- |
| Walls | Face brick on concrete. Metal fascia. | Satisfactory |
| Windows | Aluminum sash | Satisfactory |
| Doors/Frames | Hollow metal | Satisfactory |
| Roof | EPDM ballasted membrane | Year new: 2000 |
| Building Interior | Description | Comments/Condition |
| Walls | Concrete block partitions. Drywall partitions in <br> office area. Interior drywall partitions - 1998 | Good |
| Floors/Coverings | Terrazzo in corridors. Vinyl tile in classrooms. <br> Ceramic tile in bathrooms. Carpet in offices <br> and computer labs. | Good |


| Doors/Frames | Hollow metal / wood. | Satisfactory |
| :---: | :---: | :---: |
| Ceiling | Suspended acoustical in classrooms and offices. | New in hallways; Nursing replaced in 2013, South end replaced in 2015 |
| Comments: |  |  |
| Electrical | Description | Comments/Condition |
| Medium Voltage Connection and main Transformer | Consists of 3 single phase 100kVA transformers in outdoor cabinet. MV cable comes from vault near 100 building. | Transformers and MV cable are 25 years old. Should plan on replacement in the near future. |
| Secondary voltage and building main service equipment | Have a 2000A main breaker in the 208Y/120V 3 -phase switchboard. | No available space for expansion |
| Branch and distribution panels |  | Acceptable |
| General Receptacles |  | Good |
| Interior Lighting | Most are newer or upgraded fluorescent with T 8 lamps. | Satisfactory |
| Exterior Lighting |  | Satisfactory |
| Emergency and Exit Lighting |  | Good - meets codes |
| Computer Wiring | CAT 5 wiring installed throughout. | Satisfactory |
| Security and Special Systems | Fire Alarm system updated 2010 | Good |
| Comments: |  |  |
| Plumbing | Description | Comments/Condition |
| Water/Sewer |  | Good |
| Piping/Valves/Fitting |  | Satisfactory |
| Domestic Hot Water | Natural gas water heater | Satisfactory |
| HVAC | Description | Comments/Condition |
| Fuel | Natural gas | Good |
| Boilers | (3) Riello AR1000 boilers | Replaced boilers- in 2020. |
| Heating Type | Fin radiation, cabinet heaters, air handling units with duct heating coils. | Added fin-tube heating to 222B, C, F, G and H in 2021. |
| Ventilation | Fresh air-to-air handling units. Exhaust system for toilets, janitor room, automotive lab, chemistry fume hoods, and chemical storage | Satisfactory Upgraded Phoenix controls for 13 chemistry fume hoods in 2021. |
| Air Conditioning/ Coils | Direct expansion R-22 coils with remote condensing units on roof - 4 zones electronics and nursing lab. | Good - Replaced 2006 |
| Temperature Controls | Pneumatic controls | Satisfactory |

## SC 500 - STUDENT CENTER/Student Services/Café/Bookstore

| Building Exterior | Description | Comments/Condition |
| :--- | :--- | :--- |
| Walls | Face brick on concrete. Metal fascia. | Good - Ongoing maintenance |
| Windows | Aluminum sash | Excellent north and northwest |
| Doors/Frames | Hollow metal/wood | Excellent - new |
| Roof | EPDM ballasted membrane | Replaced in 2019. |
| Building Interior | Description | Concrete block partitions. Stack bond masonry <br> block walls (partial vinyl surface drywall). <br> Gypsum board partitions in administrative <br> offices. |
| Walls | Good |  |
| Floors/Coverings | Vinyl tile in cafeteria and corridors; ceramic <br> tile in bathrooms/kitchen; carpet in offices; <br> flagstone in lounge area; ceramic/porcelain <br> tile in kitchen and café. | Kitchen/cafeteria and TV and game <br> room are new floors. |
| Domestic Hot Water | Gas water heaters | Bathrooms require upgrades. |
| DVAC | Description | New |
| Ceiling | Suspended acoustical. Exposed fiberglass in <br> cafeteria. | Offices have new tile. |
| Electrical | Desing/Valves/Fitting | Pipe insulation-fiberglass |


| Fuel | Natural gas | Good |
| :--- | :--- | :--- |
| Boilers | (1) Riello AR1000 (1) Riello AR1500 boiler | New boilers in 2020. |
| Heating Type | Fin radiation, cabinet heaters, heating <br> coils. Hot water - pumped distribution. | Satisfactory. New fin-tube heating for <br> rooms 503, 504 and 505 in 2021. |
| Ventilation | Fresh air-to-air handling units. Exhaust <br> - toilets, kitchen hoods, locker room. | Satisfactory. Replaced air handler for <br> Cafeteria in2021. (2) RTU/Air units <br> for West end of building need <br> replacement. |
| Air Conditioning/ Coils | R-22 direct expansion cooling; zoned <br> system including kitchen. | Satisfactory |
| Temperature Controls | Pneumatic controls | Need upgrading. |

## SA 600 - College Apartments

| Building Exterior | Description | Comments/Condition |
| :--- | :--- | :--- |
| Walls | Face brick on concrete block. Metal fascia. | Top half needs paint |
| Windows | Aluminum sash | Need replacing |
| Doors/Frames | Wood/wood | South side replaced (good); north <br> side original (poor) |
| Roof | EPDM ballasted membrane | Year new: 1995 |
| Building Interior | Description | Comments/Condition <br> Walls <br> with drywall. |
| Floors/Coverings at unit walls. Wood frame | Acceptable |  |
| Doors/Frames | Wood with plastic laminate | All flooring removed in 2021 and <br> asbestos abatement project <br> completed. |
| Ceiling | Drywall/Drop in | Fair |
| Comments: | Fair |  |
| Electrical | Student apartments need <br> modernization and energy <br> efficiency improvements. |  |
| Medium Voltage <br> Connection and Main <br> Transformer | Fed from 1 single phase 50kVA transformer <br> in a pad-mount cabinet. Utility connection <br> and meter is on pole along railroad tracks. <br> Underground primary. | The transformer and primary <br> underground cable are 25+ years <br> old. Replacement should be <br> planned for in the near future. |
| Secondary voltage and <br> building main service <br> equipment | Each apartment complex has a 600A, <br> single phase, 240/120V service. | All equipment is original (about 25 <br> years old) and is adequate. Should <br> consider equipment upgrades if <br> any major renovation is planned <br> or if the building usage changes. |


| Branch and distribution <br> panels |  | Should replace older panels <br> as repair and replacement <br> parts are becoming difficult <br> to obtain. |
| :--- | :--- | :--- |
| General Receptacles |  | Good |
| Interior Lighting |  | Marginal |
| Exterior Lighting |  | Marginal |
| Emergency and Exit <br> Lighting |  | None |
| Computer Wiring |  | Minimal, needs upgrading |
| Security and Special <br> Systems |  | Poor |
| Plumbing | Description | Comments/Condition |
| Water/Sewer | Municipal | Pood <br> discovered in 2018. Replacement <br> is required. |
| Piping/Valves/Fitting |  | Good - New 2010 |
| Domestic Hot Water | Water maker | Comments/Condition |
| HVAC | Description | Good |
| Fuel | Natural gas | Good - new in 2011 |
| Boilers | High efficient | Satisfactory |
| Heating Type | Sin radiation | No A/C |
| Ventilation | Toilets exhaust | Satisfactory |
| Air Conditioning/Coils | N/A |  |
| Temperature Controls |  |  |

SA 600 - College Apartments

| Building Exterior | Description | Comments/Condition |
| :--- | :--- | :--- |
| Walls | Face brick on concrete block. Metal fascia. | Top half needs to be painted |
| Windows | Aluminum sash | Thermopane |
| Doors/Frames | Wood | South side replaced (good); north <br> side original (poor) |
| Roof | EPDM ballasted membrane | Year new: 1995 |
| Building Interior | Description | Concrete block at unit walls. Wood frame |
| with drywall. | Acceptable |  |
| Walls |  | All flooring removed in 2021 and <br> asbestos abatement project <br> completed. |
| Floors/Coverings | Wood with plastic laminate | Fair |
| Doors/Frames | Drywall/Drop in | Fair |
| Ceiling |  | Student apartments need |
| Comments: |  | efficiency upgrades. |
| Electrical | Description |  |


| Medium Voltage Connection and Main Transformer | Fed from 1 single phase 50kVA transformer in a pad-mount cabinet. Utility connection and meter is on pole along railroad tracks. Underground primary. | The transformer and primary underground cable are 25+ years old. Replacement should be planned for in the near future. |
| :---: | :---: | :---: |
| Secondary voltage and building main service equipment | Each apartment complex has a 600A, single phase, 240/120V service. | All equipment is original (about 25 years old) and is adequate. Should consider equipment upgrades if any major renovation is planned or if the building usage changes. |
| Branch and distribution panels |  | Should replace older panels as repair and replacement parts are becoming difficult to obtain. |
| General Receptacles |  | Good |
| Interior Lighting |  | Marginal |
| Exterior Lighting |  | Marginal |
| Emergency and Exit Lighting |  | None |
| Computer Wiring |  | None |
| Security and Special Systems |  | None |
| Plumbing | Description | Comments/Condition |
| Water/Sewer | Municipal | Good |
| Piping/Valves/Fitting |  | Corroded water pipes were discovered in 2018. |
| Domestic Hot Water |  | Future faucet replacement |
| HVAC | Description | Comments/Condition |
| Fuel | Natural gas | Good |
| Boilers | High efficient | Good - new in 2011 |
| Heating Type | Fin radiation | Satisfactory |
| Ventilation | Toilets exhaust | Satisfactory |
| Air Conditioning/Coils | N/A |  |
| Temperature Controls |  | Satisfactory |

## BESSE 700 - Besse Theater and Art Galleries

| Building Exterior | Description | Comments/Condition |
| :--- | :--- | :--- |
| Walls | Metal composite building panels. <br> Concrete block at mechanical room. | Good |
| Windows | 1 " insulated clear glass in aluminum frame | Fixed - Non-operable. Good |
| Doors/Frames | Aluminum | Good |
| Roof | EPDM ballasted membrane | Needs replacing. |
| Building Interior | Description | Comments/Condition |


| Walls | Gypsum board partitions throughout. Demountable partitions in office areas. | Good |
| :---: | :---: | :---: |
| Floors/Coverings | Carpeting throughout auditorium, LRC, and offices. Quarry tile in bathrooms. Vinyl tile in service areas. Quarry tile vestibules and corridors. | Gypsum drywall bulkhead at skylight requires continual maintenance. Needs renovation. |
| Doors/Frames | Metal/wood | Good |
| Ceiling | Suspended acoustical throughout. Partial plaster on metal lath in stack area clerestory. | Good |
| Comments: Steel columns in the entry | Rusting and no longer hold paint, they are unsightly and a high maintenance problem. | wrap columns in PVC or similar material to eliminate unsightly look and annual maintenance. |
| Electrical | Description | Comments/Condition |
| Medium Voltage Connection and Main Transformer | Fed from 3 single phase 167 kVA transformers. Also have a fused S\&C 15 kV switch in the service cabinet. | Transformers were installed in 1986. Short run of underground primary to manhole is older and should be |
| Secondary voltage and building main service equipment | Main service is 480Y/277V | Good |
| Branch and distribution panels | Have a motor control enter for mechanical equipment. Also, many branch panels. | Good |
| General Receptacles |  | Good |
| Interior Lighting | Indirect and fluorescent | Energy efficient lighting should be installed. |
| Exterior Lighting |  | Marginal |
| Emergency and Exit Lighting |  | Good - meets codes |
| Computer Wiring | CAT-5 network cable | Satisfactory |
| Security and Special Systems | Fire alarm tied to panel in Student Center (500) building | Good - Replaced in 2008 |
| Plumbing | Description | Comments/Condition |
| Water/Sewer | Municipal | Good |
| Piping/Valves/Fitting |  | Satisfactory |
| Domestic Hot Water | Gas water heater | Satisfactory |
| HVAC | Description | Comments/Condition |
| Fuel | Natural gas | Good |
| Boilers | High Efficient 20144 Weil-McLain Ultra 550 | Excellent |
| Heating Type | Fin radiation, cabinet heaters, air handling unit heating coils, and duct booster coils. Hot water circulation. | Satisfactory |


| Ventilation | Outside air-to-air handling units. <br> Exhaust systems in toilets and dark <br> room. | Satisfactory |
| :--- | :--- | :--- |
| Air Conditioning/Coils | 120 ton air cooled water chiller with <br> pumps piped to cooling coils in air <br> handling units. | Satisfactory |
| Temperature Controls | Johnson controls pneumatic | Good |
|  |  |  |

HUB 800 - Student Success Center/Online Learning/Testing \& Certification/Library

| Building Exterior | Description | Comments/Condition |
| :---: | :---: | :---: |
| Walls | Metal composite building panels. Concrete block at mechanical room. | Good |
| Windows | 1" insulated clear glass in aluminum frame | South facing windows are cracked and need replacement. |
| Doors/Frames | Aluminum | Good |
| Roof | EPDM ballasted membrane | New in 2016 |
| Building Interior | Description | Comments/Condition |
| Walls | Gypsum board partitions throughout. | Excellent, repaired and replaced in 2016. |
| Floors/Coverings | Carpeting throughout all non-corridor areas. Corridors are a mix of carpet and polished concrete. Quarry tile in bathrooms. Concrete in service areas. | Excellent, replaced carpet in 2016, removed tile in corridors and polished concrete sub-strait. |
| Doors/Frames | Metal/wood | Excellent |
| Ceiling | Suspended acoustical throughout. Partial plaster on metal lath in clerestory area. | New ceiling in Excellent condition, while sky-light clerestory in good condition after repairs. |
| Electrical | Description | Comments/Condition |
| Medium Voltage Connection and Main Transformer | Fed from 3 single phase 167kVA transformers. Also have a fused S\&C 15kV switch in the service cabinet. | Transformers were installed in 1986. Short run of underground primary to manhole is older and should be replaced. |
| Secondary voltage and building main service equipment | Main service is 480Y/277V | Upgraded in 2016 |
| Branch and distribution panels | Have a motor control enter for mechanical equipment. Also, many branch panels. | Upgraded in 2016 |
| General Receptacles | Many with integrated USB | Upgraded in 2016 |
| Interior Lighting | LED | Upgraded in 2016 |
| Exterior Lighting | LED | Upgraded in 2016 |
| Emergency and Exit Lighting | Integrated | Upgrade in 2016, meets code |


| Computer Wiring | CAT-6 network cable | Upgraded in 2016 |
| :--- | :--- | :--- |
| Security and Special <br> Systems | Fire alarm tied to panel in Student <br> Center (500) building | Good-Replaced in 2008 |
| Plumbing | Description | Comments/Condition |
| Water/Sewer | Municipal | Replaced in 2016 |
| Piping/Valves/Fitting |  | Replaced in 2016 |
| Domestic Hot Water | Gas water heater | Replaced in 2016 |
| HVAC | Description | Comments/Condition |
| Fuel | Natural gas | Good |
| Boilers | High Efficient 2014 4 Weil-McLain Ultra 550 | Upgraded in 2016 |
| Heating Type | Fin radiation, cabinet heaters, air handling <br> unit heating coils, and duct booster coils. Hot <br> water circulation. | Upgraded in 2016 |
| Ventilation | Outside air-to-air handling units. <br> Exhaust systems in toilets and dark <br> room. | Upgraded in 2016 |
| Air Conditioning/Coils | 120 ton air cooled water chiller with <br> pumps piped to cooling coils in air <br> handling units. | Upgraded in 2016 |
| Temperature Controls | Johnson controls pneumatic | Upgraded in 2016 |

JHUC 900 - JOSEPH HEIRMAN UNIVERSITY CENTER

| Building Exterior | Description | Comments/Condition |
| :--- | :--- | :--- |
| Walls | Brick on 8" concrete block. Aluminum <br> composite metal panels on 8" concrete <br> block. Glazed aluminum curtain walls. | Column bases (rusting); <br> deterioration, need <br> repairs |
| Windows | Aluminum sash | Upper South West facing windows <br> need replacement. |
| Doors/Frames | Hollow metal/aluminum | Good |
| Roof | EPDM ballasted membrane | Some minor leaking, assessed in <br> 2020, extend life to 2025. |
| Building Interior | Description | Comments/Condition |
| Walls | Concrete block partitions. Gypsum <br> board partitions | Excellent |
| Floors/Coverings | Vinyl composition tile in support areas. <br> Quarry tile in kitchen, lobby, and corridors. <br> Carpet in offices and classrooms. Paver tile. <br> Computer access flooring in data processing. | New floor covering materials <br> installed. Broken quarry tile being <br> repaired. |
| Doors/Frames | Hollow metal/wood | Good |


| Ceiling | Suspended acoustical ceilings throughout | Excellent |
| :--- | :--- | :--- |
| Electrical | Description | Comments/Condition |
| Medium Voltage <br> Connection and Main <br> Transformer | Fed from a 500kVA pad-mounted <br> transformer. Primary feeder is underground <br> from newer switches near the 100 building. | Installed in 1997. Excellent <br> condition. |
| Building main service <br> equipment and panels <br> and secondary voltage. <br> Branch and <br> distribution panels. | Main service consists of 3-1200A, 3-phase, <br> 480V switches. Also have a motor control <br> center. Have a 300kVA dry-type <br> transformer that serves the 208Y/120V <br> loads. | Excellent |
| General Receptacles | Have a variety of special receptacles in some <br> rooms. | Excellent |
| Interior Lighting | Very elaborate dimmable lighting in <br> some rooms. | Computer center lighting needs to <br> be upgraded/replaced to <br> eliminate glare on monitors. <br> LED and Induction installed in |
| large conference rooms. |  |  |
| Converted hallway lights |  |  |
| from metal haloid to LED in |  |  |
| 2021. |  |  |$|$| Satisfactory |  |  |
| :--- | :--- | :--- |
| Exterior Lighting |  | Good - meets codes |
| Emergency and Exit <br> Lighting | Temperature Controls | Johnson controls |

## SHIP/WELD 1000 - Shipping \& Receiving and Welding

| Building Exterior | Description | Comments/Condition |
| :---: | :---: | :---: |
| Walls | Metal with structural steel framing | Excellent-Renovated 2015 |
| Windows | Aluminum Clad Wood glider windows | Excellent-Renovated 2015 |
| Doors/Frames | Standard steel doors and frames | Excellent-Renovated 2015 |
| Roof | Polyvinyl Chloride (PVC) Roofing | New 2016- Excellent |
| Building Interior | Description | Comments/Condition |
| Walls | Concrete /labs and shipping, Gypsum /class rooms and offices | Good-Renovated 2015 |
| Floors/Coverings | Chemically densified and hardened concrete/ labs and shipping, Carpet tile/classroom and offices, vinyl tile/bathrooms | Welding Classroom carpeted tile floors need to be replaced with rubber type flooring. All other floors good. |
| Doors/Frames | Steel frame and doors | Good-Renovated 2015 |
| Ceiling | Acoustical panel ceilings (class room/offices) | Good-Renovated 2015 |
| Electrical | Description | Comments/Condition |
| Medium Voltage Connection and Main Transformer | 600 V and less with capacities up to 1000kVA | Good |
| Building main service equipment and panels and secondary voltage. Branch and distribution panels. | NEMA PB 1, power and feeder distribution type. | Good |
| General Receptacles |  | Good |
| Interior Lighting | Fluorescent fixtures | Needs to be updated to LED |
| Exterior Lighting | Two poles | Poor, needs upgrading to LED |
| Emergency and Exit Lighting | Meets code. | Good |
| Computer Wiring | Cat 5 cable | Good |
| Security and Special Systems | Fire alarm panel i064 Intelligent Life Safety System. Fire suppression system in West Welding Lab. (4) exterior and (4) interior cameras. | Fire alarm Good. No burglar alarms. |
| Plumbing | Description | Comments/Condition |
| Water/Sewer | Municipal | Good |
| Piping/Valves/Fitting | Domestic water piping | Good |
| Domestic Hot Water | Gas water heater | Good |
| HVAC | Description | Comments/Condition |
| Fuel | Gas | Good |
| Boiler | Four Trane boilers 180,000 BTU per hour each | Good |
| Heating Type | Gas boilers/ hydronic heating | Good |
| Ventilation | (2)AHU | Good |
| Air Conditioning/Coils | (3)RTU Trane 4 ton R410A gas/electric | Good |
| Temperature Controls |  | Good |

MAINT 1100-MAINTENANCE BUILDING 1

| Building Exterior | Description | Comments/Condition |
| :--- | :--- | :--- |
| Walls | Steel panels | Acceptable |
| Windows | Aluminum | Minimal; poor |
| Doors/Frames | Hollow metal/hollow metal | Acceptable |
| Roof | Metal roof | Good |
| Building Interior | Description | Comments/Condition |
| Walls | Few wood frame partitions | Fair |
| Floors/Coverings | Poured concrete on grade | Good |
| Doors/Frames | Wood/wood | Fair |
| Ceiling | Sprayed insulation | Fair |
| Electrical | Description | Comments/Condition |
| Medium Voltage <br> Connection and Main <br> Transformer | Have 1 - 37.5kVA and 2 - 15kVA transformers <br> in a pole-mount bank. Secondary is overhead <br> to each building. | Satisfactory |
| Building main service <br> equipment and panels <br> and secondary voltage. <br> Branch and distribution <br> panels. | Each building has a 200A, 240/120V 3-phase <br> delta service. | All panels are full - no room for <br> General Receptacles |
| Interior Lighting | Some is older, some has been upgraded. <br> Mostly industrial fluorescent. | Satisfactory |
| Exterior Lighting |  | Marginal |
| Emergency and Exit <br> Lighting | Good |  |
| Computer Wiring | N/A | N/A |
| Security and Special <br> Systems | N/A | N/A |

MAINT 1100 MAINTENANCE BUILDING 2

| Building Exterior | Description | Comments/Condition |
| :--- | :--- | :--- |
| Walls | 22 gauge steel panels | Good |
| Windows | N/A | N/A |
| Doors/Frames | Hollow metal/hollow metal | Fair |
| Roof | Metal roof | Replaced in 2019. |
| Building Interior | Description | Comments/Condition |
| Walls | Few concrete block partitions. Steel panels | Acceptable |
| Floors/Coverings | Concrete on grade. Metal building <br> type exposed. | Insulation blankets |
| Doors/Frames | Hollow metal/hollow metal | Entrance in poor condition |
| Ceiling | N/A | N/A |
| Electrical | Description | Comments/Condition |
| Medium Voltage <br> Connection and Main <br> Transformer | Have 1 - 37.5kVA and 2 - 15kVA transformers <br> in a pole-mount bank. Secondary is overhead <br> to each building. | Satisfactory |
| Building main service <br> equipment and panels <br> and secondary voltage. <br> Branch and distribution <br> panels. | Each building has a 200A, 240/120V 3-phase <br> delta service. | All panels are full - no room for <br> future expansion. |
| General Receptacles |  |  |


| Interior Lighting | Some is older, some has been upgraded. <br> Mostly industrial fluorescent. | Satisfactory |
| :--- | :--- | :--- |
| Exterior Lighting |  | Marginal |
| Emergency and Exit <br> Lighting |  | Good |
| Computer Wiring |  | Satisfactory |
| Security and Special <br> Systems | N/A | N/A |
| Plumbing | Description | Comments/Condition |
| Water/Sewer | Municipal | Water freezes |
| Piping/Valves/Fitting |  | Satisfactory |
| Domestic Hot Water | Gas water heater | Good |
| HVAC | Description | Comments/Condition |
| Fuel |  | New in 2009 |
| Boiler | High Efficient |  |
| Heating Type |  | N/A |
| Ventilation |  |  |
| Air Conditioning/Coils |  |  |
| Temperature Controls |  |  |

2000 - YMCA

| Building Exterior | Description | Comments/Condition |
| :---: | :---: | :---: |
| Walls | Steel 26 gauge panel rib with insulation; concrete block first 4 feet. | Good |
| Windows | Aluminum | Good |
| Doors/Frames | Aluminum | Good |
| Roof | Built-up composition (membrane type). | Good |
| Building Interior | Description | Comments/Condition |
| Walls | 8" concrete block painted; $2 \times 4$ steel studs with $5 / 8$ " gypsum board partitions. | Good |
| Floors/Coverings | Carpet in offices and classrooms; vinyl tile in bathrooms. | Fair |
| Doors/Frames | Steel | Good |
| Ceiling | Suspended acoustical. | Good |
| Electrical | Description | Comments/Condition |
| Medium Voltage Connection and Main Transformer | Fed from a 500kVA pad-mount transformer with underground primary feeder to pole along North 30th Street. | Satisfactory |
| Building main service equipment and panels and secondary voltage. Branch and distribution panels. | Main switchboard is 1200A, 480Y/277V, 3 phase. Have a 300 kVA dry-type transformer to serve 208Y/120V loads. | Satisfactory |
| General Receptacles |  | Satisfactory |
| Interior Lighting |  | Satisfactory |
| Exterior Lighting | A few lights on building exterior. No site lighting. | Satisfactory |
| Emergency and Exit Lighting |  | Satisfactory |
| Computer Wiring | CAT-5 network cable throughout | Satisfactory |


| Security and Special <br> Systems | Fire alarm system installed. No pull stations at <br> exits. | Horn Strobes |
| :--- | :--- | :--- |
| Plumbing | Description | Comments/Condition |
| Water/Sewer | Municipal | Good |
| Piping/Valves/Fitting |  | Good |
| Domestic Hot Water | Description | Good |
| HVAC | Natural gas | Comments/Condition |
| Fuel | N/A <br> Gas furnaces with cooling coils and <br> condensing units for 14 zones. 3 gas heating- <br> (ft. above grade. | Satisfactory |
| Boilers | Gas furnaces | Satisfactory. Relocation of frames about <br> machine shop equipment into <br> this building will require an <br> exhaust air system for fumes and <br> make-up air to balance exhaust. |
| Heating Type | Senting |  |
| Ventilation | Residential thermostats | Verify occupancy time control for <br> continuous fan operation with <br> outside air damper. |
| Air Conditioning/Coils | Temperature Controls |  |

## EXTENSION BUILDING

| Building Exterior | Description | Comments/Condition |
| :--- | :--- | :--- |
| Walls | Rough sawn white cedar | Siding stained and sealed in 2021. <br> Replaced cedar shake façade with <br> metal in 2021 |
| Windows | Siteline Standard, Clad casement, Auralast <br> pine frames. Insulated, argon filled, E366 <br> annealed glass. | Excellent, replaced 2021 |
| Doors/Frames | Aluminum frame and doors | Poor, needs replacement |
| Roof | EPDM ballasted membrane. <br> Metal fascia | IPDM membrane-good <br> Metal fascia-new 2021 |
| Building Interior | Description | Comments/Condition |
| Walls | Wood frame w/cedar and pine (offices and <br> meeting rooms). Gypsum on frame several <br> offices. | Satisfactory |
| Floors/Coverings | Office carpeting throughout. Vinyl tile in <br> bathrooms and kitchen. <br> Wood doors and frames | Poor, needs to be replaced. |
| Doors/Frames | Suspended acoustical throughout | Satisfactory |
| Ceiling | Description | Comments/Condition |
| Electrical | Fed from 3 single phase 25kVA pole mount <br> transformers. Secondary underground <br> building. | Satisfactory |
| Medium Voltage <br> Connection and Main <br> Transformer | Have a 3 phase, 4 wire service. 240/120V. <br> Have 2-200A panels in boiler room. | Satisfactory |
| Building main service <br> equipment and panels <br> and secondary voltage. <br> Branch and distribution <br> panels. | Catory |  |


| General Receptacles |  | Good |
| :--- | :--- | :--- |
| Interior Lighting | All older T-8 fluorescent lighting | Needs upgrading to LED |
| Exterior Lighting | One exterior pole light | Poor, needs upgrades |
| Emergency and Exit <br> Lighting | Meets code | Serviceable |
| Computer Wiring | CAT-5 network cable. | Good |
| Security and Special <br> Systems | Fire Alarm | No security system <br> Fire Alarm-good |
| Plumbing | Description | Comments/Condition |
| Water/Sewer | Municipal | satisfactory |
| Piping/Valves/Fitting | Domestic water piping | Satisfactory |
| Domestic Hot Water | Gas water heater | Satisfactory-Need to replace soon. |
| HVAC | Description | Comments/Condition |
| Fuel | Natural Gas | N/A |
| Boiler | N/A | Good |
| Heating Type | Forced Air-gas furnace/split level unit | Satisfactory |
| Ventilation | Toilet exhaust. Fresh air thru furnace air <br> system. | Satisfactory |
| Air Conditioning/Coils | Split level forced air | Satisfactory |
| Temperature Controls |  |  |

BAY WEST CAMPUS - IRON MOUNTAIN

| Building Exterior | Description | Comments/Condition |
| :--- | :--- | :--- |
| Walls | Face brick on concrete block/ICF covered with <br> stainless steel panels | Excellent |
| Windows | Aluminum sash | Good |
| Doors/Frames | Aluminum frame with glass metal frames | Good |
| Roof | Rubber membrane | Good - 15 years old |
| Building Interior | Shescription | Comments/Condition |
| Walls | Carpet in classrooms, offices, stained concrete <br> in public spaces | Good |
| Floors/Coverings | Wood/metal | Excellent |
| Doors/Frames | Suspended acoustical tile in classrooms | Excellent |
| Ceiling | Description | Comments/Condition |
| Electrical |  | Excellent |
| Medium Voltage <br> Connection and Main <br> Transformer |  | Excellent |
| Secondary voltage and <br> building main service <br> equipment |  | Excellent |
| Branch and distribution <br> panels |  | Eluorescent lighting in most classrooms. LED <br> General Receptacles <br> in common areas and 7 classrooms. |
| Interior Lighting |  | Excent |


| Exterior Lighting | High pressure sodium. | Excellent |
| :--- | :--- | :--- |
| Emergency and Exit <br> Lighting | All lighting as needed. Almost 15 years old. <br> Being converted to LED fixtures. | Good |
| Computer Wiring | CAT-6 network cable | Good |
| Security and Special <br> Systems | Burglary alarm disconnect. Fire alarm with <br> pull station sin hallways. | Excellent - New main alarm panel <br> installed in 2019. |
| Plumbing | Description | Comments/Condition |
| Water/Sewer | Municipal | Good |
| Piping/Valves/Fitting |  | Good |
| Domestic Hot Water | Electric water heater installed approximately <br> 2016. | Good |
| HVAC | Description | Comments/Condition |
| Fuel | Natural gas. | Good |
| Boilers | 2 boilers. | Good - 15 years old |
| Heating Type | 2 Air handling units with heating coils. | Good |
| Ventilation | Exhaust fans in bathrooms. | Good - 15 years old |
| Air Conditioning/Coils | Chiller main building, 2 Leibert units in Room <br> 110 and 1 Mitsubishi in Room 260 | Good -15 years old |
| Temperature Controls | DDC Delta |  |

## G. Facility Infrastructure Condition

A map that shows the Escanaba parking lots and access roads is shown below.( https://www.baycollege.edu/ resources/pdf/on-campus/buildings-grounds/main-campus-map.pdf )


The Iron Mountain campus has one large parking lot with three entry points. The parking lot received crack filling and resealing summer of 2021. The two entry points onto and off of US 2 are one-way with the entry off of Frank Pipp Drive two-way.


All parking lots receive regular routine maintenance that includes crack filling and seal-coating. There are four primary campus access roads into the campus. All of the roads are currently in good to excellent condition.

## H. Adequacy of Existing Utilities and Infrastructure Systems to Current and 5-year Projected Programmatic Needs

The College is committed to replacement of equipment that is beyond its useful life over the next five years. This includes boilers, air handling units, pumps, UPSs, servers, roofs, and more. Existing facilities and infrastructure systems meet programmatic needs for the immediate future but deferred maintenance is a priority for the college, in support of academic programs.
I. Goals of Enterprise-Wide Energy Plan

Facility-wide energy audits were conducted in 2001, 2012, and 2016. The 2012 audit calculated a $17.6 \%$ to 59.1 \% reduction in energy use when compared to the 2001 audit for buildings on the Escanaba campus. The 2016 energy audit showed continued overall decrease in energy usage of $14.8 \%$ across both campuses. In 2017, the Iron Mountain Campus reduced its electrical consumption by 19\%. Bay College continues to invest in energy savings projects and recognizes the importance of reducing consumption in addition to supporting energy saving devices. Bay College hired Johnson Controls in 2019 to develop a plan for a comprehensive performance contract to continue to plan, budget, and implement efficiency projects and further reduce energy consumption. The first phase of this plan was completed Fall 2021. One portion of phase 1 encompassed the replacement or update of most faucets, toilets and urinals on campus with water conserving fixtures and touchless urinals.

Bay College has two primary goals as part of its current 5-year plan.
Goal \#1: Develop a 10-year comprehensive infrastructure maintenance and replacement plan with the first five years focused on elimination of deferred maintenance of equipment that is beyond its useful life. This plan includes a Building Automation System (BAS) for both campuses to integrate utility systems across disparate buildings and ultimately gain efficiencies in controlling systems with automation and integrate new systems with the current scheduling system for maximum efficiency.

Goal \#2: Replace critical infrastructure that is at or beyond its useful life with energy efficient systems monitored and controlled with technology to reap the most efficient use of the equipment and maintenance personnel resources.

## J. Land

Bay College owns two campuses. The Escanaba campus is 155 acres of land, with fourteen buildings and eight major parking lots. The campus also contains three soccer fields that occupy approximately 100 acres of the property. Several areas around the existing structures allow expansion opportunities. Larger areas for growth are located along the US2/US41 corridors, south of student housing, and southwest of the welding and YMCA facilities. The Iron Mountain campus is 25 acres, with one 67,000 sq. ft building, and one large parking lot.

## K. Portions of Existing Building that are Obligated to the State Building Authority (SBA)

Bay College currently has two buildings obligated to the SBA.

In 1997, the MS 100, CB 200, and SC 500 buildings all underwent general renovations. The total project cost was $\$ 3,714,800$ in which the state contributed $\$ 1,857,400$. The lease for this project was originally set to expire on 11/30/2034. However, in February 2021 the bonds were paid in full and the property reconveyed to the College.

In 2005, Bay College West, Bay’s second campus, was constructed in Iron Mountain, MI. The total project cost was $\$ 11,748,200$ in which the state contributed $\$ 5,874,100$. The lease for this project will expire on 11/30/2042.

In 2013, bonded in 2015, Bay College underwent a Nursing Lab and Lecture Hall renovation. The total project cost was $\$ 1,499,600$ in which the state contributed $\$ 749,800$. The lease for this project will expire on $11 / 30 / 2050$.


Implementation Plan

## Section V. Implementation Plan

## A. Prioritize Major Capital Projects Requested from the State

## 1. Manufacturing Hub and Safety Training Center

This project includes the renovation of Bay College's existing Shipping and Receiving Building into a Manufacturing Hub and Safety Training Center for the Central Upper Peninsula. Originally used as a diesel shop, the Shipping and Receiving building was constructed in 1974. A welding laboratory was added in 1989 with the original addition renovated in 2015 doubling the size of the welding lab. With the recent relocation of the machine tool equipment into the lab, as well as a growing demand from local manufacturers for customized manufacturing courses and requests from K-12 partners for additional training space to support Career and Technical Education and Early College Programs, the need for a Manufacturing Hub is significant to our region. The renovation will allow for welding, machine tool and mechatronic/robotics programs and trainings to exist within one Manufacturing Hub. The Manufacturing Hub will fill a regional need to support the manufacturing sector by producing a highly skilled, trained and educated workforce critical to existing and future operations. The Manufacturing Hub will also serve as a Safety Training Center to support OSHA and MIOSHA trainings for construction and general industry, boot camp style trainings around safety to include but not limited to credential fork lift operators, confined space training and industrial rigging.

The scope of the project will involve relocating the existing Shipping and Receiving operation to a new 6,000 sq. ft. building and the renovation of 7,000 sq. ft. of existing Shipping and Receiving space into a Manufacturing Hub and Safety Training Center. The renovation will include new electrical and mechanical installs to support equipment, ventilation upgrades, lighting upgrades, mobile partitions, renovation of existing office space, one added classroom, automated sprinkler and fire suppression system, interior finishes and an interior entrance vestibule to the Manufacturing Hub and Safety Training Center. The project supports the College's mission; Student Success. Community Success. Culture of Success.

Total Estimated Cost for Manufacturing Hub and Safety Training Center: \$1,225,000.00 (7,000 SF x \$175.00)

The new Shipping and Receiving Building will include grading, pad, utilities, building shell, insulation, construction cost in the area, lighting, HVAC, etc.

## Total Estimated Cost for Shipping and Receiving Center: \$450,000.00 (6,000 SF x \$75.00)

## TOTAL ESTIMATED PROJECT COST: \$1,675,000.00

## 2. Renovation of Catherine Bonifas Building

This project provides for a complete renovation of the Catherine Bonifas building. The building was built in 1970 with additions in 1999 that utilized existing infrastructure. The facility houses classrooms, including arts and ceramics, a large lecture hall, faculty and administrative offices, and an art gallery. The building has not received any significant improvements in its 46 years of service with the exception of a new roof in 2014. The scope of the renovation will include windows, doors, all new mechanical, plumbing, electrical, life safety systems, interior finishes, ADA compliance, wiring for
automation, modernized classrooms, student study space, and vestibules on exterior entrances to enhance energy efficiency. The renovation supports the College's mission; Student Success. Community Success. Culture of Success.

Total Estimated Cost: \$2,570,000

## 3. The Sustainability and Native American Cultural Center

The Sustainability and Native American Cultural Center will be located on the Escanaba campus. In addition to student activities at the center, it will serve as a regional and local hub for community engagement through use of the facility and property in meeting cultural and sustainability programs, and learning exhibits. The National Council for Science and the Environment's 2015 Community College Census confirmations a growth trend in sustainability degrees for AS, AA, and AAS programs with significant growth in jobs in areas such as water, solar, green manufacturing, green building, transportation, and environmental engineering. The center will provide resources for current and new academic programs in growth areas such as natural history, environmental issues, global change, renewable energy, aquaculture, hydroponics, wildlife education, plant/tree identification, and conservation science.

The center supports the College's mission; Student Success. Community Success. Culture of Success. The center is a combination of two major capital projects that have been on the implementation plan for multiple years. We have combined the Sustainability Center and the Native American Cultural Center into one capital project.

Total Estimated Cost \$1,500,000

## 4. Campus Wide Site Improvements

A number of site related improvements have been identified to enhance the student experience, maintain the facility's assets, expand recreational opportunities, promote a healthy lifestyle, and support future academic program needs and related facility expansions.

$$
\begin{aligned}
& \text { Student Service Center Outdoor Plaza.................................................................. } \$ 262,500 \\
& \text { Includes a partially covered outdoor seating area that provides a place to eat and study outdoors. } \\
& \text { Student Service Center Entry and Façade Enhancements.............................. } \$ 577,500 \\
& \text { Improve the façade entry to the northeast entrance to the Student Center building, including an } \\
& \text { awning entrance with integrated solar panels to power lighting enhancements. } \\
& \text { Campus Landscape/Site Improvements................................................................ } \$ 577,500 \\
& \text { Improve campus landscaping throughout campus including native plantings, prairie restoration, } \\
& \text { and entrance enhancements through vegetation, tree plantings, and lighting. } \\
& \text { Walk/Bike/Ski Campus Path........................................................... } \$ 367,500 \\
& \text { Expand walking/biking/skiing trail around and through campus with } 4 \text { connectors to community } \\
& \text { trail systems. }
\end{aligned}
$$

Total Estimated Cost: \$1,785,000

## B. Status of Ongoing Projects Financed with State Building Authority Resources

## N/A

## C. Identify a Rate of Return on Planned Expenditures

## The Manufacturing Hub and Safety Training Center

The Manufacturing Hub and Safety Training Center will serve college students and our K-12 partners with additional training space to support Career and Technical Education and Early College Programs. There is significant need for this type of building in our local area for educational purposes, as well as fulfilling a regional need to support the manufacturing sector in our areas by producing a highly skilled, trained and educated workforce.

The Manufacturing Hub and Safety Training Center will have no impact on tuition and fees and will be partially funded through millage funds. Incremental operating expenses will be funded by incremental training revenue generated.

## Renovation of the Catherine Bonifas Building

The Catherine Bonifas building renovation is an investment in existing facilities with life/safety and ADA deficiencies. The renovations will provide greater utilization of the existing square footage and will integrate energy efficiencies and optimization systems into the operations of the facility.

Renovation of the Catherine Bonifas building will not impact tuition and fees and will be partially funded through millage funds.

## The Sustainability and Native American Cultural Center

The Sustainability and Native American Cultural Center will serve college students, K12 students, our Native American communities, as well as the community at large by providing outdoor interactive learning as well as indoor space for artists, musicians, and cultural programs. Existing academic programs positively impacted will be Biology, Art, Design, Forestry, Ecology, and Astronomy. New programs would also benefit, such as hobby farming, composting, hydroponic gardening, residential alternative energies, digital outdoor photography, and nature as an Art form.

The center will have no impact on tuition or fees and maintenance will be funded through event revenues, grants, and community donations. The center will positively impact job creation in the state through program enhancements to include job readiness in growth areas.

## D. Considered Alternatives to New Infrastructure

N/A
E. Identify a Maintenance Schedule for Major Maintenance Items in Excess of \$1,000,000

Bay College has identified no major maintenance items in excess of $\$ 1,000,000$ for fiscal years 2023 through 2027.
F. Amount of Non-Routine Maintenance and Sources of Financing

Bay College has budgeted approximately $\$ 1,994,776$ for non-routine maintenance on the Escanaba and Iron Mountain campuses for fiscal year 21-22. These capital items are funded through annual property tax millage, bond proceeds, Perkins grant funds and working capital.

