I. Executive Session – 8:00 a.m. In-person and Virtual

To discuss legal advice regarding a potential international transaction pursuant to §24-6-402 (3)(a)(II), C.R.S.; employee matters (promotion and tenure recommendations) pursuant to §24-6-402(3)(b)(I), C.R.S.; consideration of honorary awards pursuant to §24-6-402(3)(a)(VIII), C.R.S; and matters required to be kept confidential by federal law or statute statutes, pursuant to §24-6-402(3)(a)(III), C.R.S.

8:00 a.m. Motion to move into executive session by Trustee Starzer; seconded by Trustee Lawler. Motion approved 6-0.

Trustees present: Chairman Salazar, Trustees Grewcock, Lawler, Starzer and Steinberg.
Trustees present virtually: Trustee Burgess

Mines executives and directors present virtually: President Johnson, Provost Holz, EVP Volpi, VP Fox, VP Copan, VP Han, VPGC Walker, Ms. Markley and Ms. Vega.

9:15 a.m. Executive Session concluded

II. Regular Meeting – 9:00 a.m. In-person and Virtual

9:20 a.m. Regular session called to order by Chairman Salazar.

Trustees present: Chairman Salazar, Trustees Grewcock, Lawler, Starzer, Steinberg, Gardner and Saxena.
Trustees present virtually: Trustee Burgess

Mines executives and directors present: President Johnson, Provost Holz, EVP Volpi, VP Fox, VP Copan, VP Han and VPGC Walker.

a. Consent Agenda

The minutes from the February 4, 2022 meeting were submitted for approval.

Trustee Grewcock motioned to approve the minutes as presented; seconded by Trustee Steinberg. Approved 6-0.

b. Reports and Updates

President Johnson reported the students are back from spring break and finals are coming up with five weeks left in the semester. He also provided highlights on the progress of Mines@150 initiatives. President Johnson provided a review of the PASCAL Center’s VIP programs celebration yesterday, noting that Chairman Salazar participated. He explained Mines’ deliberate focus on professional development and getting alumni involved. He reported that Dr. Linda Battalora is creating video summaries for students with alums and used Chairman Salazar in the prototype. President Johnson reported the program is led by Dr. Colin Terry and has a great impact by helping students be well prepared for recruiters. He provided a review of the entrepreneurship and innovation efforts on campus and noted the upcoming Beck Venture Center groundbreaking on April 21. He provided a summary of E-Days events which are also that week, and asked Trustee Saxena to provide an overview of the purpose of E-Days and the activities surrounding it. President Johnson
reported that for the first time in 44 years of competition, the Mines Mining Department won the Mining Intercollegiate Mining competition.

Board Committee Reports Trustee Grewcock reported that the Finance and Audit Committee met on March 30, 2022. At its meeting, the committee reviewed existing and proposed debt financing necessary for certain capital investments and the associated impacts. He reported the committee reviewed plans for the research building and the Mines Park redevelopment, including the change in financial structure for the Mines Park transaction, which will be presented by Ms. Volpi to the full Board. At the committee meeting, Trustees also reviewed the Early Childhood Education Center and challenges related to the size and economics of the Center. The committee previewed the FY2023 budget and noted that Board approval will be sought at the June 3 meeting.

Faculty Senate report Dr. Düzgün provided an overview of recent Faculty Senate business which included new committees, shared governance, new programs, the work of the Faculty Senate Councils and the new Faculty Senate Distinguished Lecturer. She reported that a new committee was formed on Diversity, Inclusion and Access and, a committee on the impacts of Covid by tenure tenure track faculty was formed to address specific concerns about promotions due to Covid and the impacts of Covid on educators.

Dr. Düzgün provided a review of the Faculty Senate’s input on shared governance and faculty engagement and noted that they will be meeting with Mines leadership to discuss their concerns. She reviewed the results of the online program and courses survey from a faculty perspective, noting an independent survey company was used to collect information and provide an understanding of the perceptions of faculty, their experiences, and opinions about online courses. She reported on the findings, noting the positive experience with outreach and external impact, but continuing challenges regarding lack of student interaction in the context of online courses. She noted the Faculty Senate will be providing the Trefny Center and Mines Online with recommendations for improvements.

Dr. Düzgün reviewed Graduate, Undergraduate and Research Councils and their program changes and needs. She reported the Faculty Senate Distinguished Lecturer this year is Dr. Roel Schneider, and next year’s Distinguished Lecturer is Dr. Ryan Richards.

Research and Technology Transfer report Dr. Copan provided an overview of the Mines@150 initiatives to strengthen research and raise the profile of Mines. He reported on the recent Mines Methane Symposium held to elevate the stature of Mines as a convener of thought leaders. It included speakers such as Senator Hickenlooper, David Turk, Deputy Secretary of the Department of Energy, and other of notable speakers from the Department of Interior, White House Office of Climate Policy, and others. Dr. Copan reviewed the monthly research award comparison from FY20 to FY22, noting awards continue a positive trajectory. He reported that the FY21 performance was a lower due to the continuing resolution phase with Federal government. The FY22 Federal budget has not yet been released.

Dr. Copan provided an overview of the research portfolio and international partnerships and provided a review of the annual National Science Foundation (NSF) early career awardees. He provided information on the tools Mines is looking at to keep faculty engaged. He reviewed the 2021 Keck Award noting that Mines won one of the first Keck Awards offered and is one of the first four institutions to offer Quantum Engineering. He reviewed other philanthropic opportunities with a focus on research.

Dr. Copan explained how Mines can maintain the classification as Carnegie R1 status and reported on the external interest Mines has already received as the result of this classification. He provided an overview of Academic Analytics, a new tool that Mines procured for faculty benchmarking and to aid in developing an understanding at a granular level on how Mines is doing relative to other universities which will help in positioning for sustainable research success.

Dr. Copan provided a brief overview on how Mines is establishing high-visibility external partnerships and active engagement in various organizations, and reviewed efforts to seek out opportunities in hydrogen economy, ammonia technologies and the decarbonization of heavy industry. He reported on the establishment of the 4-state
hydrogen hub that includes Mines, NREL, CU Boulder and CSU as key partners. Finally, he provided an overview of the Energy and Minerals Resource Building announcement and reported on the proposal for the Sustainable Infrastructure Research Center (SIRC). Dr. Copan noted that he will bring to the Board a broad proposal for this building and the new research facility at a future meeting.

c. Presentations and Discussion

Faculty Oversight Committee on Sports and Athletics Dr. Fox provided an overview of the Faculty Oversight Committee on Sports and Athletics (FOCSA) report and background on the Faculty Athletic Representative (FAR). Dr. Fox reported on the student athlete interviews held. He noted the primary concern raised by the students related to mental health and access to mental health support systems on campus. As a result of these concerns, Mines hired another counselor who is a former NCAA athlete and works directly with student athletes. Dr. Fox summarized other mental health strategies and solutions being implemented. He reported another student athlete recommendation concerned the enhancement of baseball and softball facilities, and the need for indoor batting cages and locker room facilities. Mines is looking at possible solutions. He noted there were four other recommendations addressing diversity concerns, the need for faculty office hours outside of practice times, and access to the Career Center.

Dr. Fox introduced Faculty Athletic Representative, Dr. Brian Trewyn. Dr. Trewyn provided an overview of the annual meeting with the RMAC, other FARs and Commissioners. He summarized the RMAC selection criteria and reviewed the RMAC manual. He provided an overview of the 2021 Athletes of the Year awards, which recognized six athletes from Mines out of the eight represented institutions. Dr. Trewyn reviewed how he interacts with student athletes and noted he is the point of contact for them from an academic perspective. He reviewed the single year academic success rate based on NCAA metrics and reported that Mines has a very high success rate.

Fiscal Year 2023 Budget preview Ms. Volpi provided a summary on strategic investments that are being incorporated in the FY23 and future budgets. The investments will impact the signature student experience, entrepreneurship and innovation, and growing research and research partners. Ms. Volpi noted that the operating budget does not incorporate any restricted funds such as research and endowment funds. She reported that tuition and State funding are the primary sources that fund the Mines budget. Ms. Volpi reported that Governor Polis has offered to provide higher education with more State funding if institutions will limit undergraduate tuition rate increases to 2%. She reviewed the revenue and expense summary for FY23 noting it will be balanced before it is brought to the Board for approval.

Ms. Volpi reviewed enrollment revenue projections based on the 1375-1400 incoming class goals. She reviewed housing revenue and reported a possible 3% or 4% increase. She reviewed the dining projected increase of 4.5% due to increase in food costs. Ms. Volpi reviewed additional expenses in the budget that include 19 new FTE in faculty to support the signature student experience and support the growing student body. Ten new FTE in Student Life are planned as Mines sees significant increased need for student support services. Ms. Volpi provided a summary of employee compensation and the available vacancy and fringe savings. There was a brief discussion regarding shared services opportunities and the level of State support. Mr. Han provided information on how the state allocates one-time funding.

Ms. Volpi reported that the tuition net price has not kept up with inflation, noting the net price tuition (tuition less prospective financial aid) dipped in fall of 2020 due to the 0% tuition increase. She reviewed the tuition discount trend and reported that Mines provided more financial aid to support students in Fall 2020 and Fall 2021. Ms. Volpi noted that mandatory fees that are increased above inflation plus 1% must go to a student vote. The amount for the FY23 budget is 4.6% which reflects a 3.6% inflation rate as set in the Fall of 2021. Trustee Saxena asked management to get feedback from students regarding mandatory fees and encouraged Mines to avoid raising student fees up to the 7% inflation rate. Ms. Volpi provided a summary of the cost of attendance detail reporting a resident tuition of almost $40,000 and non-resident tuition of almost $62,000 per year. Ms. Volpi reported she will be bringing the FY23 budget back to the Board for approval at the June 3 meeting.
d. Action Items

Sale of Real Property Ms. Volpi provided an overview of the proposed sale of Mines-owned mining properties located at Alvarado Road, Lawson, CO, which include 19 claims to the south of I-70. She reported that Mines has incorporated the appropriate risk transfer and indemnification terms in the contract, which also requires a liability policy naming Mines as insured. She reported the closing is scheduled for May 12, if approved. Ms. Volpi stated there are still more mining claims to sell. Ms. Markley provided information on the protections Mines has from the buyer and noted that the buyer waived their rights to an appraisal and environmental assessment.

Pursuant to the Board of Trustees Capital Construction and Real Estate Conveyance Policy, Section 2.1, the Board of Trustees is asked to consider and approve of Mines’ sale of the mining properties located at Virginia Canyon Road, Idaho Springs, Colorado, and to authorize the execution of any and all documents necessary to effect the sale and transfer of title.

Trustee Grewcock motioned to approve the Sale of Real Property as presented; seconded by Trustee Starzer. Approved 6-0.

BE IT RESOLVED that the Board of Trustees of the Colorado School of Mines approves of the sale of the real property located at Alvarado Road, Lawson, Colorado, and authorizes the President or his appropriate delegatee to execute all documents necessary to effect the sale of said property and transfer of title.

Capital Projects Approval Ms. Volpi provided a brief overview of the capital investments that are contemplated in the Master Plan in order to enable and facilitate the goals of the Mines@150 Strategic Plan. She reviewed the entrepreneurship and innovation facilities, including McNeil Hall, Labriola Innovation Hub and the Beck Venture Center. Ms. Volpi discussed the goal for Mines to be the go-to institution for innovative research and reviewed partnership initiatives, including the USGS Energy and Minerals Research building. She noted that with research growth, Mines needs to perform a careful analysis of the timing, purpose, and size of the next research building. Ms. Volpi reviewed the goal for Mines to be a great community to learn, explore, live, and work, and how those strategic goals resulted in Spruce Hall, Jackson Street Apartments and additional housing, dining and recreation facilities. Ms. Volpi reported the goal is to have enough available housing for graduate students and upper-class students who desire campus residences. This goal is supported by the Mines Park Redevelopment project, which is set to begin in a couple of months. Ms. Volpi also reviewed the Early Childhood Education facility that will provide an important benefit for the Mines community. Other upcoming projects were reviewed, including the next Parking Garage and associated classroom building.

Ms. Volpi provided an overview of the anticipated debt funding, which if implemented, would increase Mines’ debt service by $30 million. Some of this is funded by active revenue streams. She provided an overview of the existing debt service and reviewed how Mines manages that level of debt and the ability to pay. Ms. Volpi summarized the credit rating sensitivity and how that plays into the debt capacity. There was discussion regarding increased revenue and revenue streams and funding sources. She noted that debt capacity can be managed but will need to be fully assessed again prior to bringing on any large-scale capital investment such as the next research building.

Ms. Volpi provided highlights of the Mines Park Redevelopment project, to be known as The Village at Mines Park, a sustainable community. She then introduced two visiting associates from Reith Jones Advisors (RJA), Richard Reith, principle, and Eric Bram, vice president, and Bruce McKee, a principle at Capstone Development Partners, to provide highlights of the project, background, and strategic opportunities. Ms. Volpi provided an overview of the impact of the financing strategy and the project objectives, noting Mines will transition to self-finance the project at a total project cost of $154.1 million and a total financing cost of $167 million. She provided a summary of cost comparisons and information on the current rate of debt and time frame to pay down the debt. Ms. Volpi addressed hand back standards from the P3 and reviewed the budget and finance plan.
Ms. Volpi reported that today’s requested Board approval is for the total project cost. She will request approval for the financing at the May 6 Board meeting. She provided a summary of the economic considerations and the agreements that will be reviewed at the May 6 meeting. Ms. Volpi introduced Mr. McKee with Capstone to provide an overview of the agreement’s contractual requirements, risks, and contingencies. Ms. Volpi reviewed the phases of the project and noted it will be completed in Fall 2024.

Pursuant to authority conferred by §23-41-104(1), C.R.S. (1988) and as required by §23-5-119.5(1), C.R.S. (2012), the Board of Trustees has set forth a policy for the approval of all capital construction projects. Mines’ Policy for Capital Construction and Real Estate Conveyance stipulates that the Board of Trustees approves all capital projects with a total project cost of $5 million and higher.

Trustee Grewcock motioned to approve the Mines Park redevelopment as presented; seconded by Trustee Steinberg. Approved 6-0.

BE IT RESOLVED that the Finance and Audit Committee of the Colorado School of Mines recommends to the Board of Trustees the approval of the program plan for the Mines Park redevelopment with a total project cost of up to $154.1M.

Ms. Volpi provided an overview of the Early Childhood Education Center, noting that a feasibility study was done in 2017 that concluded the demand for such a center is strong at Mines. She provided information on the impact of sponsored childcare centers in higher education and reported that Mines had already implemented a back-up care program that has a strong 15% utilization rate. Ms. Volpi reported that Bright Horizons would be the daycare center operating partner. She reviewed the revenue and cost projections and funding plan, which could add $3 million in debt service.

Pursuant to authority conferred by §23-41-104(1), C.R.S. (1988) and as required by §23-5-119.5(1), C.R.S. (2012), the Board of Trustees has set forth a policy for the approval of all capital construction projects. Mines policy for Capital Construction and Real Estate Conveyance stipulates that the Board of Trustees approves all capital projects with a total project cost of $5 million and higher.

Trustee Lawler motioned to approve the Early Childhood Education Center as presented; seconded by Trustee Starzer. Approved 6-0.

BE IT RESOLVED that the Finance and Audit Committee of the Colorado School of Mines recommends to the Board of Trustees the approval of the program plan with a project budget of $9.2M for the Early Childhood Education Center

Promotion and Tenure recommendations Following the process outlined in Colorado School of Mines Faculty Handbook (Section 8), Dr. Holz recommended the following faculty for promotion in academic rank and/or tenure.

Trustee Grewcock motioned to approve the Promotion and Tenure recommendations as presented; seconded by Trustee Starzer. Approved 6-0.

BE IT RESOLVED that the Board of Trustees of the Colorado School of Mines approves the following recommendations of promotion and/or tenure:

Tenure-Line Faculty: Promotion and Tenure (as appropriate)
Ebru Bozdag (Geophysics): recommend promotion to Associate Professor with tenure
Kevin Cash (Chemical and Biological Engineering): recommend promotion to Associate Professor with tenure
Diego Gomez Gualdrón (Chemical and Biological Engineering): recommend promotion to Associate Professor with tenure
Rennie Kaunda (Mining Engineering): recommend promotion to Associate Professor with tenure
Adrienne Kroepsch (Humanities, Arts, and Social Sciences): recommend promotion to Associate Professor with tenure
Andrew Petruska (Mechanical Engineering): recommend promotion to Associate Professor with tenure
Joseph Samaniuk (Chemical and Biological Engineering): recommend promotion to Associate Professor with tenure
Paulo Tabares Velasco (Mechanical Engineering): recommend promotion to Associate Professor with tenure
Tom Williams (Computer Science): recommend promotion to Associate Professor with tenure
Eliot Kapit (Physics): recommend tenure at the level of Associate Professor
Mohsen Asle Zaeem (Mechanical Engineering): recommend promotion to Professor Jared Carbone (Economics and Business): recommend promotion to Professor
Jenifer Shafer (Chemistry): recommend promotion to Professor
Jessica Smith (Engineering, Design, and Society): recommend promotion to Professor
Eric Toberer (Physics): recommend promotion to Professor

Teaching Faculty: Promotion
Jeff Ackerman (Mechanical Engineering): recommend promotion to Associate Teaching Professor
Jeff Wheeler (Mechanical Engineering): recommend promotion to Associate Teaching Professor
Yosef Allam (Engineering, Design, and Society): recommend promotion to Teaching Professor
Derrick Hudson (Humanities, Arts, and Social Sciences): recommend promotion to Teaching Professor

BOT Outstanding Faculty Award
Dr. Holz recommended the Board approve the Outstanding Faculty Award winner as presented.

Trustee Grewcock motioned to approve the Board of Trustees Outstanding Faculty Award as presented; seconded by Trustee Lawler. Approved 6-0.

BE IT RESOLVED that the Board of Trustees of the Colorado School of Mines awards Dr. Gerald Bourne the Board of Trustees’ Outstanding Faculty Award.

Sabbatical Requests
Dr. Holz provided an overview of the 23 requests for sabbaticals. He reported they have been reviewed Deans and Department Heads and he recommends them for approval.

Trustee Starzer motioned to approve the Sabbatical requests as presented; seconded by Trustee Steinberg. Approved 6-0.

BE IT RESOLVED that the Board of Trustees of the Colorado School of Mines approves the following for sabbaticals for the term(s) indicated.

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<tr>
<th>Name</th>
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<tr>
<td>Braun, Rob</td>
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Dr. Holz provided a summary of two new graduate certificate programs and reported there are no new costs associated with them because courses already exist. He reported that prior to these programs being submitted for approval, they were vetted and approved by the Graduate Council, Faculty Senate, and the President.

Trustee Starzer recused herself from voting on the Optics for Engineering certificate so the two programs were voted on separately.

Trustee Grewcock motioned to approve the New Program Graduate Certificate in Optics for Engineering as presented; seconded by Trustee Lawler. Approved 5-0 (Trustee Starzer recused).

Trustee Grewcock motioned to approve the New Program Graduate Certificate in Chemical Engineering Processes in Energy Transitions as presented; seconded by Trustee Steinberg. Approved 6-0.

**BE IT RESOLVED** that the Board of Trustees of the Colorado School of Mines approves creation of the following new graduate degree programs:

- Graduate Certificate in Optics for Engineering
- Graduate Certificate in Chemical Engineering Processes in Energy Transitions

Dr. Holz requested that the Board approve the conferral of a Bachelor of Science degree in Electrical Engineering posthumously to Brennen Ward and the Bachelor of Science degree in Petroleum Engineering posthumously to David Vasserman. He reported that the departments confirmed that these students were on track to fulfill their course requirements prior to their passing, and, therefore, both the departments and Faculty Senate support the posthumous award of these degrees.

Trustee Starzer motioned to approve the Posthumous Degrees as presented; seconded by Trustee Steinberg. Approved 6-0.

**BE IT RESOLVED** that the Board of Trustees of the Colorado School of Mines approves awarding the following degrees posthumously:

- Brennen Ward - Bachelor of Science degree in Electrical Engineering
- David Vasserman – Bachelor of Science degree in Petroleum Engineering

Dr. Holz provided a review of faculty retiring at the end of this academic year and recommended they be awarded emeritus status. He provided a brief overview of how emeritus status is awarded and its benefits to the faculty member.
Trustee Starzer motioned to approve the Emeritus approvals as presented; seconded by Trustee Grewcock. Approved 6-0.

BE IT RESOLVED that the Board of Trustees of the Colorado School of Mines approves the following for Emeritus status effective on their retirement dates.

Emeritus
Dr. Tracy Camp – Emeritus Professor of Computer Science
Dr. Mahadevan Ganesh – Emeritus Professor of Applied Mathematics and Statistics
Dr. Robert Klimek – Emeritus Teaching Professor of Humanities, Arts, and Social Sciences
Dr. Mark Seger – Emeritus Teaching Professor of Chemistry
Dr. Pat Taylor – Emeritus Professor of Mining Engineering

e. Regular Written Reports

Admissions and Enrollment report Dr. Holz highlighted that approximately 6700 total students were enrolled at the spring census date and reported the current freshman who have made deposits is at 885, only four down from last year. He provided an update on graduate students and the online component growth. He reviewed the targeted FY23 enrollment of 1375, and what measures are being taken to reach that number and possibly exceed it again. Dr. Holz provided information on the impact of R1 status and the challenge with lower graduate student enrollment, noting that it likely does not impact certificate and non-thesis master’s students, as they are not research related. He reported that the R1 status helps in recruiting PhD and master research students. Dr. Holz provided information on how Mines works to recruit from underrepresented groups, and reviewed strategies for increasing yield for underrepresented students.

CSM Foundation and Alumni Relations report There was no update provided.

1:01 p.m. There being no further business the meeting was adjourned.

Anne Stark Walker, Secretary