

**PRELIMINARY
NOT APPROVED**

*Original minutes
have been lost.*

RECORD OF PROCEEDINGS

Golden, Colorado
January 9, 1987

The Board of Trustees met in regular session on January 9, 1987, at 8:00 a.m.

Trustees present: Mrs. Allen, Messrs. Earnest, Pascoe, Schwartzberg, Warren, Wilson and Wood.

Absent: Mr. Henderson

Also attending the meeting were President Ansell, Vice Presidents Golden, Nyikos, and Scott, Mr. Robbins, Executive Director of the CSM Foundation, Deans Gentry and Romberger, other staff members, and visitors.

Mr. Wood presided.

Previous Minutes. The minutes of the meeting held on December 19, 1987, were approved as distributed.

✓ Increase in Students' Athletic Fee for FY 1987-88. President Ansell informed the Board that Mr. Bruce Allison, Athletic Director, has requested an increase in students' athletic fee for FY -87-88 from \$20.00 per semester to \$30.00 per semester. He reviewed Mr. Allison's memorandum of January 5, 1987 and the supporting data, which are appended hereto.

The Board unanimously approved the motion to increase the students' athletic fee for FY 1987-88 from \$20.00 per semester to \$30.00 per semester.

✓ Silver Diplomas for Undergraduates. Dr. Nyikos informed the Board that for several years students and their families have inquired about the availability of silver diplomas for undergraduate students. A number of students have indicated that they would be willing to pay for the silver diplomas. He reported that the total cost would be \$144.00 per diploma. The silver diplomas will also be offered to alumni who have graduated since 1969.

The Board unanimously approved the request that silver diplomas be made available to undergraduate students.

New Faculty Appointments. Dr. Gentry presented the report as follows:

Dr. K. P. Joshi	No compensation
Visiting Professor of Physics for the period December 1, 1986 - May 31, 1987	

Continuation of Appointment:

Dr. Henry A. Babcock	\$6,000 for the spring
Adjunct Professor of Engineering	semester of the 1986- 87 academic year

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Dr. Lawrence Kazmerski No compensation
Adjunct Professor of Physics 1986-87 academic year

Additional Information:

Dr. Gentry had distributed quantitative evaluation reports to the Board members prior to the Board meeting.

Graduate School Admissions. Dr. Romberger had distributed the report prior to the Board meeting. The report indicates that when compared to the previous two years, completed and accepted applications for the spring semester have increased significantly. Growth continues to occur in Geology, both in the regular degree programs and the Professional degree. This growth is apparent also in the steady increase in the number of graduate students registered in that department. Modest increases have occurred in Geophysics. Metallurgy, Mathematics and Environmental Sciences, while other departments have stayed the same or decreased. An encouraging sign is the number of applicants in the new Applied Mechanics program. An analysis of the continuing student numbers, those that have graduated, checked out or dropped out, and the new admittances indicate that there should be approximately 671 graduate students registered for the spring 1987 semester. Final numbers will not be available until after the close of registration and will be included in the February Board report.

Admissions. Mr. Young had distributed the January 5, 1987 Admissions Report prior to the Board meeting.

Mr. Young informed the Board that the Admissions Office is now targeting women students for recruitment, and he introduced Ms. Laura Corder, a 1986 graduate of Mines, who has been hired on a part-time basis to assist in this effort. She is being supported by a grant from the Frost Foundation.

New Research Awards. Dr. Romberger had distributed the report, which reflects the award volume through December 23, 1986, prior to the Board meeting. The report indicates that this month's volume was \$344,346, compared to \$306,000 for the same time period the previous year. This results in a cumulative total for FY 1987 of \$4,110,563, or \$1,403,994 ahead of the total for the same period the previous year of \$2,706,569.

Dr. Romberger reported that eleven proposals were submitted during the month of December 1986, compared to twenty-three for the same month the previous year. This results in a total to date of 109 proposals for FY 1987 compared to 102 for the same period the previous year.

Monthly Reports. Mr. Scott had distributed the following monthly reports prior to the Board meeting: Current Funds Revenues, Expenditures and Other Changes for the Six Months Ending December 31, 1986; Colorado School of Mines Auxiliary and Self-Funded Activities for the Six Months Ending December 31, 1986; and Time Deposits and Investment Report, December 31 1986.

Mr. Scott introduced Ms. Paula Mullis, CPA, from the State Auditor's Office, who is on campus to perform an audit.

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Mr. Wood introduced Mines student Keith Geinzlinger, who lives in Propetor Park and who is requesting that the demolition by Mr. Elickson of Propetor Park be postponed from March 3 to either the week of spring break or the end of the current semester. He stated that it would be very disruptive to have to move by March 3. Mr. Scott reviewed the legal history of this matter, stating that the matter is now between Mr. Elickson and the court. Mr. Wood stated that the Board would have no objection to moving the demolition date to the week of spring break and asked Mr. Scott to check the legalities of this request. Mr. Wilson requested that Mr. Wood, together with the administration, examine the issue keeping in mind the Board's historical posture.

Mr. Geinzlinger thanked the Board for its time.

Sabbatical Report. Dr. L. Graham Closs, Associate Professor of Geology, who was on leave at one-half pay during the 1985-86 academic year, presented his sabbatical report. He spent the fall semester of the 1985-86 academic year as a visiting professor in the Department of Geological Sciences at Queen's University, Kingston, Ontario, Canada. He initial expectations for the spring semester were to obtain a part-time appointment with the Branch of Exploration Geochemistry, U.S. Geological Survey in Denver, beginning in January 1986. However, uncertainties caused by the Gramm-Rudman-Hollings Budget Bill resulted in delay, then postponement, of the appointment. The appointment was not confirmed until late June.

Dr. Closs informed the Board that during the month of April he visited Brazil for four weeks. The trip was sponsored through funding awarded to Professor Germano Melo Junior from Conselho Nacional de Pesquisas (CNPQ). Prof. Melo will be starting a Ph.D. research program in exploration geochemistry at CSM this fall under Dr. Closs's supervision. He described his activities while he was in Brazil. He also presented the 26th Annual Geochemical Exploration Workshop at CSM during the first week in May.

Dr. Closs stated that the sabbatical year provided an opportunity for professional and personal development and a heightened enthusiasm for his ongoing teaching and research activities at Mines. The appointment with the U.S.G.S. is now in effect and will provide for closer ties with the Branch of Exploration Geochemistry in support of his Department program. It will also provide a personal opportunity to participate in the tin exploration geochemistry program on an ongoing basis. He thanked the Board for the opportunities this sabbatical has provided.

Mr. Wood thanked Dr. Closs for his report.

Mr. Wilson entered the meeting at this time.

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✓ Trip Report. Dr. Gary Baughman of the Energy and Minerals Field Institute reported on his activities during his trip to Japan, Beijing, and Hong Kong from September 5-21, 1986. The purpose of his trip was to represent the School at "Mining China '86", an international trade show held in Beijing, China on September 11-17. The CSM community shared a booth with the State of Colorado at the trade show. He discussed the benefits of the trip and his followup activities.

Mr. Wood thanked Dr. Baughman for his report.

✓ Sabbatical Report. Dr. Kathy Ochs, Assistant Professor of Humanities and Social Sciences, who was on sabbatical leave during the 1985-86 academic year at one-half pay, presented her report. During her sabbatical, she prepared four papers to the last but final draft. She described the content of each paper and included an abstract of her book, Technology and Gender: An Annotated Bibliography of Historical and Contemporary Sources, with Gay Bindocci and Joan Rothschild.

Dr. Ochs feels that the sabbatical was valuable in that it provided her with an opportunity to perform research. She has returned with a renewed interest in teaching and believes that her classes have benefitted. Dr. Ochs thanked the Board for the opportunity.

- Mr. Wood thanked Dr. Ochs for her report.

✓ Briefing on NSF Site Visit. President Ansell discussed the process, discussed the members of the NSF site selection team, and outlined the activities for the site visit scheduled for January 12 and 13.

Mr. Pascoe entered the meeting at this time.

✓ Petroleum Engineering Advisory Committee. President Ansell informed the Board that two additional people have been nominated to serve on this Committee. They are:

James R. Jorden, Manager
Petroleum Engineering Research
Shell Development Company (Shell Research)
Houston, TX

Vernon Dullnig
Division Vice President
Denver Operating Division
Texaco
Denver, CO

The Board unanimously approved the nomination of Messrs. Jorden and Dullnig to serve on the Petroleum Engineering Advisory Committee.

The meeting was adjourned at 10:15 a.m., and the Board went into executive session.

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Contracts for Voluntary Early Retirement. Following discussion in executive session, Dr. Golden distributed, for Board review and approval, voluntary early retirement contracts for Dr. Harry W. Emrick, Associate Professor of Engineering, Dr. Joseph J. Finney, Professor of Geology, and Dr. Harry C. Peterson, Professor of Engineering.

The Board unanimously approved the contracts for voluntary early retirement for Drs. Emrick, Finney, and Peterson.

James C. Wilson
Secretary

January 9, 1987

COLORADO SCHOOL OF MINES

INTER-DEPARTMENT COMMUNICATION

TO Dr. George Ansell, President
 FROM Bruce Allison, Athletic Director
 SUBJECT Fee Increase

DATE January 5, 1987

I. Request

Increase students' athletic fee FY 87-88 from \$20.00/semester to \$30.00/semester.

II. Justification

- A. 53% of the 86-87 intercollegiate athletic budget is derived from student fees.
- B. 47% of the 86-87 I.A. budget is at or near maximum. (Balance of budget.)
- C. The number of students paying fees since 1984 has decreased an average of 131+ students/year or about \$5,260.00 per year loss of income.
- D. Student-athletes numbers are increasing.

1. 1984-85	350	2. 85-86	384	3. 86-87	400+ (est.)
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III. The department has intended to regulate its requests for fee increases so that an undergraduate would experience only one increase in his/her time at Mines (5 years). Enrollment decline coupled with swelling numbers of student athletes has necessitated this request one year early. (Last fee increase, 1983-84.)

IV. Support data, to include the following is attached.

- A. Athletic Budget, FY 86-87
- B. Athletic Budget projection using current \$40.00 fee structure vs expense using 3% inflation factor.
- C. Fee Income Actual and Projection (\$20.00).
- D. Income Projection using \$30.00/semester.
- E. Student Involvement in Athletics

SUPPORTING DATA

- A. Intercollegiate Athletics Budget, FY 86-87 \$166,630.00
- | | | |
|-------------------------|-----|-------------|
| 1. 2-10454, inst. funds | 16% | \$27,400.00 |
| 2. Student fees | 53% | 84,460.00 |
| 3. Other | 31% | 54,770.00 |
- includes; gate receipts, guarantees, interest on savings, contributions, season tickets, rental income.
- (Intercollegiate Athletics)

B. I. A. Budget Projection

<u>FY</u>	<u>Budget</u>	<u>Expense</u>
84-85	\$168,851.00	\$172,329.00
85-86	170,250.00	173,082.00
86-87	166,630.00	178,274.00 (est., 3% inflation)
87-88	157,439.00	183,623.00
88-89	152,176.00	189,131.00
89-90	146,913.00	194,805.00

C. Fee Income \$20.00/semester

1. <u>Actual</u>						<u>Ave. #</u>	<u>Total</u>
<u>FY</u>	<u>Fall</u>	<u># Students</u>	<u>Spring</u>	<u># Students</u>	<u>Students</u>		
84-85	\$49,125	2486	\$45,788	2290	2388	\$95,513	
85-86	47,383	2369	43,386	2170	2270	90,769	
86 (Fall)	43,402	2170					
2. <u>Projection</u>							
87 (Spring)			\$40,984	2050	2110	\$84,386	
87-88	\$40,541	2027	38,582	1929	1978	79,123	
88-89	37,680	1884	36,180	1809	1847	73,860	
89-90	34,819	1741	33,778	1689	1715	68,597	

Notes:

- Fee income decreasing an average of \$5,263.00/year (a loss of 131+ students yearly).
- Enrollment loss will continue 2-3 years.

D. Income Projection, using \$30.00/semester request.

<u>FY</u>	<u># Students (ave.)</u>	<u>Fees</u>	<u>+ O.I. =</u>	<u>Income</u>	<u>Expense</u>
86-87*	2110	\$84,400	\$78,316	\$162,716	\$178,274
87-88	1978	118,680		196,996	183,623
88-89	1847	110,820		189,136	189,131
89-90	1715	102,900		181,216	194,805

* \$40.00 fee FY 86-87

E. Student-Athletes

<u>FY</u>	<u>New Students on Aid</u>	(New Students) <u>N.S.FB.</u>	Total Students <u>(Foot- Participation</u>	<u>Total FB (football)</u>
84-85	79	26	350	53
85-86	107	38	384	74
86-87	128	62	unknown	108

RECORD OF PROCEEDINGS

Golden, Colorado
February 13, 1987

The Board of Trustees met in regular session on February 13, 1987, at 8:00 a.m.

Trustees present: Messrs. Earnest, Henderson, Pascoe, Schwartzberg, Warren, Wilson and Wood.

Mrs. Allen was not present at the regular meeting. She entered the meeting during the executive session.

Also attending the meeting were President Ansell, Vice Presidents Golden, Nyikos, and Scott, Mr. Robbins, Executive Director of the CSM Foundation, Deans Gentry and Romberger, other staff members, and visitors.

Mr. Wood presided.

Previous Minutes. The minutes of the meeting held on January 9, 1987, were approved as distributed.

CSM v. Vashisht. Mr. Scott informed the Board that Naresh Vashisht was a student attending the special executive program at Mines. He dropped out midway through the semester. The School instituted an action against Mr. Vashisht in County Court to collect tuition for the semester. The School agreed, subject to Trustee approval, to accept payment of one-half of the semester's tuition, per the attached settlement agreement.

The Board unanimously approved the settlement agreement in Jefferson County Court, No. 86C7350.

Security Clearance. Dr. Golden informed the Board that our facility clearance lapsed because of a lack of need. Dr. Ozdemir's activities have triggered a need to have it reinstated. The Board unanimously approved the following resolution:

Those persons occupying the following positions among the officers and members of the Board of Trustees of the Colorado School of Mines, shall be known as the Managerial Group, having the authority and responsibility for the negotiating, execution, and administration of User Agency contracts, as described in DoD 5220.22-M, "Industrial Security Manual for safeguarding Classified Information."

George S. Ansell, President, Colorado
School of Mines

John O. Golden, Vice President for
Academic Affairs

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W. Gordon Scott, Vice President for
Business Affairs

David L. Olson, Dean of Research

Alan R. Stein, Contracts & Grants
Administrator/Industrial Security
Officer

The Chief Executive and the members of the Managerial Group have been processed, or will be processed, for a personnel security clearance for access to classified information to the level of the facility security clearance granted to this institution, as provided for in the aforementioned industrial security manual.

The said Management Group is hereby delegated all of the Board's duties and responsibilities pertaining to the protection of classified information under classified contracts of the Department of Defense or User Agencies of the Industrial Security Program awarded to Colorado School of Mines.

The following named officers and members of the Board of Trustees shall not require, shall not have, and can be effectively excluded from, access to all classified information in the possession of the Colorado School of Mines, and do not occupy positions that would enable them to affect adversely the policies and practices of the Colorado School of Mines in the performance of classified contracts for the Department of defense or User Agencies of its Industrial Security Program, awarded to the Colorado School of Mines, need not be processed for a personnel security clearance.

Officers

<u>Name</u>	<u>Title</u>
Donald W. Gentry	Dean of Undergraduate Studies
Samuel B. Romberger	Dean of Graduate Studies
Michael S. Nyikos	Vice President for Student Affairs & External Relations

Board Members

<u>Name</u>	<u>Title</u>
Russell L. Wood	President
Monte Pascoe	Vice President
James C. Wilson	Secretary

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Sally V. Allen
Don K. Henderson
Fred R. Schwartzberg
Jasper N. Warren
Frederick H. Earnest

Emeritus Appointments. Dr. Golden informed the Board that the following faculty members have announced their intentions to retire. All of them meet the requirements for emeritus status under the Faculty Handbook (Tenth Edition, August 1982).

Dr. Harry C. Peterson	Engineering Department
Dr. Richard H. DeVoto	Geology and Geological Engineering Department
Professor James W. Martin	Engineering Department
Dr. Thomas L. T. Grose	Geology and Geological Engineering Department
Dr. John T. Williams	Chemistry and Geo-chemistry Department
Dr. George B. Lucas	Chemistry and Geo-chemistry Department

The Board unanimously approved emeritus status for the above-named faculty members.

Revised Designation of Officers of the School. Mr. Scott informed the Board that the guidelines for exemption of positions in educational institutions and departments were issued by the Department of Personnel in 1977. The School last designated positions and incumbents in June of that year.

The Board unanimously approved the revised list of designation of officers of the School and heads of administrative units for purposes of determining eligibility for exemption from the State Classified System, which list is appended hereto, and extended such designation to all officers meeting the conditions stated by the Colorado State Department of Personnel.

Revision of 1986-87 Operating Budget. Mr. Scott reminded the Board that it adopted the 1986-87 budget at its meeting of June 28, 1986. Since that time, experience with revenues and expenses indicates a need for adjustment in several categories.

Mr. Scott also reminded the Board that it adopted a spending policy for CSM and CSMF restricted funds on January 11, 1985. That policy allows expenditure of accumulated balances and current year additions. The adoption of prior budgets for auxiliary and self-funded activities has not specified authorization to expend prior year accumulations.

The Board unanimously approved the revised 1986-87 budget, with the understanding that auxiliary and self-funded activities may expend funds within the limits of current year revenues and prior year accumulated balances.

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New Faculty Appointments. Dr. Gentry presented the report as follows:

New Appointments.

Dr. Ronald R. McDowell Instructor in Mathematics	\$6,000 for the 1986-87 spring semester
Dr. Terry F. Rees Adjunct Assistant Professor of Chemistry & Geochemistry	\$2,400 for the 1986-87 spring semester

Continuation of Appointment:

Mr. Jerry L. Clayton Part-time Instructor in Chemistry & Geochemistry	\$2,400 for the 1986-87 spring semester
Dr. Duane A. Haugen Adjunct Professor of Mathematics	\$9,000 for the 1986-87 spring semester
Ms. Mathilda Varban Part-time Instructor in Humanities & Social Sciences	\$1,680 for the period January 15, 1987 - April 30, 1987

Reappointment after Interruption.

Mr. Wesley Johnson Adjunct Associate Professor of Mining Engineering	\$2,250 for the 1986-87 spring semester
Dr. Terence J. Lohman Adjunct Assistant Professor of Humanities & Social Sciences	\$5,000 for the 1986-87 spring semester

Additional Information:

Dr. Gentry had distributed quantitative evaluation reports to the Board members prior to the Board meeting.

Graduate School Admissions. Dr. Romberger had distributed the report prior to the Board meeting. The report indicates that the increase in total number of new students registered over the previous spring semester, from 78 to 99, is accounted for by the new class in the Executive Program and those registered in the Geology and Geophysics degree programs. Only minor increases and decreases in new students have occurred in other programs. Dr. Romberger pointed out that under the section "total students registered," significant increases have occurred in Environmental Sciences, Geology (both regular and professional), Metallurgy, and Petroleum Engineering, while decreases have occurred in Geophysics and Mining. Other departments have stayed relatively constant, and no significant trends are apparent.

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Dr. Romberger stated that it is still too early to identify trends in fall 1987 applications. However, there may be some cause for concern in the apparent slow rate in application files becoming completed when compared to previous years. He indicated that subsequent reports will be more informative in identifying enrollment trends for the fall.

Enrollment. Mr. Spaulding had distributed the spring 1986-87 enrollment statistics prior to the Board meeting.

Admissions. Mr. Young had distributed the February 3, 1987 Admissions Report prior to the Board meeting.

New Research Awards. Dr. Olson had distributed the report, which reflects the award volume through February 2, 1987, prior to the Board meeting. The report indicates that this month's volume was \$753,317, compared to \$1,003,649 for the same time period the previous year. This results in a cumulative total for FY 1987 of \$4,863,880, or \$1,153,662 ahead of the total for the same period the previous year of \$3,710,218. Seventeen different faculty were involved in eighteen new project awards.

Dr. Olson's report reflects the submission of twenty-six proposals during the month of January 1987 compared to eleven during the month of December 1986, which results in a total to date of 135 proposals for FY 1987.

Monthly Reports. Mr. Scott had distributed the following monthly reports prior to the Board meeting: Current Funds Revenues, Expenditures and Other Changes for the Seven Months Ending January 31, 1987; Colorado School of Mines Auxiliary and Self-Funded Activities for the Seven Months Ending January 31, 1987; and Time Deposits and Investment Report, January 31 1987.

It is Mr. Scott's belief that the School is operating within the revenues projected for the 1987 fiscal year.

Development Report. Mr. Doubleday of the CSM Foundation presented the report for the six-month period starting July 1, 1986 and ending December 31, 1986 (second quarter of fiscal year 1986-87). He stated that the CSM Foundation received a total of \$3.3 million in contributions. This is thirty-eight percent more than was received during the same period in the immediately prior year.

Mr. Doubleday stated that overall, the \$3.3 million during the first half represents sixty-two percent of what was received during the entire last year.

Mr. Wood thanked Mr. Doubleday for his report.

Sabbatical Report. Dr. William A. Mattingly, Associate Professor of English, who was on academic leave during the 1985-86 academic year at one-half pay, presented his report. During his sabbatical he worked on a textbook on technical writing.

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Sabbatical Report. Dr. Robert Baldwin, Professor of Chemical Engineering and Petroleum Refining, who was on academic leave during the spring semester of the 1985-86 academic year at three-fourths pay, presented his report. Dr. Baldwin spent the period in a national research laboratory in Australia working on oil shale problems.

Mr. Pascoe entered the meeting at this time.

CSM/CSMAA/CSMF Cooperation Committee Recommendations. President Ansell reviewed the proposed memorandum of understanding entitled "Fund Raising, Fiduciary and Financial Responsibilities." Following extensive discussion, it was moved that the statement be adopted in principle and that every cooperation be extended to implementing its intent. The motion carried unanimously.

Mr. Wood stated that a letter reflecting this action will be sent to Mr. Rodney J. Eichler, President of the CSM Alumni Association, for presentation to the CSM Alumni Board, and to Mr. Don Henderson, President of the CSM Foundation Board.

Departmental Visiting Committees. President Ansell reviewed the lists of names submitted for visiting committees for the Mineral Economics and Physics Departments. The nominees for the Mineral Economics Department Visiting Committee are:

Dr. John J. Schanz, Jr.
Senior Specialist
Energy and Mineral Resources Policy
Congressional Research Service, Library of Congress
Washington, D.C.

Hans Landsberg
Senior Fellow, Emeritus
Resources for the Future, Inc.
Washington, D.C.

Dr. Merton J. Peck
Professor of Economics
Yale University
New Haven, CT

Mr. Gordon Parker
Chairman, President & CEO
Newmont Mining Corporation
New York, NY

Mr. Kenneth J. Barr
President and CEO
Cyprus Minerals Company
Englewood, CO

Mr. Jack W. Wilkinson
Chief Economist

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Sun Company, Inc.
Radnor, PA
(Also President, International Association
of Energy Economists)

Mr. P.C.F. Crowson
Economics Adviser & Head of Economics Dept.
The Rio Tinto-Zinc Corporation, PLC
London

Mr. Richard A. Kirk
Chairman
United Bank of Denver
Denver, CO

Mr. Allen Born
Amax, Inc.
Greenwich, CT

Dr. C. George Miller
Managing Director
The Mining Association of Canada
Ottawa, Ontario, Canada

Dr. Elizabeth L. Robinson
Vice President
Morgan Guarantee Trust Co. of New York
New York, NY

Joseph Robertson, Jr.
Philipp Brothers
New York, NY

The nominees for the Physics Department Visiting
Committee are:

Leonid Azaroff
Director
Institute for Materials Science
University of Connecticut
Storrs, CT

Morrel Cohen
Staff Scientist
Exxon Research Laboratories
Annandale, NJ

Gerald Garvey
Associate Director
Los Alamos National Laboratory
Los Alamos, NM

Ted Geballe
Professor
Department of Applied Physics
Stanford University
Stanford, CA

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Jerry Gilland
V.P. Technical Products
Ball Corporation
Broomfield, CO

Harold Hubbard
Director
Solar Energy Research Institute
Golden, CO

George Pake
V.P. and General Manager (retired)
Xerox Palo Alto Research Center
Palo Alto, CA

Dave Shirley
Director
Lawrence Berkeley Laboratory
Berkeley, CA


Bud Wonsiewicz
V.P. Science and Technology
U.S. West Advanced Technologies
Englewood, CO

Robert Stratton
V.P., Corporate Staff
and Director
Central Research Laboratories
Texas Instruments Inc.
Dallas, TX

A. Frank Mayadas
Research Division Vice President
Almaden Research Laboratory
International Business Machines Corporation
San Jose, CA

The Board unanimously approved the suggested lists for the Visiting Committees for the Departments of Mineral Economics and Physics.

The meeting was adjourned at 10:00 a.m., and the Board went into executive session.


Secretary

February 13, 1987

COUNTY COURT, JEFFERSON COUNTY, COLORADO

Civil Action No. 86C7350, Division A

SETTLEMENT AGREEMENT

STATE OF COLORADO FOR THE
COLORADO SCHOOL OF MINES,

Plaintiff,

v.

NARESH K. VASHISHT,

Defendant.

COME NOW the parties, and for their settlement agreement state as follows:

1. The Colorado School of Mines (CSM) agrees to accept the sum of \$1200.00 in full settlement of the claims asserted in this action.


2. Defendant agrees to pay this sum of monthly installments of \$200.00 commencing on February 20, 1987 and due on the twentieth of each month thereafter until paid in full.

3. Upon completion of the payment schedule set forth above, CSM shall dismiss this action with prejudice. However, if defendant is more than ten days late in any payment, CSM may obtain judgment on the amount of payment remaining owed upon five days' written notice to defendant.

4. This agreement must be ratified by the CSM trustees to be effective. It will be presented to them at their next scheduled meeting to be held on February 13, 1987. Defendant agrees, in consideration of CSM's willingness to vacate the trial date currently set for January 13, 1987, not to withdraw from this agreement pending trustee approval.

Respectfully submitted,

FOR THE ATTORNEY GENERAL



CHARLES F. KAISER, #8557
Assistant Attorney General
Human Resources Section

1525 Sherman Street, 3d Floor
Denver, CO 80203
Telephone: 866-3611
Attorney for the Plaintiff

NARESH K. VASHISHT
17162 East Ida Place
Aurora, CO 80015

CSM
BOARD OF TRUSTEES
AGENDA ITEM

Date of Meeting 2/13/87
Item Number 1(e)
Presented By Gordon Scott

SUBJECT: Revised designation of officers of the School and heads of administrative units for purposes of determining eligibility for exemption from the State Classified System.

BACKGROUND INFORMATION

The guidelines for exemption of positions in educational institutions and departments were issued by the Department of Personnel in 1977. The School last designated positions and incumbents in June of that year.

The following designations are suggested to the Board for its approval. The list must then be approved by the Executive Director of the Department of Personnel. For purposes of exemption or classification under the State Personnel System, these positions should be classified as follows:

Officers

President
Vice President for Academic Affairs
Vice President for Student Affairs and External Relations
Vice President for Business Affairs
Dean of Research
Dean of Graduate Studies
Dean of Engineering
Dean of Student Affairs
Director of Enrollment Management
Director of Public Relations and Public Information
Executive Director for Financial Services
Director of Plant Facilities
Director of Budget/Personnel/Administrative Services

Professional Staff Assistants

Office of the President's Administrative Assistant
Office of V. P. for Academic Affairs' Administrative Assistant

Heads of Administrative Units Directly Responsible to
Officers, Not Related to the Educational Functions

Controller
Financial Aid Director
Purchasing Director
Manager, Administrative Data Processing
Affirmative Action Officer
Internal Auditor

Heads of Administrative Units Directly Responsible to
Officers, Related to the Educational Function

Director of Special Programs and Continuing Education
Director of Computing Center
Director of Library
Registrar
Director of Student Health Center
Director of Student Life and Auxiliary Services
Director of Student Development
Director of Student Activities
Director of the Green Center
Director of Admissions
Publications Coordinator
Job Development Specialist
Director of Placement
Director of Geology Museum

Professional Staff Assistants

Admissions Directors
Librarians
Curator of Geology Museum
Head Nurse
Assistant Director of Housing

ACTION/MOTION REQUESTED:

Motion indicating Board designations as listed above.

RECORD OF PROCEEDINGS

Golden, Colorado
March 13, 1987

The Board of Trustees met in regular session on March 13, 1987, at 9:00 a.m.

Trustees present: Mrs. Allen, Messrs. Earnest, Henderson, Pascoe, Schwartzberg, Wilson and Wood.

Absent: Mr. Warren.

Also attending the meeting were President Ansell, Vice Presidents Golden, Nyikos, and Scott, Mr. Robbins, Executive Director of the CSM Foundation, Deans Gentry, Olson, Romberger, and Chevront, other staff members, and visitors.

Mr. Wood presided.,

Previous Minutes. The minutes of the meeting held on February 13, 1987, were approved as distributed.

Investment Policy for CSM Funds. Mr. Scott had distributed a draft of the Investment Policy to the Board members prior to the meeting. The Colorado School of Mines has no formal investment policy. The guidelines suggested are general and may be made more specific in the future.

The Board unanimously approved the Investment Policy as submitted, copy of which is appended hereto.

Sabbatical Request. Dr. Golden informed the Board that Dr. Joseph Sneed has requested sabbatical leave for the 1987-88 academic year at one-half salary to work on collaborative research, offer graduate courses and become familiar with artificial intelligence research at the University of Munich.

The Board unanimously approved the request for sabbatical leave.

Departmental Visiting Committee. The following persons are recommended for the Department of Mining Visiting Committee:

Harry M. Conger
Chairman, President and CEO
Homestake Mining Company
San Francisco, CA

Doug Dahl
Executive Vice President
Energy Exploration
Consolidation Coal
Pittsburgh, PA

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Charles Fairhurst
Professor and Head
Department of Civil and Mineral
Engineering
University of Minnesota
Minneapolis, MN

Tom V. Falkie
Chairman
Berwind Natural Resources Co.
Philadelphia, PA

Ralph Hennebach
Director (retired Chairman)
ASARCO, Inc.
New York, NY

John Murphy
Research Director
U.S. Bureau of Mines
Pittsburgh Research Center
Pittsburgh, PA

Tom O'Neil
Manager of Business Developments
Cyprus Minerals Co.
Englewood, CO

Gordon R. Parker
CEO, Chairman and President
Newmont Mining Corp.
New York, NY

Stanley Suboleski
VP Planning and Development Division
A. T. Massey Coal Co., Inc.
Richmond, VA

George M. Wilfley
Chairman
A. R. Wilfley & Sons, Inc.
Denver, CO

The Board unanimously approved the nominees for the Visiting Committee for the Department of Mathematics.

Approval of Settlement, CSM v. Marin & Marin. The Board previously discussed the settlement of the lawsuit at the level of \$6,000. Settlement of \$5,250 was offered at the Courthouse door. Consideration was given to the complexity of the case, the need for expert testimony and the additional costs to be incurred at trial. Mr. Scott authorized settlement at that level, pending approval by the Board.

The Board unanimously authorized Mr. Charles Kaiser of the Attorney General's Office to execute the Stipulation requested.

March 13, 1987

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New Faculty Appointments. Dr. Gentry presented the report as follows:

New Appointment.

Mr. Robert Cushman Instructor in Geological Engineering	\$3,275 for the period February 1, 1987 - May 8, 1987
---------------------------------------------------------------	-------------------------------------------------------------

Continuation of Appointment.

Dr. Richard Harlan Adjunct Professor of Geological Engineering	\$3,000 for the 1986-87 Spring Semester
Dr. Douglas W. Waples Adjunct Professor of Chemistry and Geochemistry	\$3,600 for the 1986-87 Spring Semester

Reappointment after Interruption.

Dr. John L. Lufkin Adjunct Associate Professor of Geological Engineering	\$7,000 for the 1986-87 spring semester
Dr. R. Gerald Nix Adjunct Associate Professor of Chemical Engineering and Petroleum Refining	\$3,500 for the 1986-87 spring semester

Additional Information:

Dr. Gentry had distributed quantitative evaluation reports to the Board members prior to the Board meeting.

Graduate School Admissions. Dr. Romberger had distributed the report prior to the Board meeting. The report indicates that the total number of applications compared to the previous year is about the same. However, a significant increase is observed in applications for Physics and Metallurgy while a decrease is observed in the exploration sciences Geology and Geophysics. These trends may be driven by the marketplace as interest in exploration decreases while that in the basic sciences and materials strengthens. The Physics Department has advertised and recruited in the past few years and this effort may be beginning to pay off.

Enrollment. Mr. Spaulding had distributed the Registrar's Report for Spring 1986-87 prior to the Board meeting. There was no discussion about this report.

Admissions. Mr. Young had distributed the March 1, 1987 Admissions Report prior to the Board meeting. There was some discussion by the Board members with regard to this report, and Mr. Young responded to questions.

New Research Awards. Dr. Olson had distributed the report, which reflects the award volume through February 26,

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1987, prior to the Board meeting. The report indicates that this month's volume was \$1,219,335, compared to \$668,955 for the same time period the previous year. This results in a cumulative total for FY 1987 of \$6,083,215, or \$1,704,042 ahead of the total for the same period the previous year of \$4,379,473. Fifteen different faculty were involved in fifteen new project awards.

Dr. Olson's report reflects the submission of seventeen proposals during the month of February 1987 compared to twenty-six during the month of January 1987, which results in a total to date of 152 proposals for FY 1987.

Monthly Reports. Mr. Scott had distributed the following monthly reports prior to the Board meeting: Current Funds Revenues, Expenditures and Other Changes for the Eight Months Ending February 28, 1987; Colorado School of Mines Auxiliary and Self-Funded Activities for the Eight Months Ending February 28, 1987; and Time Deposits and Investment Report, February 28 1987.

It is Mr. Scott's belief that the School is operating within the funds available for the 1987 fiscal year.

Legislative Report. Dr. Nyikos reminded the Board that the final legislative luncheon, which will be with the Senate Education Committee, will be held on March 30, 1987. He stressed the importance of attendance at this luncheon as it will provide the Trustees with an opportunity to defend House Bill 1187, which grants authority to the Mines Board of Trustees to sell, lease, or otherwise dispose of land and to retain the proceeds derived therefrom. He discussed the concerns of various legislators with regard to this bill.

Dr. Nyikos gave a brief report on the CCHE working committees and stated that he hopes to make a more comprehensive report at the April Board meeting.

Dr. Nyikos reported on his attendance at the Alumni Association Board of Directors meeting. He stated that he received a cordial reception and that it was a productive meeting. He was also invited to participate in the executive session.

Mr. Zehr discussed his Board's responses to the CSM/CSMAA/CSMF Cooperation Committee recommendations, stating that some of the items were agreed to and some of the items will require further discussion. He feels that the discussion of the document was very constructive.

Messrs. Henderson and Schwartzberg commented that they feel the relationships between the groups are better than they have been in a long time. Mr. Schwartzberg feels that some of the issues will take some time, but stated that he was impressed with the level of support and the attitude of cooperation.

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Mr. Henderson expressed support for the accelerated agenda, but also expressed concern about the matters on the agenda receiving enough attention. Mr. Wood pointed out that each Trustee has the option of discussing any item at length.

The meeting was adjourned at 9:40 a.m., and the Board went into executive session.


Secretary

March 13, 1987

INVESTMENT POLICY
FOR CSM FUNDS

BACKGROUND

This policy sets forth broad guidelines for the management of various funds held by the Colorado School of Mines for investment. The Board of Trustees has delegated authority for the management of most investments to the Investment Committee of the Colorado School of Mines Foundation. The authority for the management of the Cash Equivalent Funds is delegated to the Treasurer of CSM. Funds of the Foundation and the School are held separately and are not to be commingled. Outside investment advisors may be retained and reimbursed directly by CSM.

POLICY

General

All funds received by CSM which are eligible for investment should be processed and invested promptly.

Records will be maintained in the CSM Accounting Office.

Reports on the status of the investments will be made to the President and the Board of Trustees frequently, usually monthly.

By Fund Type

Cash Equivalent Funds

These are usually held for use by the fund managers upon demand or pending a decision as to the appropriate investment vehicle. They require high liquidity, low risk to principal and a good rate of return. The State of Colorado requires they be invested in U.S. Government securities or instruments insured by an agency of the U.S. Government.

Life Income Funds

Should yield in excess of the required income distributions and provide for some growth of principal with reasonable protection against loss of value.

Endowment and Quasi-Endowment Funds

Should provide higher than average income and modest growth of principal to protect its value. The CSM Board of Trustees will annually adopt a maximum spending rate for these funds.

Special Purpose Funds

Should be invested in accord with donor restrictions and instructions. In all cases the investment should be selected to best achieve the purposes of the gift or bequest.

Securities

Will be chosen by the CSM Treasurer in the Cash Equivalent Funds and the Investment Advisor in the case of all other funds with review by the CSMF Investment Committee and the CSM Board of Trustees, as appropriate.

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Golden, Colorado
April 10, 1987

The Board of Trustees met in regular session on April 10, 1987, at 9:00 a.m.

Trustees present: Mrs. Allen, Messrs. Earnest, Henderson, Pascoe, Schwartzberg, Warren, Wilson and Wood.

Also attending the meeting were President Ansell, Vice Presidents Golden, Nyikos, and Scott, Mr. Robbins, Executive Director of the CSM Foundation, Deans Olson and Chevront, Dr. Sloan, faculty representative to the Board, other staff members, and visitors.

Mr. Wood presided.

Previous Minutes. Mr. Wood asked that the minutes of the meeting of March 13, 1987, be amended to reflect the presence of Dr. Sloan, faculty representative to the Board, at that meeting. The minutes were then approved as distributed.

Undergraduate Degree Title Change. Dr. Golden informed the Board that the Department of Mathematics recommends that the undergraduate degree title, Bachelor of Science (Mineral Engineering Mathematics) be changed to Bachelor of Science (Mathematics); Bachelor of Science (Mineral Engineering Mathematics - Computer Science Option) be changed to Bachelor of Science (Mathematics-Computer Science Option); and Bachelor of Science (Mineral Engineering Mathematics-Geophysics Option) be changed to Bachelor of Science (Mathematics-Geophysics Option). This request has been submitted by the Head of the Mathematics Department and has the support of the faculty in that department.

The Colorado Commission on Higher Education staff has verbally agreed to this change. This degree title change will assist the Mathematics Department with student recruiting and more fairly represents to the industrial community the real nature of the degree.

The Board unanimously approved the request.

CCHE Letter. A copy of a letter written by Dr. Blenda Wilson, Executive Director of the CCHE, dated April 1, 1987, was distributed to the Board. This letter indicated that the following changes have been made on the Commission's official list of CSM academic programs:

1. B.S. in Mineral Engineering Chemistry to B.S. in Chemistry.
2. B.S. in Mineral Engineering Mathematics to B.S. in Mathematics.
3. Professional Degree Geophysical Engineer to Professional Degree Geophysical Engineer/Geophysics.

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4. Professional Degree Geological Engineer to Professional Degree Geological Engineer/Geology.

Approval of Syvret Agreement. The agreement with Mr. Charles Syvret provides for the Board of Trustees and CSM to establish a loan fund for graduate students. Mr. Syvret intends to contribute to the fund now and to provide for his estate to endow the fund permanently. A copy of the agreement is appended hereto.

The Board unanimously approved the agreement, which was signed by Mr. Wood and Mr. Wilson.

New Faculty Appointments. Dr. Gentry presented the report as follows:

New Appointments.

Dr. Bruce D. Craig Adjunct Associate Professor of Petroleum Engineering	\$1,500 for the 1986-87 Spring Semester
Ms. Elizabeth Baker Part-time Instructor in Humanities and Social Sciences	\$3,500 for the 1986-87 Spring Semester
Mr. Howard L. Johnson Adjunct Professor of Geophysics and Acting Director of Cooperative Institute for Geoscience Data Management and Analysis	\$40.00 per hour for an amount of time not to exceed eight hours per week

Continuation of Appointment.

Dr. Hossein Kazemi Adjunct Associate Professor of Petroleum Engineering	\$3,570 for the 1986-87 Spring Semester
Mr. Ray Sengbush Visiting Professor of Geophysics	\$24,818 for the 1986-87 Spring Semester
Ms. Cheryl A. Siefert Adjunct Assistant Professor of Mineral Economics	\$2,000 for the 1986-87 Spring Semester

Additional Information:

Dr. Gentry had distributed quantitative evaluation reports to the Board members prior to the Board meeting.

Graduate School Admissions. Dr. Romberger had distributed the report prior to the Board meeting. His report indicates that trends which began to develop the previous month are becoming clearer now, particularly the decrease in total applications received compared to last year which is caused by the decrease in applications for Geology and Geophysics. Because we have not done anything different to have a negative

April 10, 1987

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impact on the application rate for these two programs, it can only be concluded that the decrease is due to the recession in the energy industry. Despite the decrease in total applications, Geology will still admit forty new students, which is about the same as in previous years. Positive aspects of the report are the large number of applicants interested in the professional degree in Geophysics, and the large number of applications for the Physics program. Modest growth appears to be occurring in Metallurgy and Chemical Engineering. Other departments seem to be remaining the same when compared to last year, or are showing a slight decline; for example, Chemistry, Math, Mineral Economics, and Petroleum Engineering. Of the total 318 applications received to date, 116 are from foreign students.

Admissions. Mr. Young had distributed the Admissions Report dated April 1, 1987 prior to the Board meeting. There was no discussion about this report.

New Research Awards. Dr. Olson had distributed the report, which reflects the award volume through March 31, 1987, prior to the Board meeting. The report indicates that this month's volume was \$947,647, compared to \$851,013 for the same time period the previous year. This results in a cumulative total for FY 1987 of \$7,030,862, or \$1,800,676 ahead of the total for the same period the previous year of \$5,230,186. Eighteen different faculty were involved in twenty new project awards.

Dr. Olson's report reflects the submission of twenty-six proposals during the month of March 1987 compared to seventeen during the month of February 1987. Total proposals submitted has largely increased due to the inclusion of proposals submitted through ORS for renewals on contracts. In addition, the Office of Research Development is in the process of including letter proposals and consortia proposals not submitted through ORS for numbering. It is anticipated that the April report will reflect an increase in the number of proposals due to the fact that several departments have submitted consortia proposals for FY 1987. At that time, the new accounting system will be in place. To date a total of 299 proposals for FY 1987 have been submitted.

Monthly Reports. Mr. Scott had distributed the following monthly reports prior to the Board meeting: Current Funds Revenues, Expenditures and Other Changes for the Nine Months Ending March 31, 1987; Colorado School of Mines Auxiliary and Self-Funded Activities for the Nine Months Ending March 31, 1987; and Time Deposits and Investment Report, March 31 1987.

It is Mr. Scott's belief that the School is operating within the funds available for the 1987 fiscal year.

Professional Degree. Dr. Golden informed the Board that for the past year, the School has been using the professional degree on a trial basis to accommodate students interested in updating their academic background or retraining for a new career. The program has been successful in terms of student enrollment and the faculty, at its last meeting,

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approved degree requirements that accommodate the present thrust. Since this is a controversial issue on campus, the administration felt that the Trustees should be informed. Accordingly, a memo from Dr. Romig to the faculty which summarizes the new directions and discusses several of the issues is appended hereto.

Discussion ensued with regard to this matter.

Colorado Open Meetings Act. President Ansell informed the Board that the Governor has signed H.B. 1018, making the Colorado Open Meetings Act expressly applicable to institutions of higher education in this state. A copy of H.B. 1018 is appended hereto.

Sabbatical Report. Dr. Fun-Den Wang, Professor of Mining Engineering, who was on academic leave during the 1985-86 academic year at one-half pay, presented his report. He stated that he traveled to Europe, China and Japan and that he worked on his book.

Dr. Wang thanked the Board for the opportunities which the sabbatical provided, and Mr. Wood thanked Dr. Wang for his report.

Legislative Report. Dr. Nyikos informed the Board that the JBC budget proposal is currently under discussion.

Dr. Nyikos discussed House Bill No. 1342, which concerns the term of office for certain gubernatorial appointees. The bill decreases the length of term of office on several state boards, including the Board of the School of Mines. Dr. Nyikos informed the Board that he is presently in the process of determining the intent of this bill.

Dr. Nyikos reviewed HB 1187 as it relates to the authority of the CCHE. He discussed recent actions of, and matters in progress at, the CCHE.

Mr. Henderson requested a report from Bonnie Geiger and Jerry Johnson at the Trustees Conference with regard to how CSM is viewed by legislators.

Alumni Reception. Mr. Zehr reported on the reception which was held on April 9 for legislators and alumni representatives from CSM, CSU and CU. He feels that the reception was successful and believes that it might be useful to consider holding these receptions on a yearly basis.

Report on Surface Interfacial Institute and Facilities. Dean Olson, Dr. Baki Yarar, Dr. W. J. Van Ooij and Dr. Thomas Furtak have prepared a proposal for the establishment of a CSM Surface Science Institute with Centers. A copy of the proposal was submitted to the Board prior to the meeting.

Dr. Thomas Furtak, Professor of Physics, made a brief presentation.

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Master Plan - Phase II. The Master Plan - Phase I - covers the academic buildings and was approved by the Board of Trustees and the CCHE. Phase II covers the campus utility systems, plant facilities buildings and related land areas. The plan has been supported by state appropriations and CSM funds.

The Summary Report of the Support Facilities Master Plan, prepared by Worthington Everett Zeigel Architects and Planners, was distributed to the Board. Mr. Alan Zeigel and Mr. David Carson gave a brief presentation.

Mr. Henderson stated that he wants some assurance that all of the utilities, support structures, etc., are in compliance with code. He requested that a presentation be made to the Board by the Safety Committee in the near future regarding this question.

The Board unanimously approved the Master Plan - Phase II - which will be submitted to the CCHE for approval.

Draft Strategic Plan. Prior to the Board meeting, a copy of the first draft of the proposed five-year plan for the School of Mines was distributed to the Board. President Ansell informed the Board that the draft follows from the efforts of the Goals and Planning Committee, the sixteen special planning committees, and continuing discussion. The draft attempts to capture the ideas put forth to date--recognizing that many specific recommendations have already been put in place or will be included in the revised Faculty Handbook.

The draft has been distributed to members of the Goals and Planning Committee, Department Heads and members of the Administrative Advisory Council. The intent is to have each of these groups meet and discuss the draft with a view towards generating a second generation draft plan which then will be shared and discussed by the broad Mines community.

The final version of the plan will then be used as the contextual framework for each department to develop individual strategic plans for implementation during the 1988-89 academic year.

Dr. Golden requested Board approval of six percent spending limit on CSM Foundation endowed funds to be spent by the School during FY 1988.

The Board unanimously approved the request.

Request to CSM Foundation Board. Dr. Golden stated that each year at this time CSM makes a formal request to the Foundation for support of the School's activities. This support has been used for undergraduate financial aid, faculty recruiting, faculty improvement, graduate recruiting, and support of the President's Office. Last year the amount that was requested and approved by the Foundation was \$600,000.

April 10, 1987

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For the 1987-88 academic year, after considerable discussion, the administration recommends that the request level be increased to \$1,000,000. This increased support level is based upon the need to implement our new strategic plan. Dr. Golden stated that he realizes the Trustees will see a draft version of the plan for the first time at this meeting and, accordingly, will need time for questions and discussion. In addition, it is requested that the CSM Foundation contract separately for legislative services support.

Following extensive discussion, the Board unanimously voted to request the Foundation Board to consider an appropriation of \$1 million.

Personnel Actions, 1986-87. Dr. Golden made the following recommendations:

Promotion to Associate Professor with Tenure

GE - Dr. Eric P. Nelson
HU - Dr. Karen B. Wiley
HU - Dr. Kathleen H. Ochs
GP - Dr. Catherine A. Skokan
PA - Professor Charles R. Kroll

Promotion to Associate Professor - Tenure Granted by Previous Administration

PA - Professor Robert W. Pearson
PE - Professor Charles S. Aldrich

Extension of Time for Tenure Decision

PH - Dr. Mark A. Passler

Promotion to Professor

MA - Professor William R. Astle
MN - Dr. Robert H. King
CR - Dr. M. Sami Selim

The Board unanimously approved the proposed personnel actions.

Dr. Sloan informed the Board that he will summarize his impressions of the Board meetings at the upcoming faculty meeting.

The meeting was adjourned at 12:15 p.m., and the Board went into executive session.


Secretary

April 10, 1987

MEMORANDUM OF AGREEMENT
RE: SYVRET ENDOWMENT FUND

THIS AGREEMENT, made this 10th day of April, 1987, between Charles F. Syvret ["the Proponent"] of the City and County of Denver, State of Colorado, and the Board of Trustees ["the Trustees"] of the Colorado School of Mines ["Mines"], a state educational institution located in the City of Golden, State of Colorado, WITNESSETH:

WHEREAS the Proponent proposes to establish, subject to the applicable laws and regulations of the State of Colorado, a permanent, non-expendable endowment fund to be known as the Syvret Endowment Fund ["the Endowment Fund"], and

WHEREAS the intended purpose of said Endowment Fund is to provide income for a separate fund to be known as the Syvret Educational Loan Fund ["the Loan Fund" or the acronym, "SELF"], from which loans may be made to deserving graduate students who desire to continue their studies at Mines for the one, or not over two additional academic years needed to fulfill the requirements for a Professional, Master's, or Doctoral degree in an engineering discipline, but who may need additional financial assistance in order to accomplish that objective.

NOW, THEREFORE, IT IS AGREED AS FOLLOWS:

¶ 1. That all cash, securities, and any other property that may be donated or bequeathed to Mines by or in the name of the Proponent shall be deemed to represent, and be recorded as, contributions to the principal or corpus of the Endowment Fund.

¶ 2. That any corporate securities or real or other property that may be received by Mines as contributions to the Endowment Fund shall be disposed of as promptly as the Trustees may deem it prudent to do so, and the proceeds added to the Endowment Fund's cash and cash-equivalent assets.

¶ 3. That eventually the entire principal or corpus of the Endowment Fund shall be invested only in securities issued by, or accounts insured or collateralized by, the United States Government or its agencies, and maturing in not over two years from their respective acquisition dates.

¶ 4. That the income earned on the aforementioned securities and accounts shall, as soon as available, be deposited to a separate interest-earning, government insured or collateralized account in the name of the Loan Fund.

¶ 5. That disbursements from the Loan Fund shall be limited to [a] student loans approved by the Trustees or their administrative designee, and [b] such ordinary and necessary, authorized expenses as may properly be allocable, on a pro-rata basis, to either the Endowment or the Loan Funds.

¶ 6. That all loan repayments, as well as all payments of interest and penalties, shall be deposited to the Endowment Fund's interest-earning account, as additions to its permanent, non-expendable principal or corpus.

¶ 7. That as prerequisites for consideration for a loan commitment from the Loan Fund, each student applicant shall:

- [a] be a graduate of a Colorado high school, and currently a legal resident of the state of Colorado for tuition-paying purposes;
- [b] have ranked academically in the upper quartile of his or her undergraduate class, or provide other evidence of superior potential and motivation; and
- [c] agree to such other terms as the Trustees may require.

¶ 8. That the total loan commitment for each approved loan applicant's ensuing academic year shall be determined from an estimate of his or her reasonable budgeted needs for such ensuing year, but in any event limited to twice the amount of the applicable resident tuition, whether or not any portion of the loan will be applied thereto.

¶ 9. That each loan is to be evidenced by a promissory note setting forth the following:

- [a] the agreed loan commitment for the ensuing academic year;
- [b] the applicable interest rate, which shall be no less than the then current yield on two-year Treasury notes, plus an allowance for bad debts, collection costs, etc.;
- [c] a schedule of advances made pursuant to said commitment;
- [d] the due dates of each payment of interest and principal;
- [e] the penalties for any delinquency in such payments; and
- [f] any other terms that the Trustees may deem appropriate.

¶ 10. That if any unforeseen circumstances should preclude the acceptance or continuance by Mines Trustees of the custody and administration of the said Endowment and Loan Funds, the balances in said funds are to be transferred to the Regents of the University of Colorado, provided they will agree to full compliance with the provisions set forth above. If such an agreement is unobtainable, or is subsequently abrogated, the then balances in both the said funds are to be transferred to the Board of Trustees of the Denver Art Museum, to be used only for the acquisition of additional permanent exhibits.

¶ 11. That this agreement may be executed in any number of counterparts, each of which shall be deemed an original, and all of which, taken together, shall constitute but one and the same instrument.

IN WITNESS WHEREOF, the Proponent has hereunto set his hand and seal and the Board of Trustees of the Colorado School of Mines has authorized that this instrument be signed by its president, and its corporate seal affixed and attested by its secretary, on, or as of, the day and year first above written.

Charles F. Syvret, Proponent (L.S.)

Colorado School of Mines
Board of Trustees

Attest:

James C. Wilson, Secretary

by _____
Russell L. Wood, President

DATE: 1 April 1987

TO: CSM Faculty
FROM: Phil Romig
SUBJ: Professional Degree Requirements
ENCL: Rationale for change

Attached is an outline of the issues surrounding proposed changes in the requirements for and administration of the Professional Degree. Following a presentation on these issues, I will offer the following substitute for the motion of 18 March, 1987:


IT IS HEREBY MOVED THAT the description of the Professional Degree on pages 45-46 of the 1987-88 CSM Bulletin be deleted and the description of the Professional Degree in Dean Romberger's draft memo of March 12, 1987 be added at the appropriate place in Section 7 (Graduate School).

SUMMARY OF CHANGES

The Professional Degree has existed for decades. It was modified and approved by the faculty in 1975 as a program "...of additional course work beyond the Bachelor of Science Degree...a final, practically oriented degree, preparing the student for an industrial career," (1976-77 Bulletin, p.17). It was reviewed and re-affirmed by the CCHE this past winter as a "...post-baccalaureate degree...designed to be a final, practically-oriented degree, preparing a student for an industrial career," (CCHE letter dated September 1, 1987). This is not a motion to change either the title of the degree or intent of the program. It is simply an attempt to strengthen the requirements of the degree and change the procedures for administering the program to make it more responsive to today's needs. If this motion is approved, it will:

- 1) increase the coursework requirement from 25 hours to 30 hours,
- 2) disallow the use of Junior courses in satisfying degree requirements,
- 3) raise the minimum cumulative GPA requirement from 2.0 to 3.0,
- 4) delete institutional curriculum guidelines and replace with departmental curriculum guidelines,
- 5) delete the requirement that all applicants have the equivalent of a CSM degree and replace with departmental admission standards,
- 6) transfer administration of the program from the Undergraduate School to the Graduate School and clarify its role as a POST-baccalaureate program.

For those inclined to worry about granting departments authority over curriculum and admissions, it should be noted that all such guidelines still would be subject to Graduate Council approval.



RATIONALE FOR CHANGING PROFESSIONAL DEGREE REQUIREMENTS

I) Interested constituencies

- A) Students
 - 1) Students with recent BS
 - a) BS no longer adequate for many engineering professions
 - b) Therefore -- we have an obligation to expand opportunities for post-baccalaureate training
 - c) But -- we can't (don't want to?) allow open admission to MS
 - d) The Professional Degree provides an alternative
 - 2) Students returning from industry
 - a) Upgrading skills (half-life of an engineer is 5 years)
 - b) Career change out of declining industry
 - c) Recognize completion of a series of courses taken part time
 - d) Reduced cost for part-time students
 - state pays capitation for students in degree programs
 - many companies pay tuition for graduate programs
- B) Industry
 - 1) Not enough technically-trained people by 1995
 - a) Option 1 -- train immigrants from other countries
 - b) Option 2 -- retrain older people from declining industries
 - 2) Upgrade skills of current employees
 - 3) Rapid response to changing personnel needs -- BS takes 8 years
- C) Public
 - 1) Economic development depends on availability of trained labor
- D) Faculty (our self-interest)
 - 1) Protect jobs -- 1986-7 students paid for 6 faculty positions
 - 2) Higher standards -- mature students expect and produce more
- E) Institutional (also self-interest)
 - 1) Stabilize enrollment
 - 2) Reinforce the unique role of CSM in Colorado
 - 3) Tuition and State capitation
 - 4) Enhance ties with industry and alumni
- F) Alumni
 - 1) Strengthening requirements and clarifying role enhance stature
 - 2) Prevent termination by CCHE, rescue from obsolescence & obscurity

II) Historical Development

- A) 1976 -- Professional Degree requirements last modified
 - 1) Institutional
 - a) Distribution requirements, half outside department
 - b) Administered by Undergraduate School -- 2.0 minimum GPA
 - c) 25 hours -- Junior, senior and graduate courses
 - d) CSM BS degree or equivalent required for admission
 - 2) GP Department specific
 - a) 28 hours
 - b) Maximum flexibility in distribution
- B) 1982-83 -- Included in GP master plan based on rationale above
- C) 1983-85 -- Options discussed by Grad Council
 - 1) Included modified Professional Degree, Non-thesis Masters
 - 2) No clear consensus

- D) Summer 1985 -- Experimental program developed on trial basis
 - 1) Administered by Graduate Dean
 - 2) Existing GP Catalog requirements enforced with the addition of:
 - a) All courses senior and above
 - b) At least 15 hours graduate, at least 15 hours in GP
 - c) GPA of 3.0 required
 - d) Specific professional objective
 - e) Program approved by Department Head and Dean
 - 3) Actively recruit non-CSM graduates
 - 4) Waived requirement for more than half of courses outside GP
 - 5) All but (4) authorized in existing catalog
- E) Summer 1986 -- trial program extended one year
 - 1) Industry interest in Professional Degree in GE and PE
 - 2) Declining enrollment in undergraduate program
 - 3) Modified GP requirements
 - 4) Credit-hour requirement changed to 30 hours
- F) Fall 1986 -- CCHE review of Professional Degree
 - 1) CSM letter dated September 1, 1986

"This degree, a post-baccalaureate degree, encompasses a minimum of twenty-five hours of additional coursework beyond the Bachelor of Science degree. In its present form, it is designed to be a final, practically-oriented degree, preparing a student for an industrial career. It looks much like a Masters degree in coursework requirements but has no thesis requirement."

"Professional Degrees are offered by the departments of Engineering, Chemical Engineering and Petroleum Refining, Geology and Geological Engineering, Geophysical Engineering, Metallurgical Engineering, Mining Engineering and Petroleum Engineering."
 - 2) Subsequent decision by CCHE
 - a) terminated for MT and CE/PR
 - b) continued for PE
 - c) endorsed for other departments by no action to challenge
- G) Winter 86-87 -- Trial program deemed successful
 - 1) 35 students enrolled
 - 2) Graduate Dean proposes permanent changes in catalog

III) Peripheral Questions (from concern to obfuscation)

- A) What will go on the diploma?
 - 1) PROFESSIONAL DEGREE (name of department)
 - 2) Silver Diploma
- B) Is it a lesser degree than the MS?
 - Yes -- No thesis requirement
 - No -- More total course requirements
 - Same graduate course requirements
- D) Could a person get the Professional Degree, then later write a thesis and get the MS?
 - No -- CSM allows submittal of one course for multiple degrees only for dual BS degrees and for MS courses in the PhD program

- C) Is it between the BS and the MS?
 No -- Terminal degree, not preliminary to MS program
- E) Are admissions requirements more liberal than the MS
 Depends -- on the specific departmental admission requirements
 (subject to Graduate Council approval)
- F) Is it a graduate program?
 Yes -- Definition of graduate: "of, relating to, or engaged in studies that go beyond the first or bachelor's degree and are specialized or professional"
 CCHE accepts it as a "post-baccalaureate" program
 CSM Bulletin says "...beyond a Bachelor of Science degree."
 Name of the degree is "Professional"
 Professional Degree has been a graduate program since 1967
- G) Is it a non-thesis masters?
 Yes -- Essentially the same as non-thesis masters at other schools
 No -- It is a terminal program different from and not called MS
 CSM Tradition -- Masters degrees should include theses
 Stanford model -- require industrial experience and call it MS
 Not germane because this motion only changes requirements for existing degree
- H) Will the alumni object?
 No -- 1) All degrees evolve -- for 20 years the Professional Degree hasn't changed -- it's time to bring it up to date
 2) Lends credence to traditional (1960s) alumni claim that their Professional Degree was as good as any Masters
 3) The proposed change strenghtens requirements -- easing concerns about degradation of traditional program
 4) Trustees' GP Visiting Committee has five highly-placed alumni -- unanimously endorsed the changes
 5) Without change it will be unused, which will cause CCHE to eliminate it, and alumni will have obsolete degree
- J) Is it an engineering degree without some form of ABET accreditation?
 1) Yes -- as are all graduate engineering degrees at CSM
 2) In the last two years, we have awarded:
 22 Master of Engineering in _____ Engineering
 81 Master of Science in _____ Engineering
 20 Doctor of Philosophy in _____ Engineering
 All without any requirement for ABET-accredited BS
 3) Apply the same standards to the Professional Degree
 4) Since 1976 Prof Deg could be obtained without ABET-accredited BS
 5) Undergraduate ABET accreditation means little at graduate level
- K) Will Administration do as they please regardless of faculty decision?
 1) Administration has been sensitive to faculty on this
 a) Unwillingness to move without Graduate Council endorsement
 b) Extreme caution in implementing trial program
 2) Recent assurance by Dr. Golden:
 a) Will accept faculty decision if consensus reached
 b) Will act independently if no consensus

An Act

HOUSE BILL NO. 1018.

BY REPRESENTATIVES Knox, Allison, Bond, Bowen, Carpenter, Faatz, Fleming, Groff, P. Hernandez, Jones, Kopel, Reeser, Reeves, Ruddick, Rupert, Tanner, Thiebaut, Trujillo, Ulvang, Webb, K. Williams, and Wright;
also SENATORS Ezzard, Groff, Lee, Mendez, Peterson, and Trujillo.

CONCERNING THE APPLICABILITY OF THE OPEN MEETINGS REQUIREMENTS OF THE SUNSHINE ACT TO GOVERNING BOARDS OF STATE INSTITUTIONS OF HIGHER EDUCATION.

Be it enacted by the General Assembly of the State of Colorado:

SECTION 1. 24-6-402 (1), (2.3) (a), (2.3) (b), and (2.5), Colorado Revised Statutes, 1982 Repl. Vol., are amended, and the said 24-6-402 (2.3) is further amended BY THE ADDITION OF A NEW PARAGRAPH, to read:

24-6-402. Meetings - open to public. (1) All meetings of two or more members of any board, committee, commission, or other policy-making or rule-making body of any state agency or authority or of the general assembly, INCLUDING ALL MEETINGS OF TWO OR MORE MEMBERS OF THE REGENTS OF THE UNIVERSITY OF COLORADO OR ANY OTHER GOVERNING BOARD OF A STATE INSTITUTION OF HIGHER EDUCATION REFERRED TO BY THE PROVISIONS OF SECTION 5 OF ARTICLE VIII OF THE STATE CONSTITUTION OR OTHERWISE ESTABLISHED BY LAW, at which any public business is discussed or at which any formal action may be taken by such board, committee, commission, or other policy-making or rule-making body are declared to be public meetings open to the public at all times, except as may be otherwise provided in the state constitution.

(2.3) (a) The purchase of property for public purposes, or the sale of property at competitive bidding, if premature disclosure of information would give an unfair competitive or

Capital letters indicate new material added to existing statutes; dashes through words indicate deletions from existing statutes and such material not part of act.

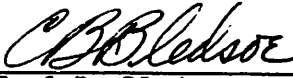
bargaining advantage to a person whose personal, private interest is adverse to the general public interest. No member of the public body shall use this paragraph (a) as a subterfuge for providing covert information to prospective buyers or sellers. GOVERNING BOARDS OF STATE INSTITUTIONS OF HIGHER EDUCATION INCLUDING THE REGENTS OF THE UNIVERSITY OF COLORADO MAY ALSO CONSIDER THE ACQUISITION OF PROPERTY AS A GIFT IN AN EXECUTIVE SESSION, ONLY IF SUCH EXECUTIVE SESSION IS REQUESTED BY THE DONOR.


(b) Conferences with an attorney for the public body concerning disputes involving the public body that are the subject of pending or imminent court action. GOVERNING BOARDS OF INSTITUTIONS OF HIGHER EDUCATION INCLUDING THE REGENTS OF THE UNIVERSITY OF COLORADO MAY ALSO CONFER WITH AN ATTORNEY CONCERNING SPECIFIC CLAIMS OR GRIEVANCES OR FOR PURPOSES OF RECEIVING LEGAL ADVICE ON SPECIFIC LEGAL QUESTIONS. MERE PRESENCE OR PARTICIPATION OF AN ATTORNEY AT AN EXECUTIVE SESSION OF A GOVERNING BOARD OF AN INSTITUTION OF HIGHER EDUCATION INCLUDING THE REGENTS OF THE UNIVERSITY OF COLORADO IS NOT SUFFICIENT TO SATISFY THE REQUIREMENTS OF THIS SUBSECTION (2.3).


(f) With respect to the board of regents of the university of Colorado, matters concerning the modification, initiation, or cessation of patient care programs at the university of Colorado university hospital (including the university of Colorado psychiatric hospital), and receiving reports with regard to any of the above, if premature disclosure of information would give an unfair competitive or bargaining advantage to any person or entity.

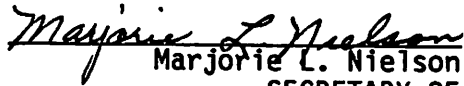
(2.5) All meetings held by members of a public body subject to this part 4 to consider the appointment or employment of a public official or employee or the dismissal, discipline, promotion, demotion, or compensation of, or the investigation of charges or complaints against, a public official or employee shall be open to the public unless said applicant, official, or employee requests an executive session. GOVERNING BOARDS OF INSTITUTIONS OF HIGHER EDUCATION INCLUDING THE REGENTS OF THE UNIVERSITY OF COLORADO MAY, UPON THEIR OWN AFFIRMATIVE VOTE, HOLD EXECUTIVE SESSIONS TO CONSIDER THE MATTERS LISTED IN THIS SUBSECTION (2.5). EXECUTIVE SESSIONS MAY BE HELD TO REVIEW ADMINISTRATIVE ACTIONS REGARDING INVESTIGATION OF CHARGES OR COMPLAINTS AND ATTENDANT INVESTIGATIVE REPORTS AGAINST STUDENTS WHERE PUBLIC DISCLOSURE COULD ADVERSELY AFFECT THE PERSON OR PERSONS INVOLVED, UNLESS THE STUDENTS HAVE SPECIFICALLY CONSENTED TO OR REQUESTED THE DISCLOSURE OF SUCH MATTERS. An executive session may be held only at a regular or special meeting of the public body and only upon the affirmative vote of two-thirds of the entire membership of the body.

SECTION 2. Safety clause. The general assembly hereby finds, determines, and declares that this act is necessary for the immediate preservation of the public peace, health, and safety.


Carl B. Bledsoe
SPEAKER OF THE HOUSE
OF REPRESENTATIVES


Ted L. Strickland
PRESIDENT OF
THE SENATE


Lee C. Bahrych
CHIEF CLERK OF THE HOUSE
OF REPRESENTATIVES


Marjorie L. Nielson
SECRETARY OF
THE SENATE

APPROVED March 27, 1987 at 8:58


Roy Romer
GOVERNOR OF THE STATE OF COLORADO

RECORD OF PROCEEDINGS

Golden, Colorado
May 7, 1987

The Board of Trustees met in regular session on May 7, 1987, at 1:30 p.m.

Trustees present: Messrs. Earnest, Henderson, Pascoe, Schwartzberg, Warren, Wilson and Wood.

Absent: Mrs. Allen.

Also attending the meeting were President Ansell, Vice Presidents Golden, Nyikos, and Scott, Mr. Robbins, Executive Director of the CSM Foundation, Deans Chevront, Gentry, and Olson, Dr. Sloan, faculty representative to the Board, other staff members, and visitors.

Mr. Wood presided.

Announcements. Mr. Wood introduced Mr. Tony Setter, Class of 1932, and Mr. Sam del Rio, Class of 1928.

Mr. Earnest introduced Mr. Brian Warren, Student Trustee-elect, and Student Treasurer, Mr. Bob Todd.

Previous Minutes. The minutes of the meeting of April 10, 1987, were approved as distributed.

Candidates for Degrees. Distribution was made of lists of candidates for degrees as recommended by the regular and graduate faculties.

Upon motion made, seconded and unanimously passed, the candidates whose names appear on the lists appended hereto were approved for degrees on the dates specified, subject to the completion of all academic requirements and continued compliance with school requirements and regulations.

R. E. Bisque Retirement Contract. Dr. Gentry reported that for some years now, Dr. Bisque has been employed only part time with the Department of Chemistry and Geochemistry. This has worked well because the department's teaching needs that he fulfilled were only a few courses. He has not been involved in the graduate research program for about eight to ten years.

Dr. Bisque wants to retire when he reaches age sixty (1991). To maximize his PERA retirement benefits, the subject contract assures him three years of full-time or near full-time employment at CSM. The extra time involves teaching in the EPICS program and involvement with a grant (4-49020). From CSM's point of view, the contract obligates Dr. Bisque to actually retire at the end of the 1990-91 academic year, thus freeing up 0.50 FTE subsequent to this date.

The Board unanimously approved the contract between Dr. Bisque and the Colorado School of Mines, copy of which is appended hereto.

RECORD OF PROCEEDINGS

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Resolution - Power of Attorney. Mr. Scott informed the Board that the Colorado School of Mines wishes to retain the services of Fred S. James & Co. of Colorado, Inc. to act as its agent in monitoring Workmen's Compensation claims. In order to have access to the information, James Company requires a power of attorney which excludes any act constituting the practice of law. This resolution authorizes the execution of that Power of Attorney.

The Board unanimously approved the resolution, copy of which is appended hereto.

Admission Fee - Experimental Mine. Mr. Scott informed the Board that CSM began charging admission fees at the Experimental Mine in June 1985. The Board approved a fee of \$2.00 per adult and children under twelve years of age, free. Dr. Salamon, head of the Mining Department, now requests that the fee be increased to:

\$3.00 per adult
\$1.50 for six to twelve year olds
The group rate would remain unchanged

In 1985, 300 adults and 88 children toured the Mine. In 1986, 1,376 persons toured the Mine. (No breakout for children.)

In both years expenses exceeded income.

The Board unanimously approved the new rates as listed.

Auxiliary Budgets and Fees. The Board annually approves the operating budgets of the auxiliaries and supporting activities and approves the fees imposed to provide the revenues. Mr. Scott informed the Board that representatives of the Fund Managers are present at the meeting to answer questions concerning the proposed budgets and fee changes. He stated that status of the accounts for this fiscal year can be found in monthly Report #2 to the Board.

The Board unanimously approved the Auxiliary Budgets and Supporting Fees, copies of which are appended hereto.

Departmental Visiting Committee - Mineral Economics. A list of visiting committee members for the Mineral Economics Department was approved at the February 1987 meeting of the Board. Mr. Gordon Parker and Dr. C. George Miller, who were on the original list submitted to the Board, will be unable to serve, and Mr. Jack Wilkinson, who was also on the original list, has not yet responded to the invitation to be a member of the committee. Therefore, the following list of names is submitted for Board approval:

Mr. John R. Parry
Senior Vice President
Newmont Mining Corporation
New York, New York

RECORD OF PROCEEDINGS

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Dr. Dennis J. O'Brien
Chief Economist
Caltex Petroleum Corporation
Dallas, TX

Mr. Richard W. Volk
Chief Executive Officer
BHP Petroleum
San Francisco, CA

The Board unanimously approved the motion to invite the people listed above to serve on the Visiting committee for the Department of Mineral Economics.

Mr. Wood commented that he toured the newly-renovated Stratton Hall and was very impressed.

New Faculty Appointments. Dr. Gentry presented the report as follows:

New Appointments.

Dr. Hans-Peter Huttlermaier Associate Professor of Engineering	\$37,500 for the 1987-88 academic year
Dr. Kewal K. Kohli Visiting Professor of Mining Engineering	No compensation August 1, 1987 - December 31, 1987
Dr. Stanley J. Laster Adjunct Professor of Geophysics	No compensation 1986-87 Spring Semester
Dr. Graham G. W. Mustoe Associate Professor of Engineering	\$38,000 for the 1987-88 academic year
Dr. Robert H. Patrick Assistant Professor of Mineral Economics	\$35,000 for the 1987-88 academic year

Reappointment after Interruption.

Dr. Douglas W. Waples Visiting Professor of Chemistry and Geochemistry	\$33,000 (3/4 time, 75% effort based on AY Salary of \$44,000) for the 1987-88 academic year
------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------

Additional Information.

Dr. Gentry had distributed quantitative evaluation reports to the Board members prior to the Board meeting. Mr. Henderson commented that he appreciates receiving these reports.

RECORD OF PROCEEDINGS

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Graduate School Admissions. Dr. Romberger had distributed the standard graduate student admissions report for Fall semester 1987 prior to the Board meeting. Trends which were indicated on the previous month's report have continued through the month of April, in that the total number of applications to date have dropped from the previous year. A significant decrease in the applications for Geophysics, Geology, Mineral Economics, and Petroleum is a reflection of the depressed energy industry. However, this decrease is partially offset by an increase in applications from the materials-related departments, Physics and Metallurgy. Other departments showing modest increases or which have remained the same are Chemistry, Chemical Engineering, Environmental Sciences, and Mining, while Mathematics has shown a decrease. Applications for the new programs, Applied Mechanics and Materials Science, remain slow. However, the latter should improve with some recent recruiting efforts.

Admissions. The Admissions Report dated May 1, 1987, was distributed to the Board. Discussion ensued, during which Mr. Young responded to questions.

New Research Awards. Dr. Olson had distributed the report, which reflects the award volume through April 30, 1987, prior to the Board meeting. The report indicates that this month's volume was \$952,596, compared to \$871,074 for the same time period the previous year. This results in a cumulative total for FY 1987 of \$7,983,458, or \$1,882,198 ahead of the total for the same period the previous year of \$6,101,260. Twenty-two different faculty were involved in twenty-four new project awards.

Dr. Olson's report reflects the submission of twenty-eight proposals during the month of April 1987 compared to twenty-six during the month of March 1987. It is anticipated that the number of proposals will increase during the month of May due to several departments submitting consortia proposals not previously processed through ORS for FY 1987. To date, a total of 327 proposals for FY 1987 has been submitted.

Monthly Reports. Mr. Scott had distributed the following monthly reports prior to the Board meeting: Current Funds Revenues, Expenditures and Other Changes for the Ten Months Ending April 30, 1987; Colorado School of Mines Auxiliary and Self-Funded Activities for the Ten Months Ending April 30, 1987; and Time Deposits and Investment Report, April 30 1987. Mr. Scott also submitted report #1a, CSM State Appropriated Funds Comparison of FY 1987 to FY 1986 for the ten months ending April 30.

It is Mr. Scott's belief that the School is operating within the funds projected for the 1987 fiscal year.

Preliminary Agenda, Annual Trustees' Conference. The Annual Trustees' Conference will be held at the Aspen Lodge June 12-14, 1987. Mr. Robbins reviewed the preliminary agenda for the Conference, stating that this year's Trustees' Conference will focus on the issues of development and planning for a major capital campaign. The objectives of the Conference are: (1)

RECORD OF PROCEEDINGS

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participant education as to the nature and requirements of a capital campaign, and (2) "buy-in" and development of a sense of ownership in the proposed campaign.

Visiting Committee Reports. The reports of the Visiting Committees for the McBride Honors Program and for the Geophysics Department were distributed to the Board prior to the Board meeting. Mr. Schwartzberg commented on the reports, and Mr. Henderson asked if responses had been made by the administration. President Ansell informed the Board that he has sent written responses to the Committees. Mr. Wood referred to a letter written by Trustee Allen regarding the report on the McBride Honors Program in which she calls for a Board response to the report.

Mr. Schwartzberg asked that he be furnished with a schedule of visiting committee visits.

Mr. Pascoe asked for a report on the McBride Honors Program with regard to how the program "fits" into the entire picture at Mines. Mr. Schwartzberg expressed the hope that the Board can have a discussion regarding the program prior to the next meeting of the Honors Visiting Committee, which is scheduled for fall 1987.

Personnel Matters. Dr. Golden reported that Dr. Sam Romberger, Dean of Graduate Studies, has announced his intention to resign as Dean of Graduate Studies. He will remain on the staff as a faculty member in the Geology Department. An internal search is now underway for a Dean of Graduate Studies. Dr. Romberger will remain in the position until a replacement is named. Dr. Golden informed the Board that an internal search is being conducted for a person to fill this position. If this is unsuccessful, he will conduct a national search. Mr. Henderson commented that he feels a national search would be advantageous.

Professor Bill Mattingly of the Humanities and Social Sciences Department has resigned from the faculty in order to enter private business.

Legislative Report. Dr. Nyikos reported on the status of the budget and informed the Board that House Bill 1187 has passed both houses and is awaiting the Governor's signature.

Dr. Nyikos informed the Board that he wants to have a reception for the members of the Capital Development Committee and their staff at Stratton Hall to show them the results of the renovation.

Dr. Nyikos stated that he hopes Berthoud Hall will be back in service by the fall of 1988.

Faculty Handbook Draft. Dr. Golden informed the Board that the draft of the Handbook has been through legal review twice and has been reviewed by a national faculty handbook expert. He stated that he is not asking for approval at this time. He introduced Dr. Steve Daniel, a member of the Faculty Handbook Committee, who summarized the changes to be made in the draft of the Faculty Handbook, which was distributed to the Board prior to the Board meeting.

RECORD OF PROCEEDINGS

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Mr. Henderson expressed his appreciation for the work which the Committee has performed, and Mr. Wood thanked Dr. Daniel for his report.

Faculty Salaries. Prior to the Board meeting, Dr. Golden sent a memorandum to the Board which stated that the School of Mines has experienced exceptionally tight budgets for the last few years and, accordingly, the Mines faculty salary situation has deteriorated significantly. The most recent South Dakota School of Mines engineering salary survey report on colleges and universities offering programs in mineral engineering, was attached to the memorandum as evidence of our problem. Our relative ranking has dropped from a high of eighth from the bottom (ninth from the top) in 1982-83 to this year's position of third from the bottom. Since much of the success of our strategic plan is based upon the efforts of our faculty, Dr. Golden felt that the Trustees should be aware of this problem. Dr. Golden also attached a recent article from Engineering Education News dealing with the faculty salary issue.

Budget Discussion. Mr. Scott informed the Board that legislative action is not completed for the FY 1988 appropriation. He submitted materials for Board consideration and discussion, and told the Board that he expects to submit the FY 1988 budget for approval at the June Board meeting.

Budget discussion issues are as follows:

Integration of Restricted Funds

- Reliance on CSMF
- Dramatic increase CSMF unrestricted
- Future balancing restricted/unrestricted
- Transfers among programs
- Spending rules (restricted addition to unrestricted support)

Faculty Compensation

- Adequacy of proposed increases
- Retention
- Morale
- Compound effect on future years

Research Development

- Adequacy of proposed investment

Capital Outlay

- Proposal v. plan
- Reliance on CSMF

Tuition Rates

- 5% for 1987-88
- Limited for future years

RECORD OF PROCEEDINGS

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Library

Step up for 1987-88 (\$184k) 55%
Then stable; future increase needed

Safety

Adv. for Industrial/Safety/Hazardous Waste Mgr.
Set aside \$150k 1987-88
Set aside \$50k for future years

Mr. Pascoe moved that CSM request an annual appropriation from the CSM Foundation Board of restricted and unrestricted funds required for the operation of the School, with the understanding that such funds can be drawn upon until fully expended even should such expenditures occur beyond the fiscal year for which they were initially appropriated; and, further incorporating a suggestion by Mr. Wilson, that the CSM Foundation Board be presented CSM budget information concerning the purposes for which the funds are to be expended.

The Board unanimously approved the resolution.

Discussion ensued during which Mr. Pascoe requested that the Foundation expenses be included in the School budget. President Ansell informed the Board that the budget is at the compromise level; that the salary part needs to be changed; and that the problem areas are salaries and the Library.

Mr. Schwartzberg stated that the revised budget should be in the hands of the Foundation Board before the next meeting, which is scheduled for May 19. A copy of the draft Strategic Plan should also be distributed to the Foundation Board.

Announcements. Mr. Earnest announced that the senior class has raised \$3,600.00, which will be used to pay for the regilding of the gold dome on Guggenheim Hall. Included is a donation of two ounces of gold from Amax.

Mr. Earnest informed the Board that approximately 380 people, 114 of that number graduating seniors, will be attending the Alumni Association-sponsored dinner.

Mr. Earnest thanked the Board for its support, which has permitted the graduating seniors to acquire silver diplomas if they wish.

The meeting was adjourned at 4:55 p.m., and the Board went into executive session.


Secretary

May 7, 1987

CLASS OF 1987
GRADUATING SENIORS
May 8, 1987

BACHELOR OF SCIENCE
(Mining Engineering)

Carlos Armando Ballon
Glen Leroy Black
Douglas Hield Brown
Barbara Lynn Clinton
Frederick Hume Earnest
Gordon Lewis Fellows
Michael James Hurley
David Rolland Krizek
Jeanne Lynn Major
Laura Margaret Mandery
Matthew Phillip Reilly
David Richard Schricker
Kirk Allen Zabel

BACHELOR OF SCIENCE
(Metallurgical Engineering)

Matthew Richard Bender
Jeffrey Lehman Bibbey
Paul Quincy Campbell
Thomas Lee Centa
Michelle Lee Cheever
Samuel Keith Cooper
Christopher Steven Dodds
Jeffrey Stephen Epstein
Gretchen Marie Gallagher
Henry William Herbert
Matthew John Horton
Patricia Marie Howe
Bernard L. Jene, II
Jerry Bruce Ledingham, Jr.
Jonathan Sterling Ogborn
Brian Robert Westphal

BACHELOR OF SCIENCE
(Geological Engineering)

Robert Scott Arnold
Theresa Bahrych
Mark Whitfield Brooks
Carl Mitchell Brown

BACHELOR OF SCIENCE
(Geological Engineering) Continued

Douglas Neal Cantrell
Nadia M. Chornij
Akhmad Dorojatun
Kara Lynn Ebeling
John Eric Engstrom
Richard Lee Franks
Michael John Gamba
Virgle Roland Goodgame, Jr.
William Young Klett, III
Matthew Jason Knight
Raymond Conner Lee
Francis Xavier Markert
Michele Monin Santos
Brian Edward Simpson
Brian Howard Werle
Jill Lynn Williford
Teresa Ann Wilt

BACHELOR OF SCIENCE
(Petroleum Engineering)

John Martin Anderies
James Clarke Ayers
Lawrence Henry Baker
Wade Arthur Bard
Linda Ann Battalora
David Christopher Black
Theresa Marie Brandt
Thomas Seldon Bruington, II
Scott Charles Darling
Brian D. Dean
Kevin Michael Dickey
Peter Camp Dillingham
Denise Michele Dobkins
Francis Eugene Dominguez
Darrin Allen Dunger
Dana Kent Greathouse
Larry John Haas
H. Wayne Hamal
Troy Alvin Hoefler
Lewis Mansfield Johnson

CLASS OF 1987
GRADUATING SENIORS
May 8, 1987

BACHELOR OF SCIENCE
(Petroleum Engineering) Continued

Ahmadi Tauhid Kasim
Jess Dan Kelley
Kathleen Ann Kernaghan
Dave Elwin Leopold
Byron James Lindros
Eric Page Lockard
Velna Lynn Mc Ewen
*Kathy Evelyn Myers
Walton Miller Newlon
Daniel Curry Wang Cheung Ng
Diatmo Mulyo Nugroho
Clark Dewey Parrott
Michael Edward Pavlich
Fransiskus Xaverius Budianto Renyut
Mark Todd Rody
Kenneth D. C. Rowilson
Jeffrey Brian Salen
Vance Lee Scott
John Arthur Starck
Tina Veronica Stegman
Michael Lee Stokes
Wahyu Hidayat Sumpeno
Richard Scott Temple
Vi Quoc Tien
James Thomas Warmack
Kevin James Welch
Don Kevin Wilken
Jon K. Wilken
Jeffrey David Wilson
Mike Christian Wood

BACHELOR OF SCIENCE
(Chemical & Petroleum-Refining Engineering)

Annette Bills
Kevin Lyle Coons
Laurie Marie Franchini
Jaime William Germundson
Charles Philip Hager
Lonney Paul Heisel
Renata Louise Jarzabek
Michael Patrick Kellison
Thomas Adam Lessard
Don Michael Lira

BACHELOR OF SCIENCE (Continued)
(Chemical & Petroleum-Refining Engineering)

Gilberto Marcha, Jr.
David Arthur Radtke
Thomas Gordon Rogers
Linda Anne Ross
Paul Everett Seyler
Randy Lee Smith
Rollin G. Socha
Todd Dennis Staebell
Jack Vincent Stant, III
Dean Allen Strain
Jeffrey Raymond Swanson
Michael Duane Thomas
Thomas James Witt

BACHELOR OF SCIENCE
(Geophysical Engineering)

Marketa Adamek
Carl Martin Addington
Nursyafrin Arbi
Dana Kent Bargell
Paul David Dubois
*Julie Lorraine Ekman
Mark Jeffrey Emanuel
Melissa S. Ettelstein
Miguel Ferrer
Walter B. Goedecke
Steven Patrick Gruber
Thomas Harold Haynes
Hugh Lenox Hodge, III
David Schrock Hunsinger
Scott Andrew Irvine
Stuart Adam Jackson
Gregory Alan Jones
Dale E. London
King Hung Ma
William Francis Mallett, III
Orlinda Marie Marquez
Steven Thomas Marts
Barry Joseph Middlebrook
Andy Petefish
Elizabeth Ann Polzin
Kurt Alan Ranzinger
Steven Dean Rogge

CLASS OF 1987
GRADUATING SENIORS
May 8, 1987

BACHELOR OF SCIENCE
(Geophysical Engineering) Continued

Tutuko Resihadi Sarno
John Andrew Stoffel
Wahyudin Suwarlan
Kerri Irene Thompson
Steven Clark Wood

BACHELOR OF SCIENCE
(Mineral Engineering Chemistry)

Kathryn Fink Miks
Chad William Ochs
Christopher Carl Reiber
Edward Arnold Schauer

BACHELOR OF SCIENCE
(Mineral Engineering Mathematics)

Lisa Jo Cox
John David Crabtree
Olga Lynn Ekberg
William Lawrence Fink
Wesley Allen Hayes
James Scott Kneedler
Mark Edward Levin
Anne-Marie L. Moos
*Chris James Myers
Carol Irene Rodgers
Thomas Anthony Schutter
Karri Elaine Unruh
Frances Marie Vallejo

BACHELOR OF SCIENCE
(Engineering Physics)

Michael James Burns
Paul Eugene Ciszek
Katerina Marie Dickerhoof
Richard Allen Elder, Jr.
Deirdre Harris

BACHELOR OF SCIENCE
(Engineering Physics) Continued

Susan Mary Hemming
Brett Stuart Henderson
Verne Charles Hornback
Catherine Marie Mader
Nikolas Wayne Winjum

BACHELOR OF SCIENCE
(Engineering)

Kevin Allen Barnes
Skip Henry Herman Benjes, III
Russell George Bundschuh
Mark Dennis Cevaal
Cho Hung Cheung
*Julie Lorraine Ekman
Stephen Joseph Fenton
Erick Charles Flora
Mark Allen Hoffman
Deanna Keiko Ikeya
James Peter Jordano
James Nicholas Karantounis
Gregory William Kazel
Alexander Larry May
John Clark McMullen
*Chris James Myers
*Kathy Evelyn Myers
Samuel Wallace Newman
Mark John Ollweiler
James Burl Patterson
Richard James Reuter
Michael Lawrence Richards
William Alan Sawyer, Jr.
Ronald Anthony Smith
Harold Kenneth Snyder, Jr.
John Martin Speidel
Valerie Jo Steineck
Scott Robert Thomas
Allen George Van Nest
Thomas Wesson Wells

PROFESSIONAL DEGREE
(Engineer)

Frederick Walter Braun

CLASS OF 1987
GRADUATING SENIORS
June 19, 1987

BACHELOR OF SCIENCE
(Metallurgical Engineering)

Christopher Richard Roll

PROFESSIONAL DEGREE
(Geological Engineer)

Mark Jayson Vanarelli

BACHELOR OF SCIENCE
(Chemical & Petroleum-Refining Engineering)

Steven Richard Fox

M. Khaldoun Hejazi

Henry Ernst Heyser, III

*Daniel Bryan Hurlbut

Nancy Jean Lynch

Michael William Miks

Gunnar Walker Recht

Dominic Jude Ricotta

Mary Lynne Spaid

David H. Thornton

BACHELOR OF SCIENCE
(Geophysical Engineering)

Brian Robert Phelps

Eric Christopher Toft

BACHELOR OF SCIENCE
(Mineral Engineering Chemistry)

Dean Rene Charpentier

*Daniel Bryan Hurlbut

BACHELOR OF SCIENCE
(Engineering)

Bryan Joseph Brock

Kelli Kay Hofer

Jordy Lee Murray

CLASS OF 1987
GRADUATING SENIORS
August 14, 1987

BACHELOR OF SCIENCE
(Metallurgical Engineering)

Michael Andrew Ferraro

BACHELOR OF SCIENCE
(Engineering)

Karen Lori McOllough
Franklin David Zanetell, Jr.

BACHELOR OF SCIENCE
(Geological Engineering)

Timothy Michael Thomas

BACHELOR OF SCIENCE
(Petroleum Engineering)

Pascal Patrick Hinnen

BACHELOR OF SCIENCE
(Chemical & Petroleum-Refining Engineering)

Steven S. Antonopoulos

BACHELOR OF SCIENCE
(Geophysical Engineering)

Michael Anthony Hanak
James Edward Leberknight
*Julio E. Rodriguez
Gehrig Stannard Schultz

BACHELOR OF SCIENCE
(Mineral Engineering Chemistry)

John Scott Kimbrough

BACHELOR OF SCIENCE
(Mineral Engineering Mathematics)

Michael Gene Medberry
Adnan Rebei
*Julio E. Rodriguez

**CLASS OF 1987
GRADUATING SENIORS
August 21, 1987**

**BACHELOR OF SCIENCE
(Petroleum Engineering)**

**Scott Bradley Daves
Anna Marie Logan
Gary Scott Nordlander
James Mitchell Shaw
Paul James Taylor**

PROFESSIONAL DEGREE

GEOPHYSICS DEPARTMENT
Dr. Phillip R. Romig, Jr.,
Department Head

Professional Degree

Geophysics

Yousef Ali Al-Ali
Samir I. Alinaizi
Jonathan Louis Andrews
Steven Alvin Bahret
Jerry Dale Fountain
~~Daniel L. McCord~~
David N. Patten
Scott Walker Peters

Saudi Arabia
Dhahran, Saudi Arabia
Los Angeles, California
Staatsburg, New York
~~Denver, Colorado~~
Ventura, California
Houston, Texas

GEOLOGY DEPARTMENT
Dr. Samuel S. Adams,
Department Head

Professional Degree

Geology

James Wiley Babcock
Craig Alan Cox
~~Peter E. Penoyer~~

Colorado Springs, Colorado
Conifer, Colorado
~~Denver, Colorado~~

4/22/87
FINAL

MASTER OF ENGINEERING

MASTER OF SCIENCE

May 8, 1987

MINING ENGINEERING DEPARTMENT
Dr. Miklos D. G. Salamon,
Department Head

Master of Science
(Mining Engineering)

Ernesto Villaescusa Cordova
Paul John Allen Lever

Ures, Sonora, Mexico
Evergreen, Colorado

METALLURGICAL ENGINEERING DEPARTMENT
Dr. William D. Copeland,
Department Head

Master of Science
(Metallurgical Engineering)

Roberto M. Z. Castro
Jay Scott Gomer
Andrew Carlyle Hunt
Kenneth Patrick Marts
Paul B. Maxwell
Christopher Nelson McCowan
Dong Won Oh
Catherine Ann Perkins
Kevin Lee Stansbury
Michael Joseph Weis

Belo Horizonte, MG Brazil
Arvada, Colorado
Denton, Texas
Morrison, Colorado
Frogmore, South Carolina
Albuquerque, New Mexico
Seoul, Korea
Mt. Clemens, Michigan
Littleton, Colorado
Englewood, Colorado

GEOLOGY DEPARTMENT
Dr. Samuel S. Adams,
Department Head

Master of Engineering
(Geological Engineer)

Brent C. Anderson
Michael F. Padgett
Thomas Lee Rice
Peter O'Brian Sinton

Bozeman, Montana
Yucaipa, California
Wheat Ridge, Colorado
Lakewood, Colorado

Master of Science
(Geology)

Laura Marie BeVier
Carl Lennart Eriksson
Scott Paul Greubel
Denise Marie Hendrickson
Keith A. Laskowski
Cheryl Deanna Leighton
Frederick George Lerch
Mark Kingdon Levorsen
Ming Lu
Scott R. Richey
Patricia Gould Smith
Calvin R. Wiggs
John Stevens Zuker

Springfield, Missouri
Placerville, California
Northglenn, Colorado
Englewood, Colorado
Norwich, Connecticut
Lakewood, Colorado
Long Beach, California
Belvedere, California
China
West Branch, Michigan

Lafayette, Louisiana
Golden, Colorado

Master of Science
(Geological Engineering)

Genevieve Beth Catherine Young

Denver, Colorado

PETROLEUM ENGINEERING DEPARTMENT
Dr. Craig W. Van Kirk,
Department Head

Master of Engineering
(Petroleum Engineer)

Haiyan Meng

China

Master of Science
(Petroleum Engineering)

Steven Bruce Hinchman
Purnomo Yusgiantoro
Louise Marie Zimmerman

Bradford, Pennsylvania

Loveland, Colorado

CHEMICAL ENGINEERING AND PETROLEUM REFINING DEPARTMENT
Dr. Arthur J. Kidnay,
Department Head

Master of Science
(Chemical and Petroleum-Refining Engineering)

Joseph G. Ceurvorst
Marshall Bret Shackelford

Davenport, Iowa
Rolla, Missouri

GEOPHYSICS DEPARTMENT
Dr. Phillip R. Romig, Jr.,
Department Head

Master of Engineering
(Geophysical Engineer)

Douglas Matthew Gable

Arvada, Colorado

Master of Science
(Geophysics)

Tesfalul Alazar
Sam W. Allen
Thomas Eugene Jordan
William Aepli Schneider, Jr.
Richard G. Weber

Ethiopia
Denver, Colorado
San Gabriel, California
Lakewood, Colorado
Bartlett, Illinois

Master of Science
(Geophysical Engineering)

Tanya Lynn Mueller
Mary Catherine Pfeifer

Littleton, Colorado
Arvada, Colorado

CHEMISTRY AND GEOCHEMISTRY DEPARTMENT
Dr. George H. Kennedy,
Department Head

Master of Science
(Chemistry)

Oscar E. Tovar Tovar

Caracas, Venezuela

Master of Science
(Geochemistry)

Marnie L. Ceazan
Thomas Eugene Musselman

Boulder, Colorado
Los Angeles, California

MINERAL ECONOMICS DEPARTMENT

**Dr. John A. Cordes,
Department Head**

**Master of Science
(Mineral Economics)**

**Thomas Seldon Bruington
Sergio Zica de Castro
Kathleen Anne Currin
Francisco Pulido Fernandez
Norman W. Goddard
Clay Livingston Hoes
Frank Joseph Marrone
Cecilia Kay Oatney**

**Greeley, Colorado
Belo Horizonte, Brazil
Golden, Colorado
Caracas, Venezuela
Wheat Ridge, Colorado
Cooperstown, New York
Denver, Colorado
Donnelly, Idaho**

ENVIRONMENTAL SCIENCES AND ENGINEERING ECOLOGY

**Dr. George H. Kennedy,
Acting Department Head**

**Master of Science
(Ecological Engineering)**

Mark Lawrence Paricio

Golden, Colorado

DOCTOR OF PHILOSOPHY

GEOLOGY DEPARTMENT
Dr. Samuel S. Adams,
Department Head

Doctor of Philosophy
(Geology)

James Scott Brinton Dean
Fred A. Kruse Jr.

American Fork, Utah
Salmen, New Hampshire

CHEMICAL ENGINEERING AND PETROLEUM REFINING DEPARTMENT
Dr. Arthur J. Kidnay,
Department Head

Doctor of Philosophy
(Chemical and Petroleum-Refining Engineering)

David Allen Flanigan
Michael Kent Maholland

Golden, Colorado
Lakewood, Colorado

GEOPHYSICS DEPARTMENT
Dr. Phillip R. Romig, Jr.,
Department Head

Doctor of Philosophy
(Geophysics)

Henrik Toft Andersen
Dennis Alexander Cooke
Marshall A. Martin
Joerg Rossow
Michael Francis Sullivan

Golden, Colorado
Denver, Colorado
Denver, Colorado
West Germany
Golden, Colorado

CHEMISTRY AND GEOCHEMISTRY DEPARTMENT
Dr. George H. Kennedy,
Department Head

Doctor of Philosophy
(Applied Chemistry)

Kaveh Zarrabi

Tehran, Iran

Doctor of Philosophy
(Geochemistry)

Nancy L. Parduhn
James A. Rice

Brookfield, Wisconsin
St. Cloud, Minnesota

PHYSICS DEPARTMENT
Dr. Franklin Schowengerdt,
Department Head

Doctor of Philosophy
(Applied Physics)

James Michael Madsen

Racine, Wisconsin

CSM
BOARD OF TRUSTEES
AGENDA ITEMS

Date of Meeting May 7, 1987
Item Number I-C
Presented By Donald W. Gentry

Subject: R. E. Bisque Retirement Contract

Background Information: For some years now, Dr. Bisque has been employed only part time with the CGC Department. This has worked well because the department's teaching needs that he fulfilled were only a few courses. He has not been involved in the graduate research program for about 8-10 years.

Dr. Bisque wants to retire when he reaches age sixty (1991). To maximize his PERA retirement benefits, the subject contract assures him three years of full-time or near full-time employment at CSM. The extra time involves teaching in the EPICS program and involvement with a grant (4-49020). From CSM's point of view, the contract obligates Dr. Bisque to actually retire at the end of 1990-91 academic year, thus freeing up 0.50 FTE subsequent to this date.

Action Motion Requested: Approval of attached document between Dr. Bisque and the Colorado School of Mines.

AGREEMENT

The Colorado School of Mines (CSM) and Dr. Ramon Bisque hereby enter into the following contract:

WHEREAS, Dr. Bisque currently is a tenured professor working on a half-time basis for CSM; and

WHEREAS, the parties desire to provide a definite date for Dr. Bisque's separation from tenured employment at CSM.

NOW THEREFORE, in consideration of Dr. Bisque's agreeing to a definite date of separation from tenured employment and in consideration of CSM's agreeing to allow Dr. Bisque to return to full-time employment for academic year 1987-88 through 1988-89, the parties state and agree as follows:

(1) CSM will employ Dr. Bisque as a full-time professor for academic year 1987-88 through academic year 1988-89 subject to the terms specified in (2) below.

(2) CSM agrees, for the 1987-88 academic year and for the period from the beginning through 31 October 1988 of the 1988-89 academic year, to furnish from school funds money equivalent to 60% of Dr. Bisque's full-time salary. The remaining 40% will be paid from research account 4-49020. CSM further agrees to furnish funds equivalent to 100% of Dr. Bisque's full-time salary from 1 November 1988 through the end of the 1988-89 academic year.

(3) CSM agrees to employ Dr. Bisque at a 25% level (which does not preclude additional time on research grants) for the 1989-90 through the 1990-91 academic year.


(4) Dr. Bisque agrees to resign, and by executing this agreement hereby resigns from CSM effective at the end of academic year 1990-91.

(5) CSM agrees to accept, and by executing this agreement hereby accepts Dr. Bisque's resignation effective at the end of academic year 1990-91.

(6) Dr. Bisque's employment through academic year 1990-91 will be as a tenured professor at CSM who may be only terminated for good cause, program discontinuation or financial exigency. After that time, he will have no further claim of continued employment or any other claim against CSM. However, this agreement does not preclude Dr. Bisque from working at CSM on a nontenured part-time basis after that date, if both parties agree to such employment.

(7) Dr. Bisque warrants that he has entered into this agreement voluntarily, with full knowledge of his legal rights herein.

(8) Obligations of the State of Colorado beyond the current fiscal year are dependent upon appropriations therefor.



Dr. Ramon Bisque


April 10, 1987
Date



Dr. George Ansell, President
Colorado School of Mines

April 14, 1987
Date

APPROVED:



Deputy State Controller

April 13, 1987
Date

CSM
BOARD OF TRUSTEES
AGENDA ITEM

Date of Meeting 5-7-87
Item Number 1(d)
Presented By Gordon Scott

Subject:

Resolution - Power of Attorney

Background Information

Colorado School of Mines wishes to retain the services of Fred S. James & Co. of Colorado, Inc. to act as its agent in monitoring Workmen's Compensation claims.

In order to have access to the information, James Company requires a Power of Attorney which excludes any act constituting the practice of law. This resolution authorizes the execution of that Power of Attorney.

Action/Motion Requested:

Approval of the attached resolution.

At a regular meeting of the Board of Trustees
(regular, special) (Governing)

Body of Colorado School of Mines
(Name of Government Body)

a State institution of higher education, on May 7,
(Type of Entity) (Date)

1987, this resolution was passed:

BE IT RESOLVED, that Fred S. James & Co. of Colorado, Inc. is hereby authorized to act as the corporation's true and lawful agent and attorney-in-fact in all matters regarding Workers' Compensation in accordance with the Power of Attorney attached hereto;

IT IS FURTHER RESOLVED, that Russell L. Wood,
(Name of Officer)

the President of the Board of the Colorado School of Mines is hereby
(Title) (Name of Company)

authorized to sign a Power of Attorney authorizing Fred S. James & Co. of Colorado, Inc. to act as its agent in all Workers' Compensation matters before the State Compensation Insurance Fund.

CERTIFICATION

I, _____, the secretary of _____
Colorado School of Mines, do hereby certify that the above is
a true and correct copy of the resolution duly adopted by the Board of
Trustees of the said Colorado School of Mines
(Governing Body)

_____ at a meeting that was held on the 7th day
of May, 1987, in Golden, Colorado, at which
a quorum was present and voted.

DATED May 7, 1987.

(SEAL)

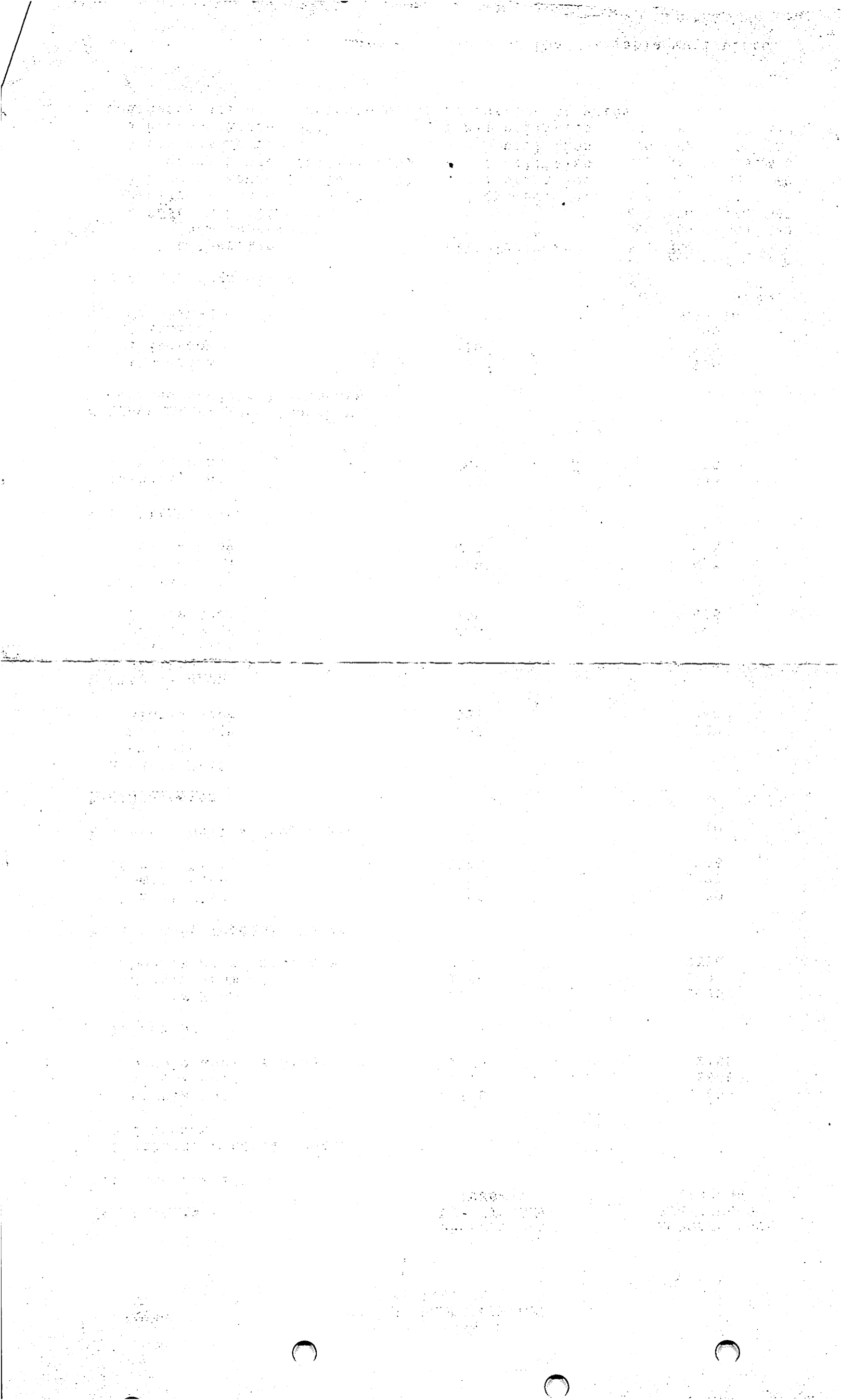
Secretary

Proposed
ROOM AND BOARD CHARGES
FY 1987-88

<u>Academic Year</u>	PRESENT RATE PER STUDENT 1986-87	PROPOSED RATE PER STUDENT 1987-88			
Residence Halls*					
Bradford, Randall, Morgan and Thomas					
Double Room	\$1575	\$1655			
Single Room	1675	1855			
Double Room as Single	1775	2155			
Twin Towers					
Double Room	1840	1930			
Single Room	1940	2080			
Double Room as Single	2040	2130			
Meal Plans, Academic Year*					
19-meal Plan	1400	1470			
15-meal Plan	1300	1375			
10-meal Plan	1245	1305			
Residence Hall Activity Fee	10	10			
<u>Field Session</u>					
Randall Hall Room Only					
Double Room	305	320			
Single Room	325	350			
<u>Summer Session</u>					
Randall Hall*					
Double Room	405	425			
Single Room	435	465			
Twin Towers*					
Double Room	N/A	N/A			
Single Room	N/A	N/A			
Meal Plans, Summer Session*					
15-Meal Plan	325	345			
10-Meal Plan	305	320			
<u>Prospector Village (monthly rate)</u>					
Married Student Apartments					
1-Bedroom	285	300			
2-Bedroom	310	325			
3-Bedroom	335	350			
Furnished	Add 30	Add 30			
<u>Mines Park (monthly rate)</u>					
		86-87		87-88	
		Grd		Grd	
Buffet Apartment	util. included	Stu	Fac	Stu	Fac
1-Bedroom Apartment	" "	285	300	300	315
2-Bedroom Apartment	" "	380	400	400	420
2-Bedroom House (37,38,39)	" exclud. water	440	470	460	495
2-Bedroom House (25,26,27,28)	+ all utilities	485	510	510	535
2-Bedroom House (30,31-34,35)	+ all utilities	575	610	525	560
3-Bedroom House	+ all utilities	415	440	435	460
3-Bedroom House	+ all utilities	470	500	495	525
3-Bedroom House (29)	+ all utilities	530	580	555	610

Residents are not responsible for irrigation of yards.

* Residence Hall students must choose one of the available meal plans.



PROPOSED FEES - FY 1987-88

Payment of fees entitles students to a ticket to all athletic events; subscriptions to both the Oredigger, the weekly newspaper published by students, and the Prospector, the student yearbook; use of the Student Health Center and Student Center; and participation in student activities.

The Associated Students fee is administered by the Student Council in financing the Oredigger, the Prospector, the bank, the chorus, and Interfraternity Council, Barb Council and the student organizations. Budgets for these publications and organizations are set at the beginning of the fall semester by the Student Council.

Regular Semester (Fall/Spring)

During a regular semester, students taking less than 6.5 credit hours are not required to pay student fees. Any such student, however, wishing to take part in student affairs and receive student privileges may do so by paying full semester fees.

All degree students carrying 6.5 or more credit hours must pay full student fees as follows:

Health Center*	\$ 25.00
Associated Students	25.00
Athletics	30.00
Student Center	<u>60.00</u>
Total	\$140.00

* An optional medical insurance program is also available. See Student Health Plan below.

In addition to the above fees, Intensive English Students also pay a \$90 activity fee.

Nondegree students are not required to pay student fees. Should they wish to receive any of the student privileges provided by fee payment, they may do so by paying full semester (or session) fees. Medical insurance may be purchased without paying the other fees.

Summer Session

Academic Courses

Health Center	\$ 15.50
Student Center Fee	<u>30.00</u>
Total	\$ 45.50

Thesis Research (if on campus)

Health Center	\$ 15.50
Student Center	<u>30.00</u>
Total	\$ 45.50

Intensive English

Health Center	\$ 21.00
Student Center	30.00
Activities	<u>60.00</u>
Total	\$111.00

Field Courses/Graduate Field Trips

On-Campus: Health Center \$ 8.00

Off-Campus:

Arrangements and payment for transportation, food, lodging and other expenses must be made with the department concerned. (Geology Field Camp costs, including camping and materials, are \$100.)

Miscellaneous:

New Student Orientation/Quick Start Program/Freshman Hard Hat

\$ 16.00

New Stu Orien./Quick Start, \$7
Freshman Hard Hat, \$9
(Hd Hat Fee of \$9 can be waived.)

Deposits (cover the cost of supplies consumed, with any unused balance refunded)

Chem Lab (1st time reg.) \$ 15.00
Plane Surveying 50.00

Graduation (includes theses binding and other expenses)

Bachelors \$ 25.00
Professional Engineers 25.00*
Masters 100.00*
Doctors 100.00*

Graduate Studies Support \$1500.00
(optional for sponsored students)

Student Health Plan (optional for all students)

A medical insurance program is available to all students, both degree and nondegree, who request coverage. An election to accept/waive this insurance must be made at the time of registration. Costs are as follows:

Fall Semester \$ 64.00
Spring Semester (provides
coverage through August) 64.00
Summer Session 32.00

Arrangement can be made for coverage of spouse and/or children. The insurance carrier should be contacted directly. The annual fee for coverage is:

Spouse \$134.00
Spouse and Child(ren) 258.00
Child(ren) Only 122.00
Optional Maternity, per unit 100.00

* Any changes will be submitted later.

May 6, 1987

PROPOSED BUDGET SUMMARY

1962 BOND ISSUE
1966 BOND ISSUE
TWIN TOWERS
FOR FISCAL YEAR 1987-88

	<u>BUDGET 1986-87</u>	<u>BUDGET 1987-88</u>
<u>INCOME</u>		
Residence Halls	\$ 472,940	\$ 602,114
Student Center	325,760	300,560
Dining Hall	734,160	760,470
Prospector Village	258,770	276,577
Mines Park	196,740	196,484
Twin Towers	473,740	438,936
Conferences	0	90,000
TOTAL INCOME	\$2,462,110*	\$2,665,141
<u>EXPENSE</u>		
Residence Halls	\$ 273,994	\$ 207,400
Student Center	338,909	354,803
Dining Hall	559,235	666,055
Prospector Village	192,916	182,300
Mines Park	130,541	130,890
Twin Towers	220,015	205,015
Conferences	0	53,400
Debt Service and Renewal/Replacement	780,000	780,000
TOTAL EXPENSE	\$2,495,610	\$2,579,863

*1985-86 fund balance (\$33,500) applied to income.

PROPOSED BUDGET SUMMARY
STATE RENTAL PROPERTIES
FOR FISCAL YEAR 1987-88

<u>BUDGET 1986-87</u>	<u>BUDGET 1987-88</u>
INCOME	\$ 26,350
EXPENSE	6,000
\$ 35,000	
17,000	

May 6, 1987

	<u>BUDGET 1986-87</u>	<u>BUDGET 1987-88</u>
INCOME	\$ 109,575	\$ 106,475
EXPENSE	109,575	106,475

PROPOSED BUDGET SUMMARY
HEALTH AND ACCIDENT
FOR FISCAL YEAR 1987-88

May 6, 1987

PROPOSED BUDGET SUMMARY
 ATHLETIC ASSOCIATION
 FOR FISCAL YEAR 1987-88

	<u>BUDGET 1986-87</u>	<u>BUDGET 1987-88</u>
<u>INCOME</u>	\$ 137,080	\$ 149,355
<u>EXPENSE</u>	\$ 137,080	149,355

Note: As in the past, the above figures exclude the Administrative Allocation.

May 6, 1987

PROPOSED BUDGET SUMMARY
SPONSORED RESEARCH
FOR FISCAL YEAR 1987-88

<u>EXPENSE</u>	<u>INCOME</u>
6,650,000	\$ 6,650,000
<u>BUDGET 1986-87</u>	
7,600,000	\$ 7,600,000
<u>BUDGET 1987-88</u>	

May 6, 1987

May 6, 1987

PROPOSED BUDGET SUMMARY
ASSOCIATED STUDENTS
FOR FISCAL YEAR 1987-88

	<u>BUDGET 1986-87</u>	<u>BUDGET 1987-88</u>
<u>INCOME</u>	\$ 129,736	\$ 152,385
<u>EXPENSE</u>	108,041	152,385

Note: As in the past, the above figures exclude the Administrative Allocation.

PROPOSED BUDGET SUMMARY
CSM PUBLICATIONS
FOR FISCAL YEAR 1987-88

<u>INCOME</u>	<u>EXPENSE</u>
\$ 360,117	351,532
<u>BUDGET 1986-87</u>	<u>BUDGET 1987-88</u>
\$ 476,598	473,038

May 6, 1987

May 6, 1987

PROPOSED BUDGET SUMMARY
SPECIAL PROGRAMS
FOR FISCAL YEAR 1987-88

	<u>BUDGET 1986-87</u>	<u>BUDGET 1987-88</u>
INCOME	\$ 175,000	\$ 214,000
EXPENSE	145,118	200,000

May 6, 1987

PROPOSED BUDGET SUMMARY
GREEN CENTER
FOR FISCAL YEAR 1987-88

	<u>BUDGET 1986-87</u>	<u>BUDGET 1987-88</u>
<u>INCOME</u>	\$ 82,000	\$ 63,000
<u>EXPENSE</u>	80,325	58,150

Note: As in the past, the above figures exclude the Administrative Allocation.

PROPOSED BUDGET SUMMARY
 RESEARCH REVOLVING FUND
 FOR FISCAL YEAR 1987-88

	<u>BUDGET 1986-87</u>	<u>BUDGET 1987-88</u>
<u>INCOME</u>	\$ 2,550	\$ 7,250
<u>EXPENSE</u>	2,550	7,250

Note: As in the past, the above figures exclude the Administrative Allocation.

May 6, 1987

PROPOSED BUDGET SUMMARY
SELF FUNDING ACTIVITIES
FOR FISCAL YEAR 1987-88

	<u>BUDGET 1986-87</u>	<u>BUDGET 1987-88</u>
<u>INCOME</u>	\$ 828,975	\$ 781,495
<u>EXPENSE</u>	825,119	781,495

RECORD OF PROCEEDINGS

Golden, Colorado
June 13, 1987

The Board of Trustees met in regular session on June 13, 1987, at 1:30 p.m. in the Long's Peak Room of The Aspen Lodge.

Trustees present: Ms. Allen, Messrs. Earnest, Henderson, Pascoe, Schwartzberg, Warren, Wilson and Wood.

Also attending the meeting were President Ansell, Vice Presidents Golden, Nyikos, and Scott, Mr. Robbins, Executive Director of the CSM Foundation, Deans Chevront, Gentry, Olson and Romberger, Dr. Sloan, faculty representative to the Board, other staff members, and visitors.

Mr. Wood presided.

Election of Officers. The following slate of officers was nominated and unanimously elected:

President: Mr. Wood
Vice President: Mr. Pascoe
Secretary: Mr. Wilson
Assistant Secretary and Assistant
Treasurer: Mr. Schwartzberg
Treasurer: Mr. Gordon Scott

Recognition of Mr. Earnest. Mr. Wood presented a silver Certificate of Appreciation to student Trustee Fred Earnest. The Certificate reads:

In recognition of his
loyal and meritorious service as
a member of the Board of Trustees,
this certificate is presented to
FREDERICK H. EARNEST
by the Board of Trustees upon the
occasion of expiration of the term
June thirtieth, One thousand nine hundred and eighty-seven.

Previous Minutes. The minutes of the meeting of May 7, 1987, were approved as distributed.

Tentative Budget, 1987-88. Mr. Scott distributed copies of 1987-88 Strategic Financial Plan (Income) -- Summary Version and 1988-89 Strategic Financial Plan (Expense) -- Summary Version, proposed tuition rates for FY 1987-88, and 1987-88 Tuition and Fees -- Evidence of Consistency with CCHE Policies, copies of which are appended hereto. President Ansell discussed the tentative budget and informed the Board that some specific figures within the budget will change and that a final budget should be ready for submission to the Board for its July meeting.

The Board unanimously authorized the School to continue operating under the 1986-87 budget until a final budget

RECORD OF PROCEEDINGS

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is presented to the board. The Board also unanimously approved the proposed tuition rates for FY 1987-88.

Mr. Henderson asked if the institution was still pursuing a position in which prospective students who were academically qualified but had demonstrable financial need were offered sufficient financial aid to meet such need, i.e. would not be denied a Mines education solely on the basis of financial need. Both President Ansell and Dr. Nyikos assured Mr. Henderson that this position of the institution was unchanged.

Program Plan Approval, Student Health Center. The Program Plan and Feasibility Study for renovation of 1225 17th Street for the Student Health Service, copy of which is appended hereto, was unanimously approved by the Board.

Physics Department Visiting Committee. Two people on the list originally submitted for Board approval did not respond to the invitation to serve on the committee. Therefore, President Ansell recommends that the two names listed below be added to the External Advisory Committee for Physics:

Dr. Peter Bender
Staff Scientist
National Bureau of Standards
Boulder, CO

Dr. Albert Bartlett
Professor
Department of Physics
University of Colorado
Boulder, CO

The Board unanimously approved the request that Drs. Bender and Bartlett be invited to serve on the Physics Department Visiting Committee.

New Faculty Appointments. Dr. Gentry presented the report as follows:

Reappointment after Interruption.

Dr. Nalini Mitra	\$28,000 for the
Visiting Professor of	1987-88 academic
Physics	year

Continuation of Appointment.

Dr. Robert Drury	\$31,000 for the
Visiting Assistant Professor	1987-88 academic
of Mineral Economics	year

Additional Information.

Dr. Gentry had distributed quantitative evaluation reports to the Board members prior to the Board meeting.

Mr. Henderson asked for an estimate of the percentage of faculty who really taught in the classroom with the spirit of the Future Graduate Profile program. Dr. Gentry responded that, in his opinion, 80 to 90%. Dr. Sloan did not comment on the

RECORD OF PROCEEDINGS

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percentage, but did state that he noted great improvement in this area.

Graduate School Admissions. Dr. Romberger had distributed the standard graduate student admissions report for Fall semester 1987 prior to the Board meeting. There have been no changes in the trends observed in previous months. The total number of applications received is still less than last year for the same time period as a result of a weakness in the exploration sciences and petroleum engineering. The most active department is Physics, where the number of applications has increased by fifty percent. The most disappointing department in terms of application activity is Geophysics where applications have decreased approximately fifty percent. Recruiting and increased funding opportunities have helped to attract more applications in the materials science departments such as Physics and Metallurgy. However, it will take more than recruiting to improve the situation in the exploration and petroleum area.

Admissions. The Admissions Report dated June 1, 1987, was distributed to the Board. Attached to the Admissions Report was a report on the number of women and ethnic minority students who have applied for the fall semester 1987.

New Research Awards. Dr. Olson had distributed the report, which reflects the award volume through May 29, 1987, prior to the Board meeting. The report indicates that this month's volume was \$1,009,360 compared to \$952,596 for the same time period the previous year. This results in a cumulative total for FY 1987 of \$8,992,818, or \$2,653,766 ahead of the total for the same period the previous year of \$6,339,052. Twenty-four different faculty were involved in twenty-one new project awards.

Dr. Olson's report reflects the submission of fifteen proposals during the month of May 1987 compared to twenty-eight during the month of April 1987. To date, a total of 348 proposals for FY 1987 has been submitted.

Monthly Reports. Mr. Scott had distributed the following monthly reports prior to the Board meeting: Current Funds Revenues, Expenditures and Other Changes for the Eleven months Ending May 31, 1987; Colorado School of Mines State Appropriated Funds for eleven months ending May 31; Colorado School of Mines Auxiliary and Self-Funded Activities for the Eleven Months Ending May 31, 1987; and Time Deposits and Investment Report, May 31 1987.

It is Mr. Scott's belief that the School is operating within the funds projected for the 1987 fiscal year.

Leave of Absence. Dr. Golden informed the Board that Dr. Ruth Maurer of the Mineral Economics Department has accepted an academic year 1987-88 appointment at the U.S. Military Academy at West Point, New York. She has requested, with Dr. Cordes's support, an unpaid leave of absence for the academic year.

June 13, 1987

RECORD OF PROCEEDINGS

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Legislative Report. Dr. Nyikos reported on the passage of HB 1320, which establishes 21 years as the drinking age in Colorado. He also reported on HB 1021, which requires all male students to prove registration for the draft when they apply to a state-supported university in Colorado. Dr. Nyikos informed the Board that the so-called "Science City" bill, which restructures CATI, is acceptable to Mines in its present form.

Dr. Nyikos reported that the CCHE master planning process is ongoing. He stated that the Commissioners are in the process of meeting with each governing board and will want to meet with the Mines Board. Dr. Nyikos proposed that the Mines Board meet with the Commissioners on the evening of July 9.

Dr. Nyikos informed the Board that, with regard to the CCHE affirmative action policy concerning faculty hiring and student life, he will report at a later time.

Curricula Revisions. Dr. Gentry provided background information, stating that in September 1982, CSM began an in-depth analysis and discussion of necessary curricular changes and the implementation thereof. The implementation of proposed curricular changes was in response to the following identified programmatic objectives:

- o Increased educational breadth
- o Further strengthen science and engineering fundamentals
- o Enhance computer usage throughout the curriculum
- o Enhance competency in communicative skills
- o Strengthen overall level of the engineering design process
- o Increase program flexibility

In January 1984, the CSM Board of Trustees expressed its desire to strengthen the above curricular objectives by adopting a set of policy statements requiring significant revisions in each of the degree-granting undergraduate programs. These revisions were implemented by the end of 1984.

In the fall of 1985, an institutional ad hoc curriculum committee was formed as part of the institutional strategic planning process and charged with the design of an institutional curricular structure which would contribute to accomplishing the following institutional objectives:

1. CSM will continue to produce engineers and scientists for the mineral, energy and materials areas.
2. The curriculum should be designed to achieve a balance between:

June 13, 1987

RECORD OF PROCEEDINGS

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- a) technical competence in a single discipline, and
 - b) the ability of CSM graduates to function successfully in an interdisciplinary, open-ended, ever-changing environment
3. CSM must provide an educational environment which motivates and excites students to learn and instill a desire to continue to learn for the duration of their forty- or fifty-year professional careers. To prepare them for this unknown future, we must have a curriculum and a culture that develops within students the ability and basis for continued intellectual growth, and maintains the desire for lifelong learning.
 4. CSM must broaden its focus to educate students for leadership. To accomplish this, our graduates will need to grasp the new social, political, economic and philosophical issues which will play an increasing role in their professional lives; they will have to learn to understand people and their institutions, how to move them, how to change them, and how to lead them.
 5. CSM must start thinking, educating and operating in more of an international context. This will require an educational program which recognizes the international environments in which our graduates will function.
 6. CSM must educate students for an expanded role within industry, government and academe -- one that does not begin with exploration and end with processing, but one that continues further with career possibilities that extend to the finished product.

Special emphasis was placed on the issues of breadth versus depth in the Mines curriculum and on significantly enhancing communicative skills of all Mines students.

In the year that followed, the faculty analyzed and studied the issues and potential ramifications of various curricular changes. At its monthly faculty meeting in April 1986, the CSM faculty voted to recommend the following curricular structure to the CSM Board of Trustees for approval.

CSM CURRICULAR STRUCTURE

	<u>Semester</u> <u>Credit Hours</u>	<u>Sub-Total</u>
I. COMMON REQUIRED COURSES* (Core Curriculum)		
EARTH SCIENCE:	3	
GE 101: General Geology		
MATHEMATICS:	13	

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	<u>Semester Credit Hours</u>	<u>Sub-Total</u>
MA 131: Analytic Geometry & Calculus		
MA 132: Analytic Geometry & Calculus II		
Honors		
MA 231: Analytic Geometry & Calculus III		
MA 315: Differential Equations		
PHYSICS:	7	
PH 112: Physics-Mechanics		
PH 211: Physics II-Electricity & Magnetism		
PH 212: Physical Measurements		
CHEMISTRY:	8	
CH 121: Principles of Chemistry		
CH 124: Principles of Chemistry II		
CH 126: Quantitative Chemical Measurements		
H&SS:	3	
HS 100: Crossroads		
ECONOMICS:	3	
ME 111: Principles of Economics		
EPICS:	11	
EP 101: EPICS I		
EP 102: EPICS II		
EP 201: EPICS III		
EP 202: EPICS IV		
PHYSICAL EDUCATION:	2	
PA 101: Physical Education		
PA 102: Physical Education		
PA 201: Physical Education		
PA 202: Physical Education		
	50	50
II. ADDITIONAL SUBJECT AREA REQUIREMENTS		
H&SS (basic program)	9	
H&SS/ECONOMICS ELECTIVE	3	
FREE ELECTIVES (or student selected minor program of study)	12	
ENVIRONMENTAL SCIENCE**	3	
MATHEMATICS**	3	
	30	80
III. MAJOR DISCIPLINE COURSES***	56-68	136-148
TOTAL HOURS REQUIRED FOR GRADUATION		136-148

*Includes a completely common freshman year.

**A specific course may be mandated by the degree granting program.

***Must include a minimum of six credit hours in a capstone/design course sequence incorporating computer usage; must also include a summer field course not to exceed a total of six credit hours.

RECORD OF PROCEEDINGS

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During the 1986-87 academic year, the curricula for all programs of study leading to a degree were revised in accordance with the above structural requirements. These revised curricula will become effective with the 1987-88 academic year.

The curricular revisions are the result of extensive, thoughtful, and rigorous debate and are comprehensive in nature. They reflect a tremendous amount of work and deliberations by departmental faculty members and effective leadership by the respective department heads. In Dr. Gentry's judgment, the revised curricula are far superior to those of three or four years ago. He believes these revisions provide the foundation for engineering and applied science programs of study at CSM which are reflective of the 1980's instead of the 1960's. The faculty as a whole has excelled in structuring and formulating the new, revised curricula.

In addition to departmental curricular changes, the faculty also developed and approved two other significant educational offerings at Mines that are unique to this institution. They are: (1) a minor program of study in International Political Economy, consisting of 21 semester credit hours, and (2) an International Political Economy Certificate Program, consisting of 24 semester credit hours.

The Board unanimously commended the CSM faculty and department heads for their timeliness in revising program curricula to comply with the June 1986 approved curricular structural changes. Their special efforts in this regard are greatly appreciated.

Book Store. Dr. Chevront reviewed this matter and distributed information compiled by Cameron Associates, College Store Management Consultants, Princeton, New Jersey, copy of which is appended hereto. Discussion ensued, during which Mr. Earnest informed the Board that eighty percent of the Student Council wants a book store on the CSM campus.

The Board unanimously invited Dr. Chevront to present a definitive proposal, and Dr. Chevront promised to present periodic progress reports to the Board.

Placement Statistics. Dr. Chevront distributed 1986-87 placement statistics to the Board.

Announcement. President Ansell announced the deaths of Mrs. Ida Green and Mr. Gaylord (Buck) Weaver, both of whom left large bequests to the School of Mines. At the request of President Ansell, the Board unanimously gave formal expression of its sympathy and appreciation.

The meeting was adjourned at 4:00 p.m., and the Board went into executive session.


Secretary

June 13, 1987

Proposed
TUITION
FY 1987-88

Tuition and fees at CSM are kept at a minimum, consistent with the cost of instruction and the amount of State funds appropriated to the School.

All prices are effective June 1987 and are subject to change without notice.

TUITION

Academic and Field Courses

<u>Semester Hours</u>	<u>Resident</u>	<u>Nonresident</u>
9.5 & over	\$1,514	\$4,198
8.5 - 9.0	909	2,520
7.5 - 8.0	808	2,240
6.5 - 7.0	707	1,960
5.5 - 6.0	606	1,680
4.5 - 5.0	505	1,400
3.5 - 4.0	404	1,120
2.5 - 3.0	303	840
1.5 - 2.0	202	560
.5 - 1.0	101	280

The above are applicable to all academic periods and to both graduate and undergraduate courses.

Other Courses and Programs

Extended Studies - \$101 per credit hour

Executive Program Mineral Economics (includes fees)
1st-3rd Modules, each \$3,150
4th Module 1,550

Audit, no credit
1st-3rd Modules, each 1,890
4th Module 930

Intensive English for International Students:

	<u>Req. Semester</u>	<u>Summer Session</u>
EN 01	\$2,191	\$1,680
EN 02	1,315	1,120

Graduate Student Notes

All on-campus graduate students are expected to enroll for a minimum of 15 semester hours of course work and/or thesis each regular semester.

Students employed on a full-time basis outside the School are required to enroll for a minimum of 3 semester hours each regular semester. Evidence of employment must be filed with the Graduate School each semester.

Students doing thesis research in the summer should register for a minimum of 3 semester hours the first week after spring Commencement.

Governing Board Board of Trustees
 Institution Colorado School of Mines
 Contact Person W. G. Scott
 Phone Number 273-3240

1987-88
Tuition and Fees
Evidence of Consistency with CCHE Policies

A. The CCHE annually-approved Reexamination of the Base Budget is a translation of institutional role and mission into appropriated financial resources. Governing board approved institutional budgets consisting of board allocated general fund, governing board proposed tuition, and other institutionally collected income, shall be evaluated by governing boards in the context of the Reexamination of the Base Budget Framework.

- 1) 1987-88 Reexamination of the Base, all appropriated funds; \$21,040,875 .
- 2) 1987-88 Board approved appropriated funds budget; \$23,286,544 .
- 3) Governing Board evaluation of the relationship between (1) and (2) above.

B. As much as possible, students should be able to select the institution and the program in which they enroll on the basis of appropriateness to their educational objectives and abilities rather than on the basis of cost. Governing boards should consider the relationship of proposed resident tuition rates to total cost per student and the effect upon access and quality.

- 1) Tuition rate as a % of on-campus cost:

	1986-87	1987-88
Resident Undergraduate	<u>35%</u>	<u>34%</u>
Resident Graduate	<u>35%</u>	<u>34%</u>
Non-Resident Undergraduate	<u>96%</u>	<u>95%</u>
Non-Resident Graduate	<u>96%</u>	<u>95%</u>
Other	<u>-</u>	<u>-</u>

2) Estimate of 1987-88 tuition rate impact upon access.

The impact is expected to be minimal. The Office of Admissions in its follow-up, personal contact with students who have chosen other schools, does not find a significant block to access on the basis of cost. Students choose other schools over Mines for reasons which are personal and not specifically cost-related.

3) Estimate of 1987-88 tuition rate impact upon quality.

The tuition increase is minimally able to provide some maintenance of the status quo in what continues to be an eroding expenditure base.

C. Need-based financial aid in the form of grants, scholarships, loans, work programs, and fellowships from all sources of funds should be used to promote access for all students. Board approved institutional tuition proposals should consider financial aid available from all sources for needy students.

1) 1986-87 need-based financial aid (all sources) \$4,268,980.

2) Estimated 1987-88 need-based financial aid (all sources) \$4,646,460.

3) Governing Board evaluation of impact of approved tuition rates and need-based financial aid availability on access.

The estimated 1987-88 need-based financial aid will be awarded to an estimated 740 students. This compares to some 719 in the previous year. Hence, the 8.8% increase in need-based financial aid is intended to both cover the additional students and to mitigate the increased costs for individual need students.

D. Changes in the amount of student fees should be sufficient to continue appropriate service levels as determined by governing boards after consultation with institutional administrators and students. Student fees should not be used to support academic facility construction; nor should increased special academic fees be used to minimize tuition rate proposals by shifting tuition increases to special fees increases.

1) Overall mandatory fee increase from 1986-87 to 1987-88 19.7%.

2) Other programs (see definitions) fee increases from 1986-87 to 1987-88
0.

3) Amount of 1987-88 student fees used to support academic facility construction
0.

- 4) Overall tuition increase from 1986-87 to 1987-88

Resident	5%
Nonresident	5%

 .
- 5) Further Board evidence of consistency with this policy.

PLEASE RETURN BY JULY 1, 1987 TO: John Bliss
Colorado Commission on Higher Education
1300 Broadway, Second Floor
Denver, Colorado 80203

**Student Fees, Room and Board
1987-88**

COLORADO SCHOOL OF MINES
Institution

W. G. Scott
Contact Person

273-3240
Phone

A. Application Fee

Yes No

Is an application fee charged? X (only to NR undergrads)
 Is it refundable? X
 It is applied to tuition upon enrollment? X
 Is it applied to fees upon enrollment? X

B. 1. Required Student Fees per Academic Year: Do not report fees which are optional or frequently waived. Please refer to attached instructions for definitions.

	Amt. req'd per full-time student per academic yr. (2 sem or 3 qtrs.)	% inc./or (dec.)	Summer Term	% inc./or (dec.)	Total anticipated collections, summer '87 - spring '88
Health Service Program	\$ 50.00	0%	\$ 15.50	0%	\$ 105,975
Bonds	_____	_____	_____	_____	_____
Student Center Program	120.00	9%	30.00	9%	249,360
Bonds	_____	_____	_____	_____	_____
Student Gov't Operations	50.00	47%	_____	_____	100,000
Student Activities	_____	_____	_____	_____	_____
Physical Recreation Program	_____	_____	_____	_____	_____
Bonds	_____	_____	_____	_____	_____
Intercollegiate Athletics Men's Program	60.00)	50%	_____	_____	_____
Women's Program	Same)	_____	_____	_____	118,470
Bonds	_____	_____	_____	_____	_____
Facility Constr./Capital	_____	_____	_____	_____	_____

Names of facilities:

Other Programs (list)

Reserve _____

Total Mandatory Fee \$ 280.00 19.6% \$ 45.50 5.8% \$ 573,805

Academic Yr. Summer Term

Student Fees, Room and Board, 1987-88, Continued:

2. Students enrolled for 6.5 hours pay the total required fees.
3. Students enrolled for less than hours pay the following required fees:

(Please List)

_____	_____	_____
_____	_____	_____
_____	_____	_____

4. Other Fees

- a. Does the institution offer a health insurance program? Yes No
- 1) What is the annual cost to the student for this insurance? \$128
- 2) Are students required to subscribe to the program?
- a) Yes, the program is mandatory with no waiver.
- b) No, students are billed for the program but the charge can be waived.
- c) No, students must sign up to get the program. X
- d) Other (please describe)

5. When did/will the governing board approve the fee rates reported in 1-4?

5-7-87

C. Room and Board per Academic year
(based on charges for on-campus housing and food service)

Room	Lowest rate per year	<u>\$1655</u>
	Highest rate per year	<u>2130</u>
	Most frequent rate per year	<u>1655</u>
Board	5 day plan - total yearly cost	<u>1375</u>
	7 day plan - total yearly cost	<u>1470</u>
	Most common total room and board charge per year	<u>3125</u>

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Colorado Commission on Higher Education
1300 Broadway, Second Floor
Denver, Colorado 80203

W. G. Scott
 Contact Person
273-3240
 Phone Number

**1987-88 Tuition Rates
 Colorado Public Colleges and Universities
 Full-Time Undergraduates**

<u>Institution</u>	<u>Academic Year Rates</u>				<u>% increase/ (decrease)</u>	<u>Summer Term Rates</u>			
	# of hours that constitute full-time enrollment for Tuition purposes	<u>Tuition</u>		# of hours that constitute full-time enrollment for Tuition purposes		<u>Tuition</u>		<u>% increase/ (decrease)</u>	
		<u>Res.</u>	<u>Nonres.</u>			<u>Res.</u>	<u>Nonres.</u>		
COLO SCHOOL OF MINES	9.5	\$3,028	\$8,396	5%	9.5	\$1,514	\$4,198	5%	

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 Colorado Commission on Higher Education
 1300 Broadway, Second Floor
 Denver, Colorado 80203

**1987-88 Tuition Rates
Colorado Public Colleges and Universities
Part-Time Undergraduates**

<u>Institution</u>	Maximum # of hours at part-time rate	Tuition per part-time hour				Tuition per hour for credits (over 18)			
		<u>In-state</u>	<u>% inc./ (dec.)</u>	<u>Out-of-state</u>	<u>% inc./ (dec.)</u>	<u>In-state</u>	<u>% inc./ (dec.)</u>	<u>Out-of-state</u>	<u>% inc./ (dec.)</u>
COLORADO SCHOOL OF MINES	9	\$101	5%	\$280	5%	\$101	5%	\$280	5%

**1987-88 Tuition Rates
Colorado Public Colleges and Universities
Full-Time Graduates**

<u>Institution</u>	<u>Academic Year Rates</u>			<u>% increase/ (decrease)</u>	<u>Summer Term Rates</u>			<u>% increase (decrease)</u>
	<u># of hours that constitute full-time enrollment for Tuition purposes</u>	<u>Tuition</u>			<u># of hours that constitute full-time enrollment for Tuition purposes</u>	<u>Tuition</u>		
		<u>Res.</u>	<u>Nonres.</u>			<u>Res.</u>	<u>Nonres.</u>	
COLORADO SCHOOL OF MINES	9.5	\$3,028	\$8,396	5%	9.5	\$1,514	\$4,198	5%

**1987-88 Tuition Rates
Colorado Public Colleges and Universities
Part-Time Graduates**

<u>Institution</u>	Maximum # of hours at part-time rate	Tuition per part-time hour				Tuition per hour for credits over 18			
		<u>In-state</u>	<u>% inc./ (dec.)</u>	<u>Out-of-state</u>	<u>% inc./ (dec.)</u>	<u>In-state</u>	<u>% inc./ (dec.)</u>	<u>Out-of-state</u>	<u>% inc./ (dec.)</u>
COLORADO SCHOOL OF MINES	9	\$101	5%	\$280	5%	\$101	5%	\$280	5%

PROGRAM PLAN AND

FEASIBILITY STUDY

Renovation of 1225 17th Street
for the
Student Health Service



CSM

Plant Facilities Department
Construction and
Engineering Section
Colorado School of Mines
Golden, Colorado 80401

May, 1987



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EXECUTIVE SUMMARY

This program plan and feasibility study was prepared by the Colorado School of Mines Plant Facilities Department, Construction and Engineering Section, with input from the administrators and staff responsible for the Student Health Center, and is in accordance with the recommendations of the Support Facilities Master Plan, which recommends relocation of this facility for life/safety and programmatic reasons from its current location in a building beyond its useful life that is scheduled for demolition.

An investigation was made of the existing facility, the needs of the Health Center, and proposed locations. Outline specifications and several schematic designs were prepared from this information. The alternative schemes were evaluated and a cost estimate prepared for the scheme which best met all criteria.

This plan recommends renovation of a Colorado School of Mines-owned 1456 g.s.f. residence at 1225 17th Street, Golden, Colorado, with a 625 g.s.f. addition at an estimated cost of \$108,500. It is proposed that design construction documents will be prepared by the CSM Construction and Engineering Section and that construction will be contracted, with final completion contemplated to occur approximately December, 1987.

The proposed renovated facility is expected to provide adequate space for current programs and room for future expansion should program requirements expand.

INTRODUCTION

This is a study of the feasibility of renovating a school-owned residence to house the Student Health Service of the Colorado School of Mines. It was prepared by the Plant Facilities Department of the School of Mines at the request of Harold Chevront, Dean of Student Affairs, and in response to the recommendations of the Support Facilities Master Plan of February 1987.

This study was based on information contained in the Master Plan, discussions with Dean Chevront, Jeanette Bower, nurse at the Health Center, and Dr. Gjellum, physician under contract to the Health Service, as well as inspections of the existing facility and proposed location by Plant Facilities personnel.

Following this information gathering process, a program was prepared for a new facility and a schematic design developed based on this program. An outline specification and cost estimate were also prepared.

DEPARTMENT PROFILE/PLAN OBJECTIVES

The Student Health Center at the Colorado School of Mines is under the direction of the Dean of Student Affairs and operates on a budget generated by student fees to perform the following functions for students and their spouses:

- Emergency Care
- Primary Care
- First Aid
- Diagnosis and referral to others for specialized care

There is no overnight care.

These functions are carried out with one full time nurse, a part-time nurse, and a part-time physician. Lab work and pharmacy services are carried out by both the staff and under outside contract. Assistance for support functions is provided by work-study students, usually only 1 or 2 at any given time.

The Center operates on a walk-in basis and saw an average of 650 students per month during the 1985-86 academic year. Patient load tends to be concentrated in the afternoon.

Anticipated future programs of the Health Center may include expanded health promotion and prevention education programs. In addition, the capability of responding to the medical needs of a hazardous materials emergency is desirable. This can probably be accommodated within existing functions. Long-term plans may include the addition of x-ray equipment.

The facility program plan objectives are to provide for the above outlined functions in a facility without life/safety deficiencies, without current space-related program deficiencies, and with adequate accessibility both to the handicapped and to ambulance services.

EXISTING FACILITY

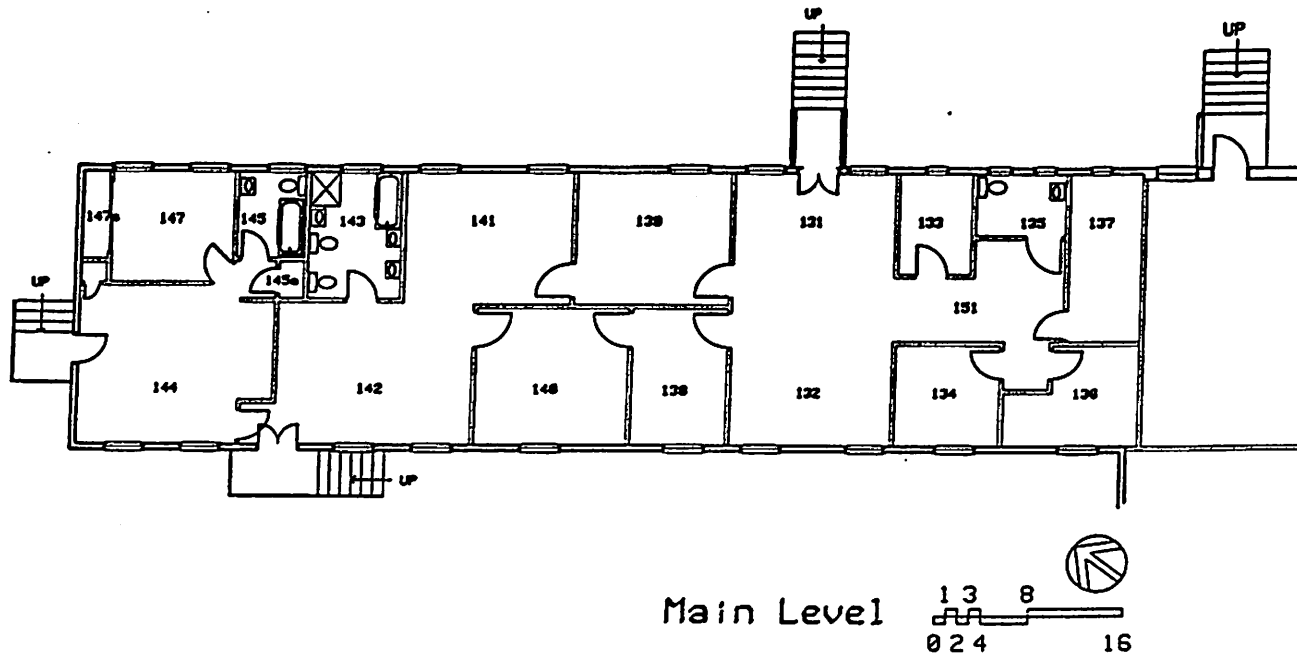
The Student Health Center occupies the northeast wing of the Military Science Building, a one-story structure in a complex of buildings which primarily house the Plant Facilities Department.

Quantitatively the existing floor area of 2,280 g.s.f. is adequate for the defined mission of the Health Center. The problems are qualitative, arising in three categories:

- 1) Poor condition of the building.
- 2) Poor arrangement of functions within the building, and
- 3) Code deficiencies of the building.

Some of the deficiencies caused by these problems are:

- Medically substandard exam rooms and labs.
- Lack of patient confidentiality.
- Poor circulation.
- Poor functional space relationships leading to over utilization of some areas while other areas are grossly under utilized.
- Lack of security and control.
- Lack of ventilation
- Inability to control temperatures for pharmaceuticals.
- Absence of handicapped access or emergency and stretcher capability.
- High continuing maintenance costs for upkeep of a building well past its useful life.



STUDENT HEALTH CENTER
Existing Facility

No.	Room	Sq. Ft.	No.	Room	Sq. Ft.
131-132	Waiting Room/Reception Area	341	141	Sleeping Room	175
133	Clean Linen Storage	52	142	Sleeping Room	163
134	Examining Room	79	143	Restroom	116
135	Laboratory	40	144	Sleeping Room/Workroom	223
136	Examining Room	68	145	Bathroom	50
137	Pharmacy	30	145a	Janitor's Closet	6
138	Office	94	147	Examining Room	98
139	Overflow Waiting Room	148	147a	Closet	15
140	Nurse's Office	153	151	Circulation	120
				Net Total	1,971
				Gross Total	2,280

The Military Science Building is a wood framed building constructed in 1942 as a barracks. The military classified this structure as temporary, with a projected 10 to 20 year life span. The building is classified as construction type V-N under the Uniform Building Code and the Health Center is considered a B-2 occupancy.

The building violates current building and life-safety codes on several counts. The structure exceeds the allowable area for its construction type and would need fire rated separation walls to come into compliance. It also should have a one-hour fire resistive wall on its west side, because of its proximity to the warehouse. The building does not have handicapped access and the stair railings do not meet current codes. The hot-water heater should be enclosed and combustion air provided.

In addition to these life-safety hazards, the building has numerous other deficiencies. Among these are the poor condition of the roof, gutters, and crawlspace skirt. The windows are in fair condition, but require weatherstripping and are single-pane glass. The interior finishes are also in fair condition, but are substandard for health clinic occupancy.

Structurally, the building is serviceable as a result of ongoing maintenance. There is evidence of settlement at the north end of the building, and some deflection of the floor was noted. The roof framing appears to be sound.

The building is heated by steam radiators from the campus supply. Controlled by a single thermostat and zone valve, the system is inefficient and expensive to operate. There is no air conditioning or mechanical ventilation. The plumbing and fixtures are in good condition, but modifications are needed to meet handicapped accessibility and functional requirements. For example, there are no sinks in the examining rooms or the pharmacy, and the laboratory, which was converted from a restroom, still has a toilet in it.

There are no fire sprinklers or standpipes in the building.

The existing electrical service is adequate to serve existing building loads. However, the panels, wiring, receptacles, and some of the lighting fixtures are antiquated and do not meet today's standards or codes.

The 10- to 20-year useful life of this building is definitely in question, since it is now 44 years old. It requires extensive modifications to bring it into compliance with the code and to make it effective as a Health Center. Additionally, it will require continued and increasingly costlier maintenance for the building to remain useful. For these reasons, it was recommended by the Support Facilities Master Plan (February 1987) that this building be demolished and the functions relocated.

NEW FACILITY PROGRAM

A. General Requirements

The Support Facilities Master Plan recommended that the Campus Health Service should be located near student activity areas, meaning the dormitories and Student Center, in order to encourage its use. This recommendation is seconded by the American College Health Association, whose Recommended Standards suggest that a health center should be readily accessible from both academic and residential areas. The site should have a minimum of three parking spaces (a physician and 2 nurses) as well as access for an ambulance. The site should allow for future expansion to accommodate potential future programs. This would include x-ray equipment or a doctor's office.

The facility should have a professional appearance, while at the same time, it needs to be inviting and comfortable. A residential image is not inappropriate. Handicapped accessibility to the entire building is required. A secondary entrance for staff and deliveries is desired.

A complete heating, ventilation and air conditioning system will be needed, along with a fire alarm system and a remote reporting security system for detecting intruders. The clinic is usually staffed by a single person during the summer, so a means should be provided for them to summon emergency assistance. There should also be an automatic doorbell which can be switched on and off.

In general, the interior finishes should be easy to maintain in a sanitary condition. Carpet may be appropriate in some areas.

The new facility will be required to meet all requirements of current editions of the Uniform Building Code, the Uniform Mechanical and Plumbing Codes and the National Electric Code.

B. Specific Space Requirements

Waiting Room:

Room for a maximum capacity of 15 people, with the ability to segregate the ill from those coming in for a routine visit. The space should be friendly and relaxing with study space and potentially a television. Seating could be built-in. This room could be carpeted. The Health Service would like to have room for health education materials. In the future, a computer database for wellness information may be installed.

Receptionist's Area:

This should be adjacent to or a part of the Waiting Room. It requires a counter, a desk with typewriter well and a telephone. This area will contain medical records storage, which is a secure space for six 4-drawer file cabinets. A small Xerox machine and office supplies will also be kept in this room. Patients are not allowed behind the counter.

There is also need for two additional workspaces and a computer terminal. This area could be combined with the Receptionist's Area, and/or a Breakroom.

Nurse's Office:

A private office for consultation with up to 2 people. Requires a desk with typewriter return, 2 file cabinets, bookshelves and a telephone. This room is used by both the full-time nurse and the part-time physician, however not concurrently. A long term potential for a full-time physician in the future may exist, at which time another office would likely be required.

Examining Room:

Four of these are needed. Each will contain the following:

Examining Table	Side Chair
Sink	Rolling Stool
Supply counter	Bulletin Board
Writing surface	Blood Pressure Cuff
Locking Cabinet	Diagnostic Scope
Mirror	

One room will be used for women's exams. Another will have an extra cabinet and be used as a Treatment Room. Each should have sanitary finishes, such as vinyl flooring and painted walls. Good lighting is essential, although windows are not, as privacy is a consideration. Clerestory windows may be an option. Ventilation is also important, as is acoustic privacy. All exam rooms should be accessible to an ambulance stretcher. Hooks for patient's clothing are needed, as are chart holders outside the rooms. Four 120 v duplex outlets and a phone jack are needed in each room.

Nurse's Station:

A work counter for 2 people to stand at. A telephone is needed, and space for a future computer terminal. This area should be adjacent to the Examining Rooms. A work area for a person seated behind the counter is also needed.

Pharmaceutical Storage:

This needs to be a secure space with 20 linear feet of under and overcounter cabinets and space for 2 people to work standing. The casework should have a plastic laminate counter top, 120 v electrical outlets above the counter and a small sink. An under-counter refrigerator is needed, along with a writing surface. This room should be near the Examining Rooms.

Laboratory:

This area needs a small refrigerator, a sink, and counter space for one person, a microscope, an autoclave, and an incubator. 120 v electric outlets are needed above the counter. A pass-thru from a restroom is needed for specimens. It may be necessary in the future to monitor the urine samples to prevent tampering.

Space is also needed for the patient to lie down during blood drawing. This could be part of the lab, or a separate room. The Laboratory should be near the Examining Rooms.

Sleeping Rooms:

Total of 4 beds in two rooms; could be divided 2 and 2 or preferably 3 and 1. Each room should have a side table for each bed, a wardrobe and a 1/2 bath (sink & toilet). These rooms need to be relatively isolated for quiet and should be carpeted. At least one of these rooms should be handicapped accessible, including the 1/2 bath. These rooms are not for overnight care.

Bathroom:

Room should be provided apart from other restroom facilities for a tub/shower. This room should also have a sink and toilet.

Breakroom:

Although not essential, a kitchenette unit with sink, refrigerator, cabinet and microwave oven is desirable. This area would be used as a workspace by work-study students.

Storage:

Eleven linear feet of clean linen storage, 7 ft. high and 11 linear feet of supply storage, 7 ft. high. Both can be open shelves. Several pegs on wall to hang crutches.

Small closet for dirty linen storage, separate from clean linen storage. Clean and dirty linen storage should be near the service entrance.

Janitor's closet with a slop sink and room for a vacuum cleaner and other janitorial supplies.

Restrooms:

A public restroom is needed. This should be conveniently located in relation to the waiting room. A restroom is also needed for collecting lab specimens. This could be combined with the public restroom.

C. Budget

The Student Health Center is a self-liquidating function of the Colorado School of Mines. As such, a fund exists for this project, currently showing a balance available for construction of \$108,572.00.

D. Implementation

The Phase II Campus Master Plan, Support Facilities Master Plan, calls for the relocation of the Student Health Center, for purposes of demolition of the old Military Science Building by 1990. This program is in accordance with the proposed demolition schedule. Future Five-Year Projection of Capital Construction outlines (CCHS Supplement to Budget 10) will indicate this demolition.

PROGRAM SQUARE-FOOTAGE SUMMARY

<u>Space</u>	<u>Sq. Ft.</u>
Waiting Room	275
Receptionist/Medical Records/General Office	100
Nurse's Office	110
Examining Rooms 4 @ 80 sq. ft each	320
Nurse's Station	25
Pharmaceutical Storage	65
Laboratory	55
Sleeping Rooms w/1/2 baths	400
Tub/Shower/Toilet	50
Breakroom/Workroom	50
Storage - Clean Linen	90
Soiled Linen	10
Janitor	15
Restrooms	100
Mechanical	15
Net Total	<u>1680 SF</u>
75% efficiency	= 2,240 GSF

EXISTING EQUIPMENT

<u>Item Number</u>	<u>Description</u>	<u>Electrical Requirements</u>	<u>Size (W X D X H, in inches)</u>	<u>Notes</u>
1	Microscope	120 V	7 x 9 x 12	
2	Thermometer Recharger (2)	120 V, 0.06 A	6 x 7 x 4	
3	Centrifuge	120 V, 1.5 A	9 x 9 x 9	Top loading
4	Microscope	120 V	8 x 9 x 16	
5*	Refrigerator	120 V	25 x 25 x 25	
6	Incubator	120 V	16 x 17 x 26	Needs room above to extract thermometer
7*	Exam Tables (2)		72 x 24 x 33	
8*	Refrigerator	120 V	24 x 29 x 57	
9	Scale		12 x 13 x 72+	
10	Ultrasound Deep Heat Machine	115 V, 1.2 A	19 x 15 x 33	
11*	Beds (4)		86 x 42 x 52	
12	Autoclave	115 V, 10 A	10 x 18 x 15	
13	Exam Table, Women's	120 V, 6 A max	67 x 28 x 38	

*Existing items recommended to be replaced.

NEW EQUIPMENT REQUIRED

14	Exam Table			
15	Refrigerator	120 V		Under-counter type

PROPOSED LOCATION

The Support Facilities Master Plan recommends the relocation of the Student Health Center to one of two new locations. These were the first floor of one of the dormitories, or one of the rental properties owned by the School of Mines and located south of the Student Center. The dormitories were eliminated from consideration after discussions with the Dean of Student Life. His concerns were the revenue lost by converting dormitory rooms to another use, as well as the difficulty in controlling outside noise in the dormitory area.

At the suggestion of the Dean of Student Life, we examined 1225 17th Street as a location for the Student Health Center.

1225 17th Street is an existing single family residence owned by the School of Mines and formerly used as rental housing. It is currently vacant and in need of upgrade, in any case, before it can be rented again. It is located two blocks south of the Student Center, two blocks north of the Twin Towers Residence Hall and several Fraternity houses, and across Elm Street from a recreational field.

The 1456 g.s.f. one-story structure is located at an angle to the street grid and in the center of the 60 foot by 130 foot lot. The legal description is "Lot 6 and the west 10 feet of Lot 5, Block 88, of the City of Golden." The site is currently zoned R-3 (multifamily housing) and regulations call for a front setback of 75 feet with side and rear setbacks of 5 feet. Neither the existing residence or its neighbors meet the front setback. The building is located on the high point of the site, with slopes down to the west and north. There is a gravel driveway, a covered concrete front porch, but no sidewalk.

The residence is constructed of concrete block with wood floor and roof framing. The north portion of the building is stucco covered. Two bedrooms and a 2-car garage at the south end of the house are a later addition. The garage has a gravel floor. There is an uninsulated crawlspace.

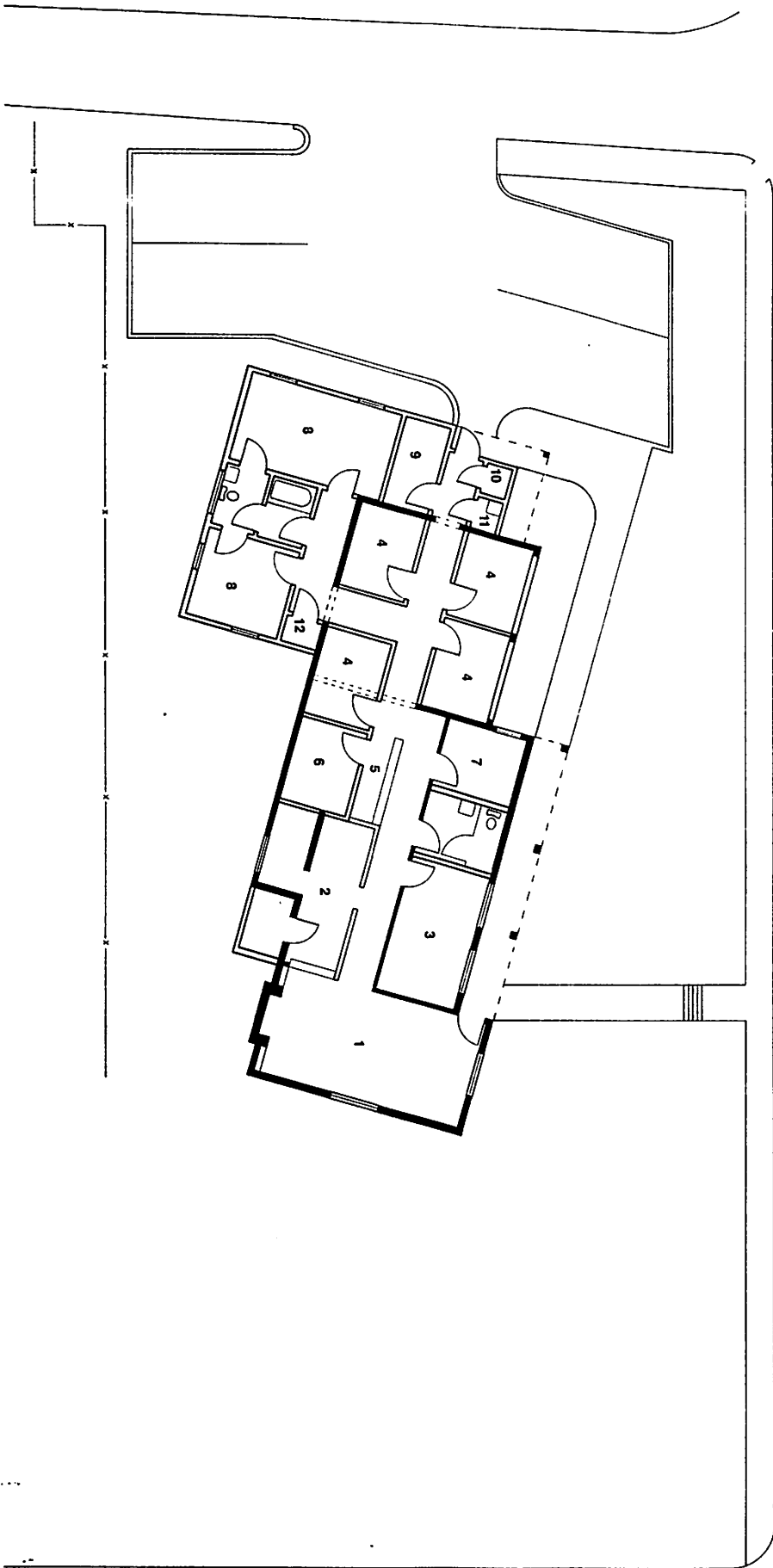
Water is provided by 1-1/2" galvanized steel supply from city services. The existing electric service is 40 amp 120 volt with 240 volt service of unknown amperage. This is inadequate by current standards. Heat is provided by a gas heater in the crawlspace and 2 gas space heaters; one in each bedroom. These are inefficient and do not have adequate combustion air provided.

The building structure is in basically good condition. The floor is constructed of 2 x 8 joists and beams made up from three 2 x 6's. The roof framing is 2 x 6 rafters, 2 x 4

ceiling joists in the original building and 2 x 6 ceiling joists in the addition. The addition uses a truss configuration. The attic of the original section has 2" of loose vermiculite insulation and no vapor barrier. Minor repairs are needed to the exterior. There are some cracks in the stucco, and the building needs repainting. The roof is asphalt shingles and is in good condition. However, roofing cement has been used in place of flashing. This is temporary at best and proper flashings should be installed. There are a mixture of wood and metal windows of single-pane construction. The wood windows are in good condition and require only caulking and weatherstripping. The metal windows are in need of repair or replacement. The screen doors need to be repaired or replaced.

Site drainage is inadequate. Gutters should be replaced on the east and west sides of the building and the site regraded to provide positive drainage. The back porch has been undermined by runoff and will need to be replaced.

The interior is in good condition, however, some finishes need to be renewed. The living room at the north end of the house has a flagstone fireplace and an exposed beam ceiling. There are hardwood floors in the entire house. The partition layout is probably not suited to reuse as a clinic and extensive interior demolition is likely in a renovation project.



ELM STREET

17th STREET

SCHEMATIC DESIGN



- 1 WAITING ROOM
- 2 RECEPTIONIST
- 3 NURSE'S OFFICE
- 4 EXAMINING ROOM
- 5 NURSE'S STATION
- 6 PHARMACY
- 7 LABORATORY
- 8 SLEEPING ROOM
- 9 CLEAN LINEN
- 10 SOILED LINEN
- 11 JANITOR
- 12 MECHANICAL

- EXISTING CONSTRUCTION
- - - - - TO BE DEMOLISHED
- ▬ NEW CONSTRUCTION



STUDENT HEALTH CENTER
COLORADO SCHOOL OF MINES
 1225 17th STREET GOLDEN, CO

OUTLINE SPECIFICATIONS

Renovation of 1225 17th Street for Student Health Center.. .

DIVISION 1 - GENERAL REQUIREMENTS

State of Colorado and School of Mines General Conditions

DIVISION 2 - SITEWORK

Demolition of interior partitions, as noted; removal of mechanical, electrical and plumbing systems, as noted.

Excavation and backfill for addition foundation; regrade site to provide positive drainage; remove existing driveway.

Concrete sidewalks and curbs; asphalt paving for parking area.

DIVISION 3 - CONCRETE

3000 psi concrete for addition foundation and new slab on grade in garage.

DIVISION 4 - MASONRY

Cutting and patching of existing concrete unit masonry walls.

DIVISION 5 - METALS

A36 Steel beams, as noted.

DIVISION 6 - CARPENTRY

Wood studs, joists, and plywood sheathing for addition.
Wood studs for new interior partitions.
Roof trusses for addition.
Exterior wood trim on addition.
Plastic laminate counters.
Wood cabinets.

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

Plastic vapor barrier under slab on grade and in crawlspace.
Additional vermiculite insulation in existing attic; batt insulation in addition attic and crawlspace.
Exterior finish system (synthetic stucco) on existing garage and addition.
Asphalt shingles on addition roof to match existing.
New copper flashing for chimney and roof penetrations on existing building and as needed on addition. Replace existing gutters and install new, as needed, on addition.

DIVISION 8 - DOORS AND WINDOWS

Prehung flush wood doors.
New screen door on front entrance.
Wood windows with insulated glazing in addition.
Replacement of metal windows.
Finish hardware, weatherstripping, thresholds

DIVISION 9 - FINISHES

Gypsum wallboard partitions and ceilings; patching of existing partitions to remain, as needed.

Acoustical tile in examining rooms, office areas.
Acoustical insulation in walls.

VAT in examining rooms, laboratory, pharmacy, storage areas and restrooms.

Carpet in office areas, hallways, sleeping rooms, waiting room.

Repaint existing exterior: primer and two coats on new and patched interior partitions. Prime and paint new exterior wood trim on addition.

DIVISION 10 - SPECIALTIES

Tackboards in exam rooms, waiting room, and offices.
Laminated plastic toilet partitions.
Interior and exterior signage.
Toilet accessories.

DIVISION 11, 12, AND 13 - not used.

DIVISION 15 - MECHANICAL

New domestic water system from existing service, drain to connect to existing sewer. Reuse hot-water heater from existing Health Service building. New and reused plumbing fixtures.

Packaged heat-pump system with gas backup; ducted distribution system.

DIVISION 16 - ELECTRICAL

New service from PSCO; new main panel and wiring distribution, outlets, lighting fixtures. Exterior lighting controlled by timeclock.

Supervised fire alarm system. Supervised intrusion and security alarm system.

Conduit and wire for telephone system; spare conduit for future computer systems.

Preliminary Estimate

Site Work (incl. demolition)	\$ 6,602.00
Concrete	4,969.00
Masonry	196.00
Metals	666.00
Woods and Plastics	16,377.00
Moisture and Thermal Protection	2,599.00
Doors, Windows and Glass	6,960.00
Lath and Plaster	2,607.00
Drywall	7,025.00
Acoustical Work	714.00
Flooring	3,999.00
Painting	2,035.00
Specialties	2,136.00
Mechanical	28,987.00
Electrical	8,478.00
Subtotal	<u>\$ 94,350.00</u>
Contingency 15%	<u>14,150.00</u>
Construction Budget	<u>\$108,500.00</u>

Costs have been estimated based on Means Cost Estimating Guide, 1987 edition.

STUDENT HEALTH CENTER

SCHEDULE

PROJECT PHASE	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
PROGRAM PLAN (Printing Final Draft)	█							
CCHE/SBD REVIEWS*	█	█						
WORKING DRAWINGS (By CSM Plant Facilities Department)		█	█					
REVIEW (By Student Affairs)		█	█					
BIDDING				█				
CONTRACT SIGNING				█				
NOTICE TO PROCEED					*			
CONSTRUCTION								** ***

* An exemption to formal program plan review is required from CCHE staff and SBD.

** Beneficial occupancy

*** Project acceptance

This schedule predicated upon the assumption that the Field House is not funded. If it is, it will be necessary to engage an outside architect and the schedule will be extended by one month.

-22-

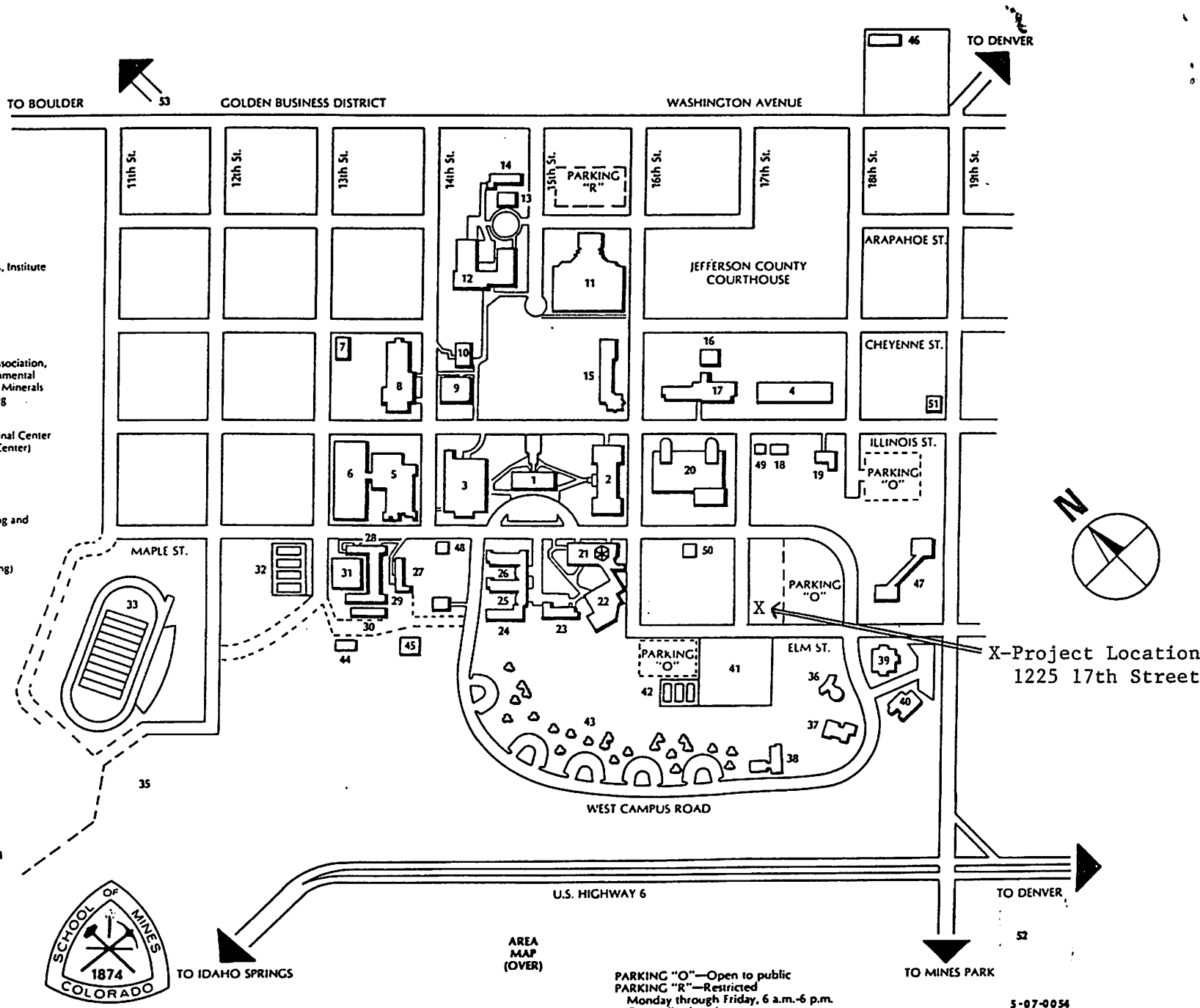
CAMPUS GUIDE

COLORADO SCHOOL OF MINES
 Golden, Colorado 80401
 303-273-3000

Toll-free Numbers
 Inside Colorado 1-800-245-1060
 Outside Colorado 1-800-446-9488

KEY TO FACILITIES

1. Guggenheim Hall (Administration)
2. Berthoud Hall (Geology, Museum, Humanities, Institute for Energy Resource Studies)
3. Arthur Lakes Library
4. U.S.G.S. Offices and Laboratories
5. Russell H. Volk Gymnasium
6. Steinhauser Field House
7. Power Plant
8. Coolbaugh Hall (Chemistry)
9. Chauvenet Hall (Affirmative Action, Alumni Association, Cooperative Education and Placement, Environmental Science, Earth Mechanics Institute, Energy and Minerals Field Institute, Special Programs and Continuing Education, EPICS)
10. Stratton Hall
11. Cecil H. and Ida Green Graduate and Professional Center (Geophysics, Mineral Economics, Computing Center)
12. Nathaniel P. Hill Hall (Metallurgy)
13. Engineering Hall (Mathematics)
14. Publications Center
15. Paul Meyer Hall (Physics)
16. Unit Operations Laboratory
17. Alderson Hall (Petroleum, Chemical Engineering and Petroleum Refining)
18. Alpha Tau Omega
19. President's Home
20. George R. Brown Hall (Mining, Basic Engineering)
21. Ben H. Parker Student Center
22. Dining Hall
23. Randall Hall
24. Bradford Hall
25. Thomas Hall
26. Morgan Hall
27. Plant Facilities
28. Infirmary
29. Military
30. Plant Facilities
31. Warehouse
32. Tennis Courts
33. Brooks Field
34. Honsting Laboratory
35. Rocky Field
36. Sigma Nu
37. Kappa Sigma
38. Beta Theta Pi
39. Sigma Alpha Epsilon
40. Sigma Phi Epsilon
41. Nils A. Swenson Intramural Field
42. Tennis Courts
43. Prospector Village
44. Carpenter Shop
45. EMI Drilling Laboratory
46. CSM Foundation, Inc. (1800 Jackson Street, Golden)
47. Twin Towers Residence Hall
48. Student Development Center
49. Alpha Tau Omega
50. Agape House
51. CSM Credit Union
52. Survey Field
53. CSM Research Institute, 5930 McIntyre



X-Project Location
 1225 17th Street

- 23 -



AREA MAP (OVER)

PARKING "O"—Open to public
 PARKING "R"—Restricted
 Monday through Friday, 6 a.m.-6 p.m.
 Open all other times

5-07-0054

CAMERON ASSOCIATES

College Store Management Consultants - Princeton, New Jersey

FIANACIAL ANALYSIS

Sales	\$300,000	\$750,000	\$2,000,000	\$4,000,000
Inventory (At Cost 25% of Sales)	\$ 75,000	\$187,000	\$ 500,000	\$1,000,000

INSTITUTIONAL OWNERSHIP

Occupancy	\$ 9,600	\$ 26,250	\$ 74,000	\$ 140,000
<u>New Income</u>	<u>\$ 11,400</u>	<u>\$ 27,000</u>	<u>\$ 80,000</u>	<u>\$ 108,000</u>
Net Income +	\$ 21,000	\$ 53,250	\$ 154,000	\$ 248,000
<u>Occupancy</u>	<hr/>			

CONTRACT MANAGEMENT

6% of Sales	\$ 18,000	\$ 45,000	\$ 120,000	\$ 240,000
Invest Inventory <u>Value at 6%</u>	<u>\$ 4,500</u>	<u>\$ 11,250</u>	<u>\$ 30,000</u>	<u>\$ 60,000</u>
<u>TOTAL INCOME</u>	<u>\$ 23,500</u>	<u>\$ 55,250</u>	<u>\$ 150,000</u>	<u>\$ 300,000</u>

Exhibit III: SUMMARY OF STRUCTURAL OPTIONS

STRUCTURE	INSTITUTIONAL	COOPERATIVE	FOR PROFIT SUBSIDIARY	NON PROFIT SUBSIDIARY	FOUNDATION	CONTRACT MANAGEMENT
Ownership	University	Member-patrons	University through stock ownership	University	Non-Stock Corporation	Lease Company
Control	University directly	Member-patrons	University through Board of Directors	University through Board of Directors	Board of Trustees	Lease Company
Source of Capital	University and reinvested surpluses	Member fees, retained earnings, debt financing	Debt financing and retained earnings	Debt financing, retained surpluses and institutional equity	Independent financing and reinvested surpluses	Lease Company
Use of Profits/Surpluses	University's discretion	Return to business and refund to members	Dividend to parent/university	Return to business or gift to university	Return to business	Lease Company
Ties to University	Direct	Member-patrons	Ownership	Ownership	Board of Trustees-some common members	Lease agreement
Taxability	Only UBI	Net taxable income less patronage dividends	Net taxable income	Only UBI	Only UBI	University's rental income may be UBTI
Major Advantage(s)	<p>Tight control by University</p> <p>Fewer reporting requirements than other structures</p>	<p>Does not tie up university capital</p> <p>Potential elimination of cash drain</p> <p>High service levels</p> <p>Patronage dividends to campus community</p> <p>Reduced unfair competition complaints</p> <p>Greater flexibility in management</p> <p>Separate accounting systems</p> <p>Separate compensation programs</p>	<p>Does not tie up university capital</p> <p>Reduces unfair competition complaints</p> <p>Greater management flexibility in terms of:</p> <ul style="list-style-type: none"> - Compensation - Investment Decisions - Marketing - Financing <p>Separate Accounting Systems</p> <p>Potential Elimination of Cash Drain</p>	<p>Potential elimination of drain on university's resources</p> <p>Reduced risk of loss of tax-exempt status by separating potential UBTI activity</p> <p>Greater management flexibility (see non-profit)</p> <p>Separate accounting systems</p> <p>Does not tie up capital at less than competitive returns</p>	<p>Avoiding restrictive state regulations</p> <p>Does not tie up university capital</p> <p>Greater management flexibility (see non-profit)</p> <p>Separate accounting system</p> <p>Potential elimination of cash drain</p>	<p>Elimination of possible cash drain</p> <p>Does not tie up university capital</p> <p>Does not threaten tax status</p> <p>Provides predictable income stream</p>
Major Disadvantage(s)	<p>Town/gown conflicts</p> <p>Possible inappropriate management accounting systems</p> <p>Constraints on compensation</p> <p>Possible UBI</p> <p>Possible drain on institutional resources in terms of management time and money</p> <p>Ties up university capital</p>	<p>No income to institution</p> <p>No direct university control</p> <p>Corporate reporting requirements</p> <p>No participation by institution in cash flow</p>	<p>Less University control of operations</p> <p>Full taxable</p> <p>Separate reporting requirements</p>	<p>Town/gown complaints</p> <p>Less day-to-day operational control by university</p> <p>Must closely monitor UBTI</p> <p>Separate reporting requirements</p>	<p>Separate reporting requirements</p> <p>No university participation in cash flow</p> <p>No state funding</p> <p>Possible town/gown complaints</p>	<p>Less day-to-day control over operations</p> <p>No participation in surpluses/profit</p> <p>Potential UBTI if rental income not structured appropriately</p> <p>Split management reporting relationship (contract manager vs. institution)</p> <p>No participation in cash flow</p>

Colorado School of Mines
Golden, Colorado 80401
303/273-3355

Associated Students

Nov. 3, 1986

Dr. Harold Cheuvront
Dean of Students
Colorado School of Mines

Dear Dr. Cheuvront:

Executive Council would like to formally recommend that a campus bookstore be installed in the vacant area formerly occupied by the bowling alleys. Our decision is based on organizational recommendations (copies attached), student surveys and direct student input. Nine of the twelve formal recommendations received by Executive Council were in favor of a campus bookstore and we feel an overwhelming majority of the students support this idea.

Executive Council strongly feels that of the ideas presented to Student Council, the bookstore will be the most beneficial to the students and the campus as a whole. If we can be of any assistance in pursuing this idea, please do not hesitate to contact us.

Sincerely,

Executive Council

Theresa Brandt

Theresa Brandt
President

Kim Cullifer

Kim Cullifer
Vice President

Pattie Sutton

Pattie Sutton
Treasurer

Mike C. Wood

Mike Wood
Secretary

Fred Earnest

Fred Earnest
BOT



JUNIOR CLASS REPRESENTATIVE
ERIC W. VESTAL

Eric W. Vestal

Sincerely,

to representing the Junior Class, before the
now vacant area in the GEM Student Center be
into an all campus bookstore. The purpose of the
bookstore being to serve the students and faculty of
the Colorado School of Mines with respect to all school
supplies, such as paper, pencils, sketches, drafting
supplies, lab supplies, books, etc., that they need in
order that their semesterly expenditures are lowered
with respect to the high costs of office supplies and
other such book stores.

October 10th, 1985

The Junior Class of GEM

persons that the aforementioned topic was covered
throughout the semester and in my other letters of

The Student Center now vacant area.

DATE:
FROM:
TO:
CONCERNING:

We, the officers of the Sophomore Class, would like to make the following proposal for the renovation of the Student Center. We suggest that a bookstore be built in the area of the Student Center which previously contained bowling alleys. We further recommend that this bookstore, run by Associated Students, would sell textbooks and other supplies needed by students in addition to CSM paraphernalia, newspapers, and magazines. We feel that this is a sound proposal because it would provide students with 1) an alternative to the high prices they now pay, 2) extra convenience, 3) extra income for ASCSM, and 4) additional job opportunities for students. We realize that this suggestion has been brought up before and discarded, but the input we have received from our classmates merits reconsideration. Hopefully the benefits would outweigh the drawbacks.



Joe Griffin

President




Betsy Ryan

Vice-President



Jordan Fox

Treasurer



Kathleen Sullivan

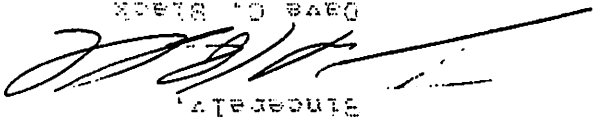
Secretary



Karen Smaldone

Social Chairman

Kappa Sigma Chapter
Dave O. Black



Sincerely,

The members of the Gamma Sigma Chapter of the
Sigma Gamma fraternity, propose that the new student
center be converted into an all campus
bookstore. The purpose of the said bookstore being to
serve the students and faculty of the Colorado School
of Mines with respect to all school supplies, such as
paper, pencils, sketches, drafting supplies, etc.
supplies, books, etc.; that they need in order that
their semesterly expenditures are lowered with respect
to the high costs of office Blueprints and other such
book stores.

October 10th, 1969

The Kappa Sigma Fraternity

Student Council members and/or any other person or
persons that the aforementioned would like to contact.

The Students Center for Student Affairs

DATE:
FROM:
TO:

CONCERNING:



Colorado School of Mines
Golden, Colorado 80401
303/273-3350

Single Student Housing Association

BOOKSTORE PROPOSAL

October 14, 1980

The Single Student Housing Association would like to propose that a bookstore be put into the area where the bowling alley used to be in the student center. A vote was taken and this was the most favored idea.
A second alternative is having both a bookstore and auditorium/theatre by removing some of the pool tables in the game room and putting a bookstore there and use the bowling alley area as an auditorium.

Kimberly Ring
Bill Gearing Treas.

Dave Leopold
Cathy Wightman Sec.
Vice-President



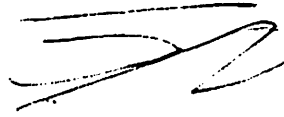
The Fraternity of Phi Gamma Delta
Gamma Kappa Chapter
Colorado School of Mines
Oct 16, 1986

The Student Council
Colorado School of Mines

Dear Council;

The brothers of Phi Gamma Delta would like to propose that the Student Council consider the suggestion of building a school bookstore in place of the "Glamorous" bowling alley.

Please consider our suggestion,

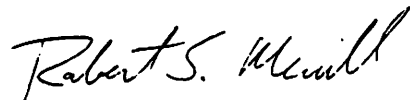


Vivek Chandra
Student Council Rep.

13
16 October 1986

Twin Towers Proposal

At a recent Twin Towers residence hall meeting I asked the students what they felt should be done with the area that used to contain the bowling alleys. In a show of hands, the overwhelming majority of the students voted for the idea of having an on-campus bookstore. So, as the Student Council Representative, I am proposing that the students in Twin Towers support the bid of having a bookstore.



Robert S. Merrill

We the members of Sigma Alpha Epsilon fraternity Colorado Lambda chapter support the idea of using the space in the student center to build a CSM bookstore. Some of our reasons for this decision are as follows:

CONVENIENCE - A bookstore on campus would be much more accessible and easier to get to especially when people are in a hurry.

COST - Even if prices of books remain relatively unchanged we believe it would be better if profits made from the text books and school supplies would remain with the school.

CAMPUS - Having a bookstore at school would help create more of a "campus" type atmosphere, which is one present complaints about the school.

And finally, we would like to add that we do not feel having a campus bookstore would remove mines from the Golden community, after all Golden has more to offer to Mines' students than text books and supplies.

8 October 1986

To: Student Council

From: Frank Mazdab, SSHA (Randall Hall) rep. to Student Council

Re: Randall Hall's position on the use of the old bowling alley space

Even though the floor meetings in Randall Hall to discuss this have shown apathy more than any particular preference, most of the few people who voiced their opinions were in favor of the bookstore. These students are supporting this idea because they expect a campus bookstore to have lower prices for books and supplies than Jeffco. Prices would at least have to be comparable for students to accept the idea. A smaller number of hall residents, all involved in MLT, were interested in the theater/auditorium, and most students I spoke with said they would support this suggestion if the bookstore idea fell through. One point of agreement with everyone in Randall Hall is that this school has enough meeting rooms, and such a use would be a waste of good space.

Thus, the "majority" consensus around Randall Hall is that the bookstore should be in, and the extra meeting rooms should not even be considered. This is Randall Hall's formal proposal. If the bookstore turns out to be the project decided upon, several Randall Hall residents have given me some good suggestions as to how the bookstore and student departmental organizations can sell books harmoniously, and I will mention these at a future student council meeting.

Sincerely,
Frank Mazdab

THE BRADFORD OPINION

Of the 51 people I talked with who reside in Bradford Hall, this is the breakdown of their opinions:

9.80% wished to see the bowling alleys put back in
11.76% wanted a combination Bookstore/Auditorium
29.41% wanted only a bookstore
17.65% wanted only an auditorium
5.88% thought a Duds-n-Suds would be a good idea
3.92% were for a Bookstore/Coop (albums, clothes, novelties, etc.)
3.92% wanted a miniature golf course
15.69% didn't care or had no opinion
and...
I got one vote for a pornographic movie theatre.

Julia Hoagland
Bradford Hall Studco Rep.

Mike Horkoff
Mines Activity Council
President



WHICH THIS AREA IS TO BE DESIGNATED.

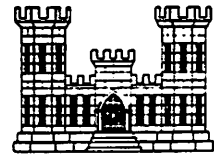
together, no suggestion is made here as to the exact way in
Although there are many ways a auditorium can be put
on performers, due to scheduling conflicts.
rare to actually schedule things regularly, such as movies,
the Green Center has a auditorium that can be used, it is
as a place where Mines Little Theater can perform. Although
system, and as a auditorium for lectures such as AMAX, and
theatre on movie nights, with a projection booth, and a sound
the bowling alley used to be, the area can be used as a movie
a multi-purpose auditorium be put in the student center where
thought on this topic, recommends to the Student Council that
Therefore, The Mines Activity Council, after careful
is not always receptive to all of them.
for most types of performers, the atmosphere in that location
put on a show. Although the i-cino has worked out fairly well
usually are performers that come in on Friday afternoons, and
the events that MAC sponsors, are the fact, these events
cafeteria, this one activity has been canceled. Another of
to the lack of anything resembling atmosphere in the
occurred, is the 01-monthly movie in the cafeteria, mainly due
damage. The one event that occurs, on in the past has
Student Center, and those that occur elsewhere on the C.S.M.
that, and manage events that occur both in the Ben H. Parker
The main goal of the Mines Activity Council is to plan
Proposal for the use of the old bowling alley

Colorado School of Mines
Golden, Colorado 80401
303/273-3997





HEADQUARTERS
CORPS OF CADETS
Colorado School of Mines
Golden, Colorado 80401



14 October 1986

SUBJECT: What to do with the old bowling alley

Dear CSM Student Council,

The Corps of Cadets of CSM have discussed the two main options for redesigning the bowling alley. We have determined that while a bookstore would be nice, it would not really give us any savings on our books. Also we feel that this would offend the Golden business community who have supported CSM so willingly.

We think that a small theatre-type auditorium would be the best use of the space. Mines ROTC sees a real need for a smaller auditorium in which among other things awards ceremonies could be held. Thank you for your consideration of this matter.

Sincerely,

Juliana L. Thaler
Oredigger Battalion Commander

October 2, 1986

Organization _____

STUDENT CENTER AUDITORIUM/THEATRE

PROPOSAL:

We propose the area in the Game Room of the Student Center that was previously the bowling alley, be adapted into a multi-use auditorium. This use maximizes the benefits of the space to the student population and offers an alternative area for various student group activities.

APPLICATIONS:

1. **Movie Theatre**
"Dollar Movies" on Friday or Saturday nights satisfy recreational need of the entire CSM community and creates money making potential for Student Council and Mines Activity Council.
2. **Student Forums & Large Group Meetings**
The auditorium will provide a meeting location for groups with large memberships which cannot be accommodated by current facilities. International Student Union, SSHA, Student forums, and others need a location such as this for meetings and other events.
3. **AMAX Lectures**
The auditorium will facilitate AMAX and similar lectures having a more intimate, non-classroom atmosphere complete with audiovisual equipment such as projection equipment, speakers, lighting, and stage.
4. **Mines Singers**
The CSM Choir has long needed an auditorium that provides optimum acoustics and seating scaled to their size.
5. **Mines Little Theatre**
MLT has made do with poor production locations. Since the I-Club's redesign and imminent loss of accessible power in Coolbaugh Hall, MLT faces having no location to present future shows.
6. **FAC's**
It will provide a larger and different location better suited for some FAC's
7. **Other...**
EPICS and Humanities class activities
Awards ceremonies (ie. CSM and ROTC)
Cultural events

CONCLUSION:

This proposed multi-purpose auditorium represents a valuable resource to the individuals and groups of CSM. The size accommodates events too large for existing Student Center rooms and too small for other campus facilities. Activities relevant to the "less academic" side of student life will be brought out of the classrooms and into the hub of extra-curricular activities, our Student Center.

Signatures

Cathy Wightman
MLT Council
Mines Chorus
Meredith A. Bond

RECORD OF PROCEEDINGS

Golden, Colorado
July 10, 1987

The Board of Trustees met in regular session on July 10, 1987, at 9:00 a.m.

Trustees present: Ms. Allen, Messrs. Earnest, Henderson, Pascoe, Schwartzberg, Warren, Wilson and Wood.

Also attending the meeting were President Ansell, Vice Presidents Golden, Nyikos, and Scott, Mr. Robbins, Executive Director of the CSM Foundation, Dean Chevront, Mr. Brian Warren, student Trustee-elect, other staff members, and visitors.

Mr. Wood presided.

Previous Minutes. The minutes of the meeting of June 13, 1987, were approved as distributed.

CCHE Recognition of Excellence Proposals. CCHE did not receive money from the legislature to fund their Promotion of Excellence and Recognition of Excellence Awards. They are accepting proposals for the Recognition of Excellence Category. Those selected will be given recognition only since funding is not available.

The School of Mines proposals to be submitted for Recognition of Excellence (in priority order) are:

1. The Department of Metallurgical Engineering.
2. SUMMET - Summer Minority Engineering Training Program.

The Board unanimously approved the motion to submit both proposals for Recognition of Excellence.

Alcohol Use Policy Proposal-Football Games. Dr. Chevront reminded the Board that a CSM Campus-Wide Alcohol Use Policy was formulated and accepted in 1984. The section of that policy on Alcohol Use at Football Games was reviewed by a committee, and it recommended that the section on Alcohol Use at Football Games be revised. A copy of the Campus-Wide Alcohol Use Policy and the proposed revisions are appended hereto.

The Board unanimously approved the proposed revisions to the section on Alcohol Use at Football Games.

New Faculty Appointments. Dr. Gentry presented the report as follows:

New Appointments.

Dr. Louis Fishman	\$50,000 for the
Professor of Mathematics	1987-88 academic
	year

RECORD OF PROCEEDINGS

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Dr. Chidambar Ganesh Assistant Professor of Engineering	\$36,250 for the 1987-88 academic year
Dr. Rodney A. Schmidt Associate Professor of Mathematics	\$47,500 for the 1987-88 academic year

Reappointment after Interruption.

Dr. Paul L. Anderson Part-time Instructor in Mathematics	\$10,300 for the 1987-88 academic year
Ms. Nancy S. Angle Adjunct Assistant Professor of Mathematics	\$11,400 for the 1987-88 academic year
Dr. Barbara B. Bath Adjunct Assistant Professor of Mathematics	\$24,720 for the 1987-88 academic year

Additional Information.

Mr. Bruce Van Haveren Visiting Assistant Professor of Environmental Science & Engineering Ecology	Salary paid by U.S. Dept. of the Interior August 31, 1987 to December 31, 1987
------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------

Dr. Gentry had distributed quantitative evaluation reports to the Board members prior to the Board meeting.

Graduate School Admissions. Dr. Romberger had distributed the standard graduate student admissions report for Fall semester 1987 prior to the Board meeting. The application rate continues to be less than the previous year because of declines in the exploration sciences (geophysics and geology), although mineral economics and petroleum engineering also show significant decreases. The only program that shows significant growth is physics; all others have remained essentially constant. Applied Mechanics (EG) is a new program and promises to add significantly to the graduate student body. Inconsistent with the slow rate of applications is the rate of return of code sheets, which is the same as the previous year. The return of code sheets historically has been the best predictor of graduate student yield, so that if this is a real number, we should see the same number of new graduate students as last fall. Each department is continually being made aware of the softness in graduate applications so that they know recruiting must be carried out in a more active mode than in the past.

Admissions. The Admissions Report dated July 1, 1987, was distributed to the Board.

New Research Awards. Dr. Olson had distributed the report, which reflects the award volume through June 30, 1987, prior to the Board meeting. The report indicates that this month's volume was \$1,068,441 compared to \$775,025 for the same

RECORD OF PROCEEDINGS

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time period the previous year. This results in a cumulative total for FY 1987 of \$10,061,259, or \$2,947,182 ahead of the total for the same period the previous year of \$7,114,077. Twenty-six different faculty were involved in twenty-five new project awards.

Dr. Olson's report indicates that an additional eleven proposals had been submitted in the month of May 1987 which were not reported on the June 1987 report, which results in twenty-six proposals submitted for the month of May 1987. Seventeen proposals were submitted in the month of June 1987 compared to twenty-six during the month of May 1987. A total to date of 376 proposals for FY 1987 has been submitted.

Monthly Reports. Mr. Scott had distributed the following monthly reports prior to the Board meeting: Current Funds Revenues, Expenditures and Other Changes for the Eleven months Ending June 30, 1987 (preliminary); CSM State Appropriated Funds Comparison of FY 1987 to FY 1986 for Twelve Months Ending June 30, 1987 (preliminary); Colorado School of Mines Auxiliary and Self-Funded Activities for the Twelve Months Ending June 30, 1987 (preliminary); and Time Deposits and Investment Report, June 30 1987 (preliminary).

It is Mr. Scott's belief that the School is operating within the funds projected for the 1987 fiscal year.

Legislative Report. Dr. Nyikos reported on the status of the budget, informing the Board that there is no appropriation for the fieldhouse; that there is a three percent increase in the general fund for the institution; that \$395,300 has been appropriated for completion of renovation of Berthoud Hall; that \$2.1 million has been appropriated for Engineering Hall project; and that \$403,000 has been appropriated for controlled maintenance.

Dr. Nyikos reported that the bill which requires all male students to prove registration for the draft when they apply to a state-supported university in Colorado was passed. He reported on the bill which reorganizes the Colorado Advanced Technology Institute. Dr. Nyikos also reported on the bill which changes the terms of office of CSM Trustees from six to four years.

Dr. Nyikos reported that the CCHE master planning process continues.

Dr. Nyikos stated that on July 22, several of the Trustees will meet with Bonnie Geiger and Jerry Johnson of Colorado Legislative Services.

Safety Presentation. Dr. Golden introduced Dr. Victor Yesavage, a member of the Safety Committee, who led the effort in conducting safety inspections. Dr. Golden stated that the Trustees have requested that the administration report on the status of safety issues on the Mines campus. The last safety presentation to the Trustees was in February 1983.

July 10, 1987

RECORD OF PROCEEDINGS

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Dr. Golden stated that CSM has made significant progress on the campus safety issue in the past several years, particularly with the renovation of Stratton Hall, the impending renovation of both Berthoud Hall and Engineering Hall, and the building of Brown Hall. However, our older buildings have significant safety problems which can be corrected only with building renovation--Alderson Hall, Hill Hall, Coolbaugh Hall and Chauvenet Hall. Departmental safety inspections were conducted during the spring of this year by the Safety Committee. Departmental cooperation has been superb in correcting safety deficiencies. However, a number of safety problems were identified which are beyond departmental resources to correct and, accordingly, will require institutional support. One serious safety issue which must be addressed in the coming months is the problem of the disposal of hazardous waste. The solution to this problem will be expensive and the hazardous issue places the institution in jeopardy of significant fines for violation of federal regulations. Asbestos used in the construction of our older buildings remains a significant safety issue and will raise the cost of renovating these facilities.

Dr. Golden reviewed the CSM Safety Policy, copy of which is attached. He informed the Board that it was the recommendation of the Safety Committee to hire a Manager of Environmental Safety. He reported on the results of the departmental safety inspections and discussed problems with disposal and federal regulations with regard to hazardous waste.

Mr. Richard Sudermann, Director of Plant Facilities, discussed CSM campus building safety issues and reviewed Plant Facilities interaction with the academic function to support safety concerns. He reviewed the new position of Manager, Environmental Safety, stating that that person will be responsible for safety policy and procedures, hazardous materials and hazardous waste management, and asbestos: conditions, removal and abatement.

Mr. Sudermann introduced Mr. David Leavenworth, Construction and Engineering Manager, who discussed physical facilities and safety, i.e. Master Plan progress and input, CSM building safety conditions by group and related issues, identified safety-related projects completed and future requests by building groups, and reviewed projects by item and cost. He also reviewed capital construction and deferred maintenance as related to safety concerns, and touched on the special concerns of the status of Engineering Hall and Jacobs Engineering Group's environmental assessment of CSMRI.

Mr. Pascoe entered the meeting at this time.

Mr. Henderson expressed his appreciation for the effort that has been expended with regard to safety and for the School's outstanding safety record. He requested that the Board receive a monthly safety report and an annual safety review.

Mr. Wood thanked the group for its report.

July 10, 1987

RECORD OF PROCEEDINGS

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Graduation Fees for Graduate Students. Dr. Golden, in Dr. Romberger's absence, informed the Board that current graduation fees for master's, doctoral, and professional degree students are not sufficient to cover actual costs incurred at the time of graduation. The actual average cost per student is \$270.00 for master's, \$305.00 for doctoral, and \$150.00 for professional degree students. Dr. Golden proposed an increase in the present graduation fee of \$112.00 for all graduate students to \$135.00 for master's, \$153.00 for doctoral, and \$75.00 for professional degree students. He also requested financial assistance from the School to subsidize the remaining balance. Dr. Golden believes that, ultimately, the student ought to bear the full cost. Dr. Golden informed the Board that he would like to put the new rates into effect in August for the December 1987 graduation.

The Board unanimously approved the request for an increase in the graduation fees for graduate students and professional degree students and the request that the School subsidize the balance not covered by the fees.

Proposed 1987-88 Budget. Mr. Scott informed the Board that the proposed 1987-88 budget differs from the draft provided the Board in the June meeting in these areas. Faculty compensation is proposed at five percent versus 3.5 percent. The number of faculty supported in the Education and General budget has been increased, and the number supported from CSMF funds has been decreased. Undergraduate financial aid support from the Education and General budget has been increased, and that provided by CSMF has been decreased. Other non-salary expenditures within Education and General have been reduced. The total Education and General budget remains the same.

Pending completion of full departmental budgets for CSMF funds, the School is using the following rules:

Expenditures for CSMF endowed restricted are the estimate of that available under the six percent spending rule.

The CSMF unendowed restricted is the amount of gifts received in this category during 1986-87. Additional balances are available and will be reflected when the departments have planned their use.

CSMF unendowed unrestricted (the appropriation from CSMF) includes this year's appropriation and roll forward from previous years and has been relieved of planned expenditures so that \$472,000 is currently unallocated.

Tuition rates are \$3,028 for resident students and \$8,396 for nonresidents, as approved in June.

The 1988-89 projection is provided to demonstrate the probable use of funds. It assumes a General Fund increase of 3.5 percent distributed through the funding formula, tuition rate increases of 3.5 percent and increases in CSMF endowed restricted and unendowed restricted funds. The appropriation of CSMF unendowed unrestricted funds is

RECORD OF PROCEEDINGS

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expected to decrease although unspent balances from 1987-88 are expected to temper the effect of this reduction.

Mr. Schwartzberg entered the meeting at this time.

Discussion ensued, following which the Board unanimously approved the proposed 1987-88 budget, copy of which is appended hereto.

Recommended Parameters for the 1988-89 Education and General Budget. Mr. Scott reviewed and recommended approval.

The Board unanimously approved the recommended parameters for the 1988-89 Education and General Budget, copy of which is appended hereto.

Bookstore Proposal. Dr. Chevront had distributed a generic bookstore contract proposal to the Board members prior to the meeting. The proposal was formulated with the assistance of several bookstore companies as well as with information provided by institutionally owned stores. The concerns and questions expressed at the June Trustees' meeting are addressed. He reviewed the pertinent points of the contract and responded to questions.

The Board unanimously authorized the administration to request bid proposals.

1988 Trustees' Conference. Dr. Nyikos stated that he believes that the points which need to be discussed are topics for next year and the appointment of a small planning committee.

Discussion ensued, during which Mr. Wood suggested that the theme of the conference might be educational experience from a student's perspective, from registration as a freshman to graduation.

The Trustees expressed a strong interest in being involved in the planning process.

The meeting was adjourned at 11:40 a.m., and the Board went into executive session.


Secretary

July 10, 1987

RECORD OF PROCEEDINGS

Golden, Colorado
September 11, 1987

The Board of Trustees met in regular session on September 11, 1987, at 9:00 a.m.

Trustees present: Ms. Allen, Messrs. Henderson, Pascoe, Warren, Wilson and Wood.

Absent: Messrs. Miller and Schwartzberg.

Also attending the meeting were President Ansell, Vice Presidents Golden, Nyikos, and Scott, Mr. Robbins, Executive Director of the CSM Foundation, Dean Chevront, other staff members, and visitors.

Mr. Wood presided.

Oath of Office. Oaths of office were administered to Trustee Henderson and student Trustee Warren and were properly executed by them.

Previous Minutes. The minutes of the meeting of July 10, 1987, were approved as distributed.

Policy on Proprietary Research at CSM. The following general statement on proprietary research is recommended for inclusion in the CSM Bulletin:

Colorado School of Mines will engage in both proprietary and classified research. Explicit permission to do research in these areas requires the approval of both the Dean of Research and Dean of Graduate Studies. Due consideration will be given to the ability of a graduate student involved in such research to publish a thesis or dissertation in a timely manner.

The statements previously approved by Graduate Council and Graduate Faculty will be used as guidelines in establishing procedures for approving such research.

The Board unanimously approved the Policy on Proprietary Research at CSM.

Mr. Pascoe commented that he feels the subject of proprietary research should be visited periodically. He believes that institutions of higher education, both public and private, have a responsibility to make their product available to the public.

Endorsement of Proclamation. President Ansell recommended approval of the proclamation submitted by the Colorado Commission on Higher Education which designates September 1987 as "Lifelong Learning Month."

RECORD OF PROCEEDINGS

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The Board unanimously approved the Proclamation.

Authorization to Transfer Stock Received as Gift.
Mr. Charles Syvret has offered to transfer certain shares of stock to the School in order to initiate the Syvret Endowment Fund. He would like to do this by a transfer of stock within the brokerage house of Charles Schwab. In order to facilitate this, the School needs to establish an account and approve an Authorization to Transfer.

The Board unanimously approved the resolution to establish a corporate account and Authorization to Transfer, copy of which is appended hereto.

New Faculty Appointments. Dr. Golden presented the report as follows:

New Appointments.

Dr. Gerald L. DePoorter Associate Professor of Metallurgical Engineering	\$42,000 for the 1987-88 academic year
Dr. Stephen Liu Assistant Professor of Metallurgical Engineering	\$35,000 for the 1987-88 academic year
Dr. Terutomo Ozawa John M. Olin Distinguished Visiting Professor of Mineral Economics	\$20,000 for the fall semester of the 1987-88 academic year
Dr. Peter J. McCabe Adjunct Professor of Geological Engineering	\$2,000 for the fall semester of the 1987-88 academic year
Ms. Diana L. Moss Instructor in Mineral Economics	\$16,818 for the 1987-88 academic year
Dr. Eileen P. Poeter Assistant Professor of Geological Engineering	\$40,000 for the 1987-88 academic year
Mr. Henry J. Sandri, Jr. Part-time Instructor in Mineral Economics	\$3,600 for the period August 1, 1987 - September 26, 1987

Continuation of New Appointments

Dr. Bahman Shahid-Saless Instructor in Physics	\$22,000 for the 1987-88 academic year
Mr. Stephen G. Weaver Part-time Instructor in Geological Engineering	\$5,000 for the fall semester of the 1987-88 academic year

September 11, 1987

RECORD OF PROCEEDINGS

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Reappointment after Interruption.

Dr. Frederick B. Bart Adjunct Assistant Professor of Humanities & Social Sciences	\$2,500 for the fall semester of the 1987-88 academic year
Dr. Satyendra Deb Adjunct Professor of Physics	No compensation for the 1987-88 academic year
Dr. James Ely Adjunct Professor of Chemical Engineering and Petroleum Refining	\$7,400 for the 1987-88 academic year

Continuation of Reappointments

Ms. Joanne Greenberg Adjunct Assistant Professor of Humanities and Social Sciences	\$2,500 for the fall semester of the 1987-88 academic year
Dr. Duane A. Haugen Adjunct Professor of Mathematics	\$18,000 for the 1987-88 academic year
Dr. Barry Hughes Adjunct Professor of Humanities and Social Sciences	\$3,500 for the fall semester of the 1987-88 academic year
Dr. Lawrence Kazmerski Adjunct Professor of Physics	No compensation for the fall semester of the 1987-88 academic year
Mr. Patrick A. Madison Part-time Instructor in Mathematics	\$4,200 for the 1987-88 academic year
Dr. Thomas J. McInerney Adjunct Associate Professor of Humanities and Social Sciences	\$5,000 for the fall semester of the 1987-88 academic year
Mr. Harold W. Olsen Adjunct Research Professor of Engineering	No compensation for the 1987-88 academic year
Dr. Judith D. Schlesinger Adjunct Associate Professor of Mathematics	\$6,000 for the fall semester of the 1987-88 academic year
Ms. Cheryl Siefert Adjunct Assistant Professor of Mineral Economics	\$4,400 for the 1987-88 academic year

RECORD OF PROCEEDINGS

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Dr. Gentry had distributed quantitative evaluation reports to the Board members prior to the Board meeting.

Mr. Henderson expressed his appreciation for this report.

Graduate School Admissions. Dr. Romberger had distributed the standard graduate student admissions report for Fall semester 1987, through August 31, 1987, prior to the Board meeting. The downward trend in applications and admissions that was reported in early months continues, and it is expected that the number of new graduate students entering in the fall will be significantly less than the previous year. Code sheets returned have been the most reliable indicator of potential new students, and the total is 47 less this year than last. Departments showing decreases are Chemical Engineering, Geology, Geophysics, Metallurgy, Mineral Economics (greater than 50 percent decrease) and Petroleum Engineering. Departments showing increases are Chemistry/Geochemistry, Engineering, Environmental Sciences, Mining, Physics, and Materials Science. The decreases in most departments can be attributed primarily to lack of strength in the energy industry.

Enrollment. Dr. Chevront reviewed the fall 1987-88 enrollment statistics.

Mr. Young distributed a packet containing an up-to-date viewbook, a brochure on CSM, and an International Student Orientation Handbook. He responded to questions.

Mr. Henderson inquired about progress on plans for expanded minority student recruiting. His continued interest in this subject stems from the discussions at the Trustees' Annual Conference. Dr. Nyikos responded that he has convened a working group on campus to develop proposals concerning this effort. He will report back to the Board in the near future.

New Research Awards. Dr. Olson had distributed the report, which reflects the award volume through August 31, 1987, prior to the Board meeting. The report indicates that this month's volume is \$607,993 compared to \$678,718 for the same time period the previous year. This results in a cumulative total for FY 1988 of \$1,407,818, which is \$91,509 less than the total for the same period the previous year of \$1,499,327. Twenty-one different faculty were involved in twenty new project awards.

Dr. Olson's report indicates that nineteen proposals were submitted in the month of August 1987 compared to eighteen during the month of July 1987. A total to date of 37 proposals for FY 1988 have been submitted.

Monthly Reports. Mr. Scott had distributed the following monthly reports prior to the Board meeting: Current Funds Revenues, Expenditures and Other Changes for the Year Ending June 30, 1987; Current Funds Revenues, Expenditures and Other Changes for the Two Months Ending August 31, 1987; Colorado School of Mines Auxiliary and Self-Funded Activities

RECORD OF PROCEEDINGS

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for the Two Months Ending August 31, 1987; and Time Deposits and Investment Report, August 31 1987.

Mr. Scott reviewed the Education and General Budget Status for 1987-88 and Final 1987-88 Fall Enrollment information as of September 10, 1987. There has been a shortfall in graduate student enrollment which will require budget adjustments. A revised budget will be submitted to the Board for its approval.

Administrative Salaries. President Ansell reviewed the Administrative Salary Schedule for 1987-88, copy of which is appended hereto.

Schedule of Visiting Committees. The External Advisory Committees' Meeting dates are as follows:

McBride Honors Program - November 11, 1987

Mineral Economics - November 11 and 12, 1987

Physics - February 25 and 26, 1988

Safety Report. Dr. Golden presented the safety report. He reported two incidents which occurred on August 4, one in which an employee inhaled hexane fumes, was taken to the hospital and released the same day, and another in which an employee lost one hour due to spilling solvent on his foot. On September 4, there was an accidental spill of a chemical in a chemistry lab in which a reagent bottle was dropped and broken, resulting in cuts on the hands of a student and the evacuation of the immediate area while the spill was cleaned up and fumes removed. The chemical involved was tetrahydrofuran which has an anesthetic effect but no long-term health effects.

Development Report. Mr. Robbins reviewed the Year-End Contributions Report, dated July 31, 1987.

Sabbatical Report. Dr. Frank A. Hadsell, Professor of Geophysics, who was on academic leave at one-half pay during academic year 1986-87, presented his report. Fifty percent of the funding for his leave came from Geophysical Services, Inc. of Texas Instruments, Inc., where he studied artificial intelligence, which includes knowledge engineering, robotics, pattern recognition, and cognitive science. His goal was to become familiar with the knowledge engineering industry and become a competent knowledge engineer.

Mr. Wood thanked Dr. Hadsell for his report.

Selection of CSM Foundation Board Members. The CSM Foundation bylaws call for the selection of three members of the CSM Board of Trustees to serve on the Foundation Board of Directors, one of whom must be an alumnus of the School. Newly-elected members will serve two-year terms ending at the last Foundation meeting in fiscal year 1989. Trustees currently serving on the Foundation Board whose terms are ending are Don Henderson, Monte Pascoe and Fred Schwartzberg.

RECORD OF PROCEEDINGS

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Upon motion made by Mrs. Allen and seconded by Mr. Henderson, the Board unanimously elected Don Henderson, Monte Pascoe and Jim Wilson to serve on the Foundation Board of Directors.

Mr. Henderson commented on the apparent success of the joint meeting between the CCHE and CSM.

Office of Teaching Effectiveness. Mr. Henderson stated that he would like this matter revisited. Do we need it and, if so, how much money will be needed. President Ansell responded that some other things need to be looked at before this effort could be launched. Mr. Henderson feels that we need to know if we are improving in our instruction and, if so, how. President Ansell stated that he will work with the staff to evaluate the quality of teaching to determine whether or not this office is needed.

The meeting was adjourned at 10:25 a.m., and the Board went into executive session.


Secretary

September 11, 1987

CERTIFICATE OF CORPORATE AUTHORIZATION TO TRANSFER (GENERAL)

I, James C. Wilson, being duly constituted Secretary of ~~Colorado~~
School of Mines, a corporation organized and existing under and by virtue of the
Laws of the State of Colorado (hereinafter called this Corporation) do hereby cer-
tify that the following is a true and complete copy of resolutions duly adopted at a meeting of the
Board of Directors of this Corporation, duly called and held on September 11, 1987,
at which a quorum was present and voting; that said resolutions are still in force and effect and have
not been rescinded; and that said resolutions are not in conflict with the Charter or By-Laws of this
Corporation:

RESOLVED: That any of the following officers, to wit: W. G. Scott, George S. Ansell

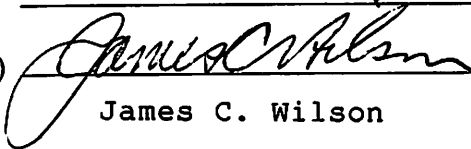
of this Corporation be, and they hereby are, fully authorized and empowered to transfer, convert,
endorse, sell, assign, set over and deliver any and all shares of stock, bonds, debentures, notes, sub-
scription warrants, stock purchase warrants, evidences of indebtedness or other securities now or
hereafter standing in the name of or owned by this Corporation and to make, execute and deliver,
under the corporate seal of this Corporation, any and all written instruments of assignment and trans-
fer necessary or proper to effectuate the authority hereby conferred.

FURTHER RESOLVED: That whenever there shall be annexed to any instrument of assignment and
transfer, executed pursuant to and in accordance with the foregoing resolution, a certificate of the
Secretary or an Assistant Secretary of this Corporation in office at the date of such certificate, and such
certificate shall set forth these resolutions and shall state that these resolutions are in full force and
effect and shall also set forth the names of the persons who are then officers of this Corporation, then
all persons to whom such instrument with the annexed certificate shall thereafter come, shall be enti-
tled, without further inquiry or investigation and regardless of the date of such certificate, to assume
and to act in reliance upon the assumption that the shares of stock or other securities named in such
instrument were theretofore duly and properly transferred, endorsed, sold, assigned, set over and
delivered by this Corporation, and that with respect to such securities the authority of these resolu-
tions and of such officers is still in full force and effect.

I further certify that the following is a true and correct list of the present officers of this Corporation:

<u>Russell L Wood</u>	President of the Board	<u>James C. Wilson</u>	Secretary
<u>Monte Pascoe</u>	Vice- President	<u>W. G. Scott</u>	Treasurer
	Vice- President	<u>Fred R Schwartzberg</u>	Assistant Secretary
			Assistant Treasurer

(CORPORATE SEAL)

(Signed) 
James C. Wilson **Secretary**

IF NO CORPORATE SEAL, PLEASE HAVE NOTARIZED.
Subscribed and Sworn to Before Me
This ____ day of _____, 19 ____ .

Notary Public
(Affix Seal)

RECORD OF PROCEEDINGS

Golden, Colorado
October 9, 1987

The Board of Trustees met in regular session on October 9, 1987, at 9:00 a.m.

Trustees present: Ms. Allen, Messrs. Henderson, Miller, Pascoe, Schwartzberg, Warren, Wilson and Wood.

Also attending the meeting were President Ansell, Vice Presidents Golden, Nyikos, and Scott, Mr. Robbins, Executive Director of the CSM Foundation, Deans Chevront, Gentry and Olson, Dr. Sloan, faculty representative to the Board, other staff members, and visitors.

Mr. Wood presided.

Oath of Office. The Oath of office was administered to Trustee Donald Miller and was properly executed by him.

Previous Minutes. The minutes of the meeting of September 11, 1987, were approved as distributed.

Sabbatical Request. Dr. Golden presented a sabbatical leave request for Dr. A. Keith Turner, Professor of Geological Engineering, for the six months January 15, 1988 through July 15, 1988 at the International Institute for Aerospace Survey and Earth Sciences in Holland. The focus of his work will be in computer-based geographic information systems. He is requesting a one-semester sabbatical leave at three-fourths pay.

The Board unanimously approved the request.

Capital Construction Request. Mr. Scott submitted the Capital Construction Budget Request for 1988-89.

The Board unanimously approved the request.

Revised 1987-88 Education and General Budget. Mr. Scott submitted a revised operating budget, adjusted from changes in revenues and expenses which occurred since the approval of the initial budget in July.

The Board unanimously approved the revised budget.

Dissolution of the Graduate Faculty. Dr. Golden informed the Board that at the Faculty Meeting of September 15, 1987, the faculty voted to dissolve the Graduate Faculty and transfer the business of the body to the Academic Faculty as a whole. He requested that the Board approve this action.

The Board unanimously granted its approval.

Designation of Waters Bequest as Quasi-Endowment. Mr. Scott informed the Board that the estates of Gower Waters

RECORD OF PROCEEDINGS

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and Clarice Waters had provided funds for scholarships at the School. We have received \$47,191.94, with a small amount to follow in the near future. It was requested that the Board designate the scholarship fund as a quasi-endowment fund to the Colorado School of Mines.

The Board unanimously so designated.

Designation of Person Responsible for Lobbying. The 1987 General Assembly passed legislation which has the effect of requiring the designation of the person responsible to represent Colorado School of Mines in its lobbying efforts. It was moved and seconded that Dr. Michael Nyikos be so designated.

The Board approved unanimously.

New Faculty Appointments. Dr. Gentry presented the report as follows:

New Appointments.

Dr. Maclyn L. Clouse Adjunct Professor of Mineral Economics	\$5,000 for the fall semester of the 1987-88 academic year
Dr. Theodore H. Moran John M. Olin Distinguished Visiting Professor of Mineral Economics	\$30,000 for the spring semester of the 1987-88 academic year
Mr. James Wilson Adjunct Professor of Mineral Economics	\$3,600 for the fall semester of the 1987-88 academic year

Continuation of Appointment

Dr. Gordon Day Adjunct Professor of Physics	No compensation for the 1987-88 academic year
Mr. Ross McClure Adjunct Assistant Professor of Humanities and Social Sciences and Director of Band	\$4,500 for the 1987-88 academic year
Mr. Wayne Richmond Adjunct Assistant Professor of Humanities and Social Sciences and Director of Chorus	\$5,100 for the 1987-88 academic year

Reappointment after Interruption.

Dr. Robert Knecht Adjunct Professor of Chemical Engineering and Petroleum Refining	\$7,400 for the 1987-88 academic year
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October 9, 1987

RECORD OF PROCEEDINGS

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Dr. Terence J. Lohman Part-time Instructor in Humanities and Social Sciences	\$5,000 for the fall semester of the 1987-88 academic year
Mr. Gysbert Wessels Part-time Instructor in Mineral Economics	\$3,200 for the fall semester of the 1987-88 academic year

Dr. Gentry had distributed quantitative evaluation reports to the Board members prior to the Board meeting.

Graduate School Admissions. Dr. Romberger had provided the standard report for graduate student admissions, including a final report for fall 1987 admissions and a progress report on the spring 1988 admissions.

Enrollment - Admissions. The Admissions Office provided a report on the tuition charges and total cost for students at twenty-five engineering schools for the three years ending 1987-88. Enrollment reports will be provided beginning in December.

New Research Awards. Dr. Olson provided a report on new research award volume for September 1987. This month's volume is \$837,984 compared to \$1,083,012 for the same time period the previous year. This results in a cumulative total for FY 1988 of \$2,245,802, which is \$336,537 behind the total for the same period the previous year of \$2,582,339. Eighteen different faculty were involved in twenty new project awards.

Twenty-seven proposals were submitted in the month of September 1987 compared to nineteen during the month of August 1987. A total to date of sixty-four proposals for FY 1988 have been submitted.

Monthly Financial Reports. Mr. Scott provided the following monthly reports prior to the Board meeting: Current Funds Revenues, Expenditures and Other Changes for the Three Months Ending September 30, 1987; Colorado School of Mines Auxiliary and Self-Funded ditures and Other Changes for the Two Months Ending August 31, 1987; Colorado School of Mines Auxiliary and Self-Funded Activities for the Three Months Ending September 30, 1987; and Time Deposits and Investment Report, September 30 1987.

Legislative Report. Dr. Nyikos presented a report based on the discussion paper provided prior to the meeting. Discussion centered on the possible changes in governance for Colorado higher education. President Ansell informed the Board that CCHE and certain committees of the Colorado Legislature will sponsor a joint session focused on the uses to which the additional funding provided to higher education by the 1987 General Assembly had been put, and the status of the implementation of HB 1187 from the session of the 1986 General Assembly. Each of the governing boards will have an opportunity to make a presentation. Trustees will be invited.

October 9, 1987

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Presentation of Certificate. Trustee Henderson presented a certificate expressing the appreciation of the Board to Trustee Schwartzberg for his service in behalf of the Board of Trustees as a director of the Colorado School of Mines Foundation (applause followed).

Trustee Warren inquired as to whether the Board members had received invitations to attend the Blue Key Board of Trustee Forum, which is scheduled for November 13, and as to whether the time and place were suitable. Discussion followed, at the end of which it was agreed that consideration would be given to moving the Board of Trustees to a later starting time so that the Board could conveniently attend the Forum at 4:00 p.m.

June Trustee Conference. President Ansell informed the Board that a committee has begun to meet to plan the June 1988 Conference.

Trustee Pascoe left the meeting at this time.

Sabbatical Report. Dr. Austin R. Brown, Professor of Mathematics, reported on his sabbatical leave taken spring semester 1987, during which he, as the holder of a Fulbright Fellowship, lived and worked in Cyprus, teaching and advising on computer applications in both the Greek and the Turkish sections of the country. He also worked on revision of EPICS materials for computer applications. Dr. Brown, in response to questions, commented on the nature of the students and educational conditions in Cyprus. He expressed appreciation to the Board for the opportunity provided.

Proposal for Ph.D. Program in Electrical Engineering. Dr. Golden presented the program proposal to the Board. Also present was Dr. Mogens Henriksen, Professor of Engineering, who had assisted with the proposal. An extensive discussion followed, during which various elements of the proposal were examined and suggestions made for clarifying and strengthening the proposal. It was emphasized to the Board that the program is important to the quality of instruction for students and that there will be continued emphasis on the role of the faculty in excellent teaching and research. The process of submittal to CCHE, its evaluation and tentative schedule were described by President Ansell.

At the conclusion of the discussion, it was moved and seconded that the Board give its approval to the proposal with the suggested changes incorporated. Unanimously carried.

Other Items. President Ansell informed the Board that an appointment is expected soon to the remaining vacant seat on the Colorado Commission on Higher Education.

Dr. Golden informed the Board that there had been no lost-time accidents reported to his office during the month of September.

October 9, 1987

RECORD OF PROCEEDINGS

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Trustee Wood informed the Board that President Ansell was to be honored at Rensselaer Polytechnic Institute by the designation of a portion of the Jonsson Engineering Center as the George S. Ansell Student Lounge and the establishment of a scholarship in his name.

The meeting was adjourned at 10:55 a.m., and the Board went into executive session.


Assistant Secretary

October 9, 1987

RECORD OF PROCEEDINGS

Golden, Colorado
November 13, 1987

The Board of Trustees met in regular session on November 13, 1987, at 1:00 p.m.

Trustees present: Ms. Allen, Messrs. Henderson, Pascoe, Schwartzberg, Warren and Wood.

Absent: Messrs. Miller and Wilson.

Also attending the meeting were President Ansell, Vice Presidents Golden, Nyikos, and Scott, Dean Chevront, Dr. Sloan, faculty representative to the Board, other staff members, and visitors.

Mr. Wood presided.

Previous Minutes. The minutes of the meeting of October 9, 1987, were approved as distributed.

Security Resolution. The following Resolution was unanimously approved by the Board:

Those persons occupying the following positions among the officers and members of the Board of Trustees of the Colorado School of Mines, shall be known as the Managerial Group, having the authority and responsibility for the negotiating, execution, and administration of User Agency contracts, as described in DOD 5220.22-M, "Industrial Security manual for Safeguarding Classified Information."

George S. Ansell, President, Colorado School of Mines
John O. Golden, Vice President for Academic Affairs
W. Gordon Scott, Vice President for Business Affairs
David L. Olson, Dean of Research
John B. Kirk, Industrial Security Officer (pending completion of clearance)

The Chief Executive and the members of the Managerial Group have been processed, or will be processed, for a personnel security clearance for access to classified information to the level of the facility security clearance granted to this institution, as provided for in the aforementioned Industrial Security Manual.

The said Management Group is hereby delegated all of the Board's duties and responsibilities pertaining to the protection of classified information under classified contracts of the Department of Defense or User Agencies of the Industrial Security Program awarded to the Colorado School of Mines.

The following named officers and members of the Board of Trustees shall not require, shall not have, and can be effectively excluded from, access to all classified information in the possession of the Colorado School of Mines, and do not

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occupy positions that would enable them to affect adversely the policies and practices of the Colorado School of Mines in the performance of classified contracts for the Department of Defense or User Agencies of its Industrial Security Program, awarded to the Colorado School of Mines, need not be processed for a personnel security clearance.

Officers

<u>Name</u>	<u>Title</u>
Donald W. Gentry	Dean of Engineering & Undergraduate Studies
Samuel B. Romberger	Dean of Graduate Studies
Michael S. Nyikos	Vice President for Student Affairs and External Relations

Board Members

Russell L. Wood	President
Monte Pascoe	Vice President
James C. Wilson	Secretary
Sally V. Allen	
Don K. Henderson	
Fred R. Schwartzberg	
Donald E. Miller	
Brian Warren	

Tenure Decision. Dr. Golden informed the Board that Dr. David C. Stickler, who is on leave without pay for the 1987-88 academic year, was scheduled for a decision this year on whether to grant tenure. Dr. Stickler has signed an agreement to delay that decision until the 1988-89 academic year. Dr. Golden recommended approval of the agreement.

The Board unanimously approved the agreement with Dr. Stickler.

Sabbatical Request. Dr. Golden informed the Board that a sabbatical request has been advanced to him on behalf of Dr. George Krauss, Professor of Metallurgical Engineering. Dr. Krauss was originally appointed to the faculty in 1975 and has not previously been on leave. The request is for the 1988-89 academic year at one-half pay for the purpose of preparing the second edition of his textbook. The first edition was published in 1980 and is now in its third printing. Dr. Krauss wishes to incorporate new material and extend the coverage of the book to make it more useful to a broader audience.

The Board unanimously approved the sabbatical request.

Membership in San Luis Valley Rural Electric Cooperative, Inc. The Geophysics Department has used the San Luis Valley as a site for Field Camp for a number of years. During this time they have had electrical hookup available to them. The coop has asked us to join. It is essential that at

November 13, 1987

RECORD OF PROCEEDINGS

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least 85 percent of their revenue comes from coop members so they prefer that all users join. There is no membership fee.

The Board unanimously authorized Messrs. Wood and Schwartzberg and President Ansell to execute the application for the membership.

Late Registration Fee. Mr. Spaulding informed the Board that the School must determine official enrollment data on the twelfth school day each semester (census date). These data are then used by the State in determining allocation of resources to the School. Final decisions as to faculty hirings must be made as early as possible in a semester, preferably in the first week. The tuition income expected for a semester must therefore be as accurate as possible in that first week.

In the past, many students, particularly graduate students, have not taken action to either register or confirm their pre-registration until just before the census date or later. While several actions are being initiated to facilitate and expedite this process (including a mail-in registration option for graduate students), a penalty is needed to motivate students to meet their responsibilities in a timely manner.

Mr. Spaulding recommends institution of a \$100.00 late registration/confirmation fee for continuing students, effective the seventh school day each semester, beginning Spring 1988. The proposed action has the approval of the Department Heads and the administration.

The Board unanimously approved the recommendation.

New Faculty Appointments. Dr. Golden presented the report as follows:

New Appointments.

Dr. Robert J. Copeland Adjunct Associate Professor of Engineering	\$3,000 for the fall semester of the 1987-88 academic year
Mr. Michael Cusick Instructor in Metallurgical and Materials Engineering	\$4,000 for the fall semester of the 1987-88 academic year
Mr. Lincoln Elkins Adjunct Associate Professor of Petroleum Engineering	\$4,228 for the fall semester of the 1987-88 academic year
Dr. Mohan S. Misra Adjunct Professor of Metallurgical and Materials Engineering	\$1,200 for the fall semester of the 1987-88 academic year
Mr. Thomas Terry Adjunct Assistant Professor of Engineering	\$2,500 for the fall semester of the 1987-88 academic year

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Continuation of Appointment

Dr. G. Mattney Cole Visiting Assistant Professor of Chemistry & Geochemistry	\$27,578 for the 1987-88 academic year year
Mr. Ross McClure Adjunct Assistant Professor of Humanities and Social Sciences and Director of Band	\$4,500 for the 1987-88 academic year
Mrs. Marianne Czupor Part-time Instructor in Physical Education	\$1,000 for the 1987-88 academic year
Dr. Hossein Kazemi Adjunct Associate Professor of Petroleum Engineering	\$2,114 for the fall semester of the 1987-88 academic year
Dr. Gerald Nix Adjunct Associate Professor of Chemical Engineering and Petroleum Refining	\$7,000 for the 1987-88 academic year

Reappointment after Interruption.

Ms. Candace S. Ammerman Part-time Instructor in Engineering	\$6,050 for the fall semester of the 1987-88 academic year
Mr. Wesley Johnson Adjunct Associate Professor of Mining Engineering	\$2,250 for the fall semester of the 1987-88 academic

Dr. Gentry had distributed quantitative evaluation reports to the Board members prior to the Board meeting.

Graduate School Admissions. Dr. Romberger had provided the standard report for graduate student admissions for Spring 1988, as of October 31, 1987.

Enrollment - Admissions. Mr. Spaulding had provided the Registrar's Report for Fall 1987.

Discussion ensued, during which Dr. Nyikos and Mr. Young answered questions with regard to minority student enrollment. Mr. Young commented that the graduation rate of minority students is very good on this campus. There was also discussion regarding strategies being used for recruiting women students.

New Research Awards. Dr. Olson provided a report on new research award volume for October 1987. This month's volume is \$410,476 compared to \$778,613 for the same time period the previous year. This results in a cumulative total for FY 1988 of \$2,656,278, which is \$704,674 behind the total for the same period the previous year of \$3,360,952. Nineteen different faculty were involved in nineteen new project awards.

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Thirty-five proposals were submitted in the month of October 1987 compared to twenty-seven during the month of September 1987. A total to date of ninety-nine proposals for FY 1988 have been submitted.

Monthly Financial Reports. Mr. Scott provided the following monthly reports prior to the Board meeting: Current Funds Revenues, Expenditures and Other Changes for the Four Months Ending October 31, 1987; Colorado School of Mines Auxiliary and Self-Funded Activities for the Four Months Ending October 31, 1987; and Colorado School of Mines Time Deposits and Investment Report, October 31, 1987. It is his belief that the School will operate within the revenues projected for the 1988 fiscal year.

Safety Report. Dr. Golden furnished a list of workmen's compensation claims for the period August through October 1987. Mr. Henderson thanked Dr. Golden for the monthly safety reports and requested further information on the Safety Committee's activities. Dr. Golden responded that the Committee has met once this fall and is presently preparing for the annual safety inspection. He informed the Board that he still anticipates the hiring of an industrial hygienist/safety officer/hazardous waste management officer. Mr. Henderson stated that once the position is filled he looks forward to hearing from that person on a monthly basis.

Sabbatical Report. Dr. Annette L. Bunge, Associate Professor of Chemical Engineering and Petroleum Refining, who was on academic leave during the spring semester of the 1986-87 academic year at three-fourths pay, presented her report. Dr. Bunge stated that the primary purpose of her sabbatical leave was to develop expertise in the absorption and transport of solutes across human skin. This new research emphasis extends her previous and continuing investigations on synthetic membranes to biological materials.

The secondary purpose of her sabbatical leave was to establish a collaborative research effort with several well-known experts on transdermal transport at the University of Utah Medical Center (Division of Dermatology and Department of Pharmaceutical Chemistry) which would continue after completion of this leave. This interdisciplinary approach benefits both the Colorado School of Mines and the University of Utah. She provides engineering and mathematical modeling capabilities which they need, while they are the respected health science experts which she needs.

Mr. Wood thanked Dr. Bunge for her report.

1988 Trustees Annual Conference. Dr. Nyikos discussed the proposed preliminary schedules which his Conference steering committee has developed. He will provide a more definite schedule at a future meeting.

Legislative Report. Dr. Nyikos reported on the activities of the CCHE.

November 13, 1987

RECORD OF PROCEEDINGS

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Dr. Nyikos and President Ansell reported on the Legislative Audit Committee hearing, and Dr. Nyikos informed the Board that there will be a Capital Development Committee hearing on Tuesday, November 24, 1987, at 2:30 p.m.

Program Discontinuance. Dr. Golden and President Ansell informed the Board that two programs have been selected by the CCHE for further consideration in phase II of the Commission's study. Those two programs are the Ph.D. in Mathematics and the Ph.D. in Physics. They will update the Board on the current status of those two programs.

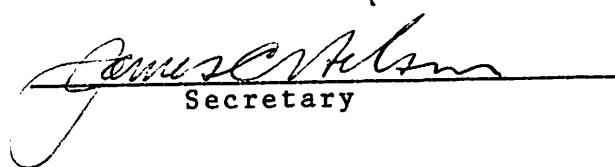
Dr. Sloan extended an invitation to the Board members to come to the Faculty Club following the Student/Trustee Forum, which is scheduled for 4:00 p.m. today.

Mr. Schwartzberg requested that the Board have a two-hour information session at the January meeting with regard to the humanities program. He wants a detailed articulation of the humanities program, a presentation by the administration regarding the specific goals and objectives of the humanities program, an assessment of the status of the program since the inception of the Future Graduate Profile, a report on the curriculum changes and the results of those changes, he wants the department chairman to give his assessment of his accomplishments, he wants faculty members to express some thoughts about where they think they are going as individual faculty members, a student assessment of what the program is accomplishing, and how the program might be improved.

Mr. Henderson wants the department head to discuss what he thinks it would take to have an outstanding department and what could be accomplished with increased resources.

The Board agreed to begin the January meeting at 8:00 a.m. and to have the information session from 10:00 a.m. to noon.

The meeting was adjourned at 3:00 p.m., and the Board went into executive session.


Secretary

November 13, 1987

RECORD OF PROCEEDINGS

Golden, Colorado
December 18, 1987

The Board of Trustees met in regular session on December 18, 1987, at 9:00 a.m.

Trustees present: Messrs. Henderson, Miller, Pascoe, Schwartzberg, Warren, Wilson and Wood.

Absent: Ms. Allen.

Also attending the meeting were President Ansell, Vice Presidents Golden, Nyikos, and Scott, Deans Gentry and Chevront, Dr. Sloan, faculty representative to the Board, other staff members, and visitors.

Mr. Wood presided.

Previous Minutes. The minutes of the meeting of November 13, 1987, were approved as distributed.

Student Health Center Endowed Account. Dr. Nyikos informed the Board that Student Health Center Endowed Account No. 6-30744 was established in 1969 specifically for the purpose of building a new infirmary. He is requesting Board approval to use the endowed portion for construction of the health center.

The Board unanimously approved the request to use the endowed portion of Account No. 6-30744.

Sabbatical Leave Request. Dr. Golden informed the Board that Dr. George Kennedy, Professor of Chemistry and Geochemistry, is requesting sabbatical leave for the fall semester, 1988 at three-quarter pay to prepare to return to full time teaching in the department and to allow the new department head to get established. Dr. Kennedy intends to associate himself with another university on a visiting basis to allow for exposure to other teaching methods and the opportunity to spend full time on course development. His previous sabbatical was during the 1982-83 academic year.

The Board unanimously approved Dr. Kennedy's request.

Candidates for Degrees. Distribution was made of lists of candidates for degrees as recommended by the regular and graduate faculties, copies of which are appended hereto.

Upon motion made, seconded and unanimously passed, the candidates were approved for degrees on the dates specified, subject to the completion of all academic requirements and continued compliance with school requirements and regulations.

Revised 1987-88 Operating Budget. Mr. Scott reminded the Board that it approved a revised budget at its October meeting, based on changes in current year enrollment. Since that time it has become apparent that additional modifications

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Geology and Geological
Engineering

1987 - May 6, 1988
(based on academic
year salary of
\$35,000)

Continuation of Appointment

Dr. Richard H. DeVoto Adjunct Professor of Geology and Geological Engineering	No compensation for the 1987-88 academic year
Dr. Lee C. Gerhard Adjunct Professor of Geology and Geological Engineering	No compensation for the 1987-88 academic year
Dr. Samuel S. Goldich Adjunct Professor of Geology and Geological Engineering	No compensation for the 1987-88 academic year
Dr. Robert D. Hamilton Adjunct Assistant Professor of Geology and Geological Engineering	No compensation for the 1987-88 academic year
Mr. Earl Madsen Adjunct Professor of Mineral Economics	\$2,500 for the spring semester of the 1987-88 academic year
Dr. Marian Radetzki Adjunct Professor of Mineral Economics	\$14,000 for the period July 1, 1987 - June 30, 1988
Dr. T. James Reynolds Adjunct Assistant Professor of Geology and Geological Engineering	No compensation for the 1987-88 academic year
Dr. Reuben J. Ross, Jr. Adjunct Professor of Geology and Geological Engineering	No compensation for the 1987-88 academic year

Graduate School Admissions. Dr. Romberger had provided the standard report for graduate student admissions for Spring 1988, as of December 15, 1987.

Enrollment - Admissions. Mr. Young had provided the December 15, 1987 Admissions Report and the Admissions Report for Spring Semester 1988.

New Research Awards. Dr. Olson provided a report on new research award volume for November 1987. This month's volume is \$629,258 compared to \$405,265 for the same time period the previous year. This results in a cumulative total for FY 1988 of \$3,276,536, which is \$489,681 behind the total for the same period the previous year of \$3,766,217. Sixteen different faculty were involved in sixteen new project awards.

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are advisable due to the likelihood of a General Fund rescission and a softening in the research awards and expenditures.

Appended hereto is a revised budget incorporating changes in the State Appropriated Income & Expense, with notations at the right hand side of the page. The pattern of expenditures within Sponsored Research has been adjusted on the basis of recent activity. The benefits within the CSMF columns have been submitted by each of the Fund Managers and are summarized. The unspent portion from the prior year has now been budgeted and included in each of these same columns.

The Board unanimously approved the revised 1987-88 Operating Budget.

Mr. Schwartzberg entered the meeting at this time.

New Faculty Appointments. Dr. Golden presented the report as follows:

New Appointments.

Dr. David W. Beaty Adjunct Professor of Geology and Geological Engineering	No compensation for the 1987-88 academic Year
Ms. Glenda Buzbee Instructor in Mathematics	\$3,000 for the spring semester of the 1987-88 academic year
Dr. Thomas J. Cook Adjunct Associate Professor of Mineral Economics	\$5,000 for the spring semester of the 1987-88 academic year
Dr. Kenneth L. Larner Charles Henry Green Professor of Exploration Geophysics	\$72,000 for the 1988-89 academic year
Dr. Dubos J. Masson Adjunct Assistant Professor of Mineral Economics	\$5,000 for the Spring semester of the 1987-88 academic year
Mr. John Stermole Adjunct Assistant Professor of Mineral Economics	\$3,000 for the spring semester of the 1987-88 academic year
Dr. Dennis Tenney Adjunct Assistant Professor of Mineral Economics	\$3,200 for the spring semester of the 1987-88 academic year
Dr. Richard Wendlandt Assistant Professor of	\$25,370 for the period Nov. 16,

RECORD OF PROCEEDINGS

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Thirty-one proposals were submitted in the month of November 1987 compared to thirty-five during the month of October 1987. A total to date of 130 proposals for FY 1988 have been submitted.

Monthly Financial Reports. Mr. Scott provided the following monthly reports prior to the Board meeting: Current Funds Revenues, Expenditures and Other Changes for the Five Months Ending November 30, 1987; Colorado School of Mines Auxiliary and Self-Funded Activities for the Five Months Ending November 30, 1987; and Colorado School of Mines Time Deposits and Investment Report, November 30, 1987. It is his belief that the School is operating within the revenues projected for the 1988 fiscal year.

Safety Report. Dr. Golden informed the Board that the campus Safety Committee met on December 11 and discussed the following items:

- Plans for the spring departmental safety inspections
- January 6, 1988 briefing to department heads by the Golden Fire Department on safety issues
- Material Safety Data Sheet requirement
- Superfund Amendments and Reauthorization Act- Title III Reporting of Hazardous Chemicals
- Campus disposal of liquid hazardous waste

The status of the hiring of a Manager of Environmental Safety--on hold because of budget constraints. Trustee Miller has offered the assistance of Gates safety personnel to assist the campus with safety matters.

Issues of hazardous waste disposal and asbestos in campus buildings remain major campus issues to be dealt with in the future.

Although we have made some progress on campus safety problems in the last few months--Material Safety Data Sheets and disposal of unused compressed gas cylinders--a number of issues will not be attacked because of lack of funds.

As reported to the Trustees last summer, a number of our campus buildings do not meet code. These buildings--Alderson, Hill and Coolbaugh--will require major renovations before they meet code.

Dr. Golden also furnished a list of workmen's compensation claims for November 1987. Mr. Henderson expressed his discomfort with the level of safety awareness on the campus. Trustees Schwartzberg and Wilson requested program level discussion for safety, and Mr. Schwartzberg asked for specific items for the May 1988 Board meeting. Discussion ensued during which President Ansell informed the Board that the safety officer position has been taken out of the budget. He

informed the Board that the problems are being assessed and alternative ways to manage the problems are being discussed. He wants to develop a strategy and examine the resources available. He stated that he will probably ask Dr. Louis York, an environmental consultant, for some assistance. Trustee Miller emphasized his willingness to offer the assistance of Gates safety personnel to assist the campus with safety matters. President Ansell informed the Board that he will give periodic progress reports, but can make no promises as to when the task will be completed. He stated that he will try to make a presentation to the Board in the spring.

Mr. Henderson thanked Dr. Golden for the monthly safety report and for his continued efforts to raise the level of safety awareness on the campus.

Sabbatical Report. Dr. John E. Warne, Professor of Geology, who was on academic leave during the fall semester of the 1985-86 academic year and the spring semester of the 1986-87 academic year, at one-half pay, presented his report. Dr. Warne reported that during the fall semester of 1985 he elected to remain in Golden and assist with Geology Department duties. These mainly included assisting Dr. Holden in his duties as Acting Head, and in spearheading a complete reworking of the first set of plans submitted by the architect for remodeling Berthoud Hall. Dr. Warne stated that during the semester most effort went towards analyzing information from field work in Morocco, preparing a new NSF proposal for Moroccan work, and preparing a proposal to establish an Exploration Geosciences Institute at CSM, which was approved in January 1986.

Dr. Warne reported that the 1987 spring semester was devoted mainly to preparing a summary manuscript of his work in Morocco. In February he was invited to Berlin by the Freie University to lecture on Morocco, and to submit a paper for a volume on Geodynamics of the Atlas System in Morocco, to be published this fall. Beginning in May he joined a committee to establish an interdisciplinary geosciences energy exploration and exploitation program/center/institute at CSM, and the committee met intermittently all summer.

Dr. Warne discussed the value of his sabbatical leave and thanked the Board for approving his request for a sabbatical.

Mr. Wood thanked Dr. Warne for his report.

Placement Report. Dr. Chevront introduced Ms. Diana M. Doyle, Director of Student Development, Career Planning and Placement. Ms. Doyle reviewed the Placement Report, which had been distributed prior to the Board meeting, and responded to questions.

Outdoor Sculptures. Mr. Scott informed the Board that the Colorado statutes provide for the setting aside of one percent of the cost of construction in major projects, to be used for the purchase of public art. Stratton Hall and Berthoud Hall projects will provide funds of this sort. The selection

RECORD OF PROCEEDINGS

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process is managed by the Colorado Council on the Arts and Humanities, and it has made a selection.

Mr. David Leavenworth, architect, CSM Plant Facilities, presented photos and a model of the selection.

Mr. Schwartzberg commented that he feels the Board should have more authority in making the final decision with regard to what is placed on the campus. President Ansell responded that he has mixed feelings about the entire process. He informed the Board that the School selected some members of the jury, some of whom were from the campus and some of whom were from off campus, but were all members of the community.

Mr. Wood thanked Mr. Leavenworth for his presentation.

Vice President for Institutional Development. President Ansell reminded the Board that he has previously discussed the reorganization of the fund raising responsibilities. He has also spoken to Mr. Zehr of the Alumni Association about this matter, but he has not spoken formally to the Alumni Association Board.

Discussion ensued, following which the Board unanimously approved the proposed reorganization.

Mr. Schwartzberg asked that the minutes reflect that the Board has gone on record to acknowledge Mr. Robbins's accomplishments during the past five years in the areas of fund raising and wise counsel which he has given to two administrations. Mr. Robbins has had significant influence in the accomplishments of this administration.

CCHE Report - Program Discontinuance. Dr. Golden informed the Board that a presentation has been made to the CCHE on the two programs under consideration. Both will be considered for phase two of the process, and the vote will take place in January.

Mr. Pascoe expressed the opinion that the School cannot afford to give up these two degrees and believes that the Board should take a strong position on this matter. The Board agreed that a draft statement should be prepared which reflects its support for the School's position in this matter. It also agreed that, if possible, some Board members should attend the CCHE meeting on January 7.

CCHE Report - Affirmative Action. President Ansell and Dr. Golden discussed the issues involved and informed the Board that this is a very controversial issue which will be voted on by the CCHE in January.

CCHE Report - Accountability. Dr. Golden stated that the CCHE is considering a new policy which will place a financial burden on the institution and encroaches on BOT responsibilities. Draft material had been distributed prior to the Board meeting.

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CCHE Report - Transfer Policy. Dr. Nyikos stated that he is preparing a letter to the CCHE which restates CSM's position in this matter.

Legislative Report. Dr. Nyikos discussed the legislative luncheons for 1988, and the Board stated that it wishes to continue the luncheons

Dr. Nyikos reviewed the recent JBC hearings.

Dr. Nyikos informed the Board that the JBC is concerned about the growth of administrative costs and would like to have a report on how the \$25 million of last year's appropriation was used.

The meeting was adjourned at 11:05 a.m., and the Board went into executive session.


Secretary

December 18, 1987

CLASS OF 1987
GRADUATING SENIORS
December 18, 1987

BACHELOR OF SCIENCE
(Mining Engineering)

Jon Eric Johnson
Thomas Andrew Schiff

BACHELOR OF SCIENCE
(Metallurgical Engineering)

Daniel Ian Ash
Jay Levan Cowden
Cameron Jae Freiboth
Roger Aaron Jaramillo
Christopher Richard Roll
John Neil Schwartzberg
Robert George Warren

BACHELOR OF SCIENCE
(Geological Engineering)

Tanya Lea Antoniuk
Hilarius Edwin Budhiman
Thomas Eugene Cannon
Hilary Ann Green-McGuire
Silke Susanne Gross
Jeffery Wayne Handy
Mitzi Ann Nielsen
Barri Cameron Schultz
Steven Patrick Smith
Ikhtiarso Agus Sulistyono
Peter Douglas Tilton
Douglas Kenton Umland

BACHELOR OF SCIENCE
(Petroleum Engineering)

Robert Dean Beierle
George Raymond Buck, III
John Wayne Burnett
Jess Dan Kelley
John Dennis Norwood

BACHELOR OF SCIENCE
(Petroleum Engineering) Continued)

Iman Permana
Bambang Setyo Roesdyoko
Uwe Sager
Craig Harold Schurig
Gary Michael Scott
James Mitchell Shaw
Darry Duane Stansbury

BACHELOR OF SCIENCE
(Chemical & Petroleum-Refining Engineering)

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Ahmad Fakhurrazzi B. Arshad
Brian Keith Bowden
Robert Lee Cleek
Pamela Lynn Drabek
*Ali Elkamel
Patrick Clay Gilcrease
Deborah Anne Hakanson
M. Khaldoun Akram Hejazi
JoAnn Hurley
Naceur Jemaa
Laga Ak Jenggi
Carol Ann Johnson
Michael Patrick Kellison
Thomas Kevin Kelly
Michael Christopher Kimble
Thomas Leroy Lewis
Mike Allen Maurer
Alexander Stephan Noguera
Scott A. Noland
Gary Lawrence Parham
Minh Ngoc Phan
Gregory Alan Pickerel
Lana Corinne Propp
Pamela Elaine Quintero
Lucas Takip
Juliana Louise Thaler
Joseph Vincent Waldinger, Jr.
Darren Ray Warren

*Double Degree

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December 18, 1987

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Rumlan Dwiyatno
Gary Joseph Elkington
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Leslie Marie Rush
Gehrig Stannard Schultz
Laila Ruth Vannurden

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(Mineral Engineering Chemistry)

Michael John Dammann

BACHELOR OF SCIENCE
(Chemistry)

Nicholas Bryan Gomez
Thomas E. Street

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(Mineral Engineering Mathematics)

Michael Gulio D'Attilio
*Ali Elkamel
Joanna Margaret Forbes
Jenni Anne Hufnagel
Craig Dylan Matthews

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Teresa Lynne Nealon
Patricia Ann Sutton
Handi Belamande Syarif

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(Mathematics)

*Julio E. Rodriguez

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(Engineering Physics)

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Bradley Mark Cohen
David Arthur Fleming
Philip Edward Hecker, Jr.
*Stephan Scott Storms
Eric Joseph Tarsa

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(Engineering)

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Robert Daniel Bopp
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Daniel Gene Mar
Daniel James McElhinney
Karen Lori McOllough

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Michael John Serra
Andrew D. Smith
Steven Michael Spaeth
*Stephan Scott Storms
Janet Frances Watkins
Judith Caroline Whittaker
Rebecca Kathryn Wilson
Ronald William Yater

*Double Degree

MASTER OF ENGINEERING

MASTER OF SCIENCE

December 18, 1987

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Dr. Miklos D. G. Salamon,
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Roger Williams Fish
Han, Song Soo

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Seoul, Korea

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Jeong Han Kim

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Master of Science
(Metallurgical Engineering)

Yavuz Atasoy
David A.K.C. Chang
Nicholas Michael Giallourakis
Douglas D. Kautz
Peter Todd Mazzare
Philip Bruce Rittgers
Peter Curtis Sanford
Michael Phillip Sheridan
Robert D. Turner
Craig Robert Van Thyne
Mark August Zaccone

Yatagan, Turkey
Aiea, Hawaii
Tarpon Springs, Florida
Merino, Colorado
Simi Valley, California
Imlay City, Michigan
Denver, Colorado
Conifer, Colorado
Denver, Colorado
Inverness, Illinois
Darien, Illinois

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Dirceu Abrahao
Roger Ellis Amerman
Rodney W. Graham
John Forist Hall, Jr.
John Robert Hicks
Craig F. Horlacher
Holly A. Rhoads

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Pendleton, Oregon
Scott City, Kansas
Bloomfield Hills, Michigan
Golden, Colorado
Chatham, New Jersey
Arvada, Colorado

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Mamadou Samba Diallo
Stephen S. DiGiacinto
John William Flanigan
Gerald Francis Giacomelli
Timothy Patrick Joyce
Abdelhamid Ouar
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Omaha, Nebraska
Golden, Colorado
Burlington, Ontario, Canada
Arvada, Colorado
Algiers, Algeria
Caracas - Venezuela

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Amir A. Al-Shakhis
Michael F. Fry
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Dammam, Saudi Arabia
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Evergreen, Colorado
Westminster, Colorado
Dallas, Texas
Guangdong, P.R.O.C.
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P.R.O.C.

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Jaafar Muhammad Al-Nemer
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Saudi Arabia
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Michael August Rome

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Sahin Bozdog

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Shusuke Kori

Karen Laney-Cummings

Nancy Jo Rusho

David Steven Schramm

Jeffery Gautier Wilkinson

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Ankara, Turkey
Morrison, Colorado
Silverdale, Washington
Osaka, Japan
Tecumseh, Oklahoma
Newport, Washington
LaGrange Park, Illinois
Lillian, Alabama

Wilmotte, Illinois

Rifle, Colorado

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Rahn G. Pitzer

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Michelle Anne Bell
John Alfred Hecht
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Hartwell, Georgia
Saudi Arabia
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Birmingham, England
Milano, Italy
Faribault, Minnesota

CSM
BOARD OF TRUSTEES
AGENDA ITEM

Date of Meeting 12-18-87
Item Number 1(e)
Presented By Gordon Scott

Subject:

Revised 1987-88 Operating Budget

Background Information:

The Board approved a revised budget in the October meeting, based on changes in current year enrollment. Since that time it has become apparent that additional modifications are advisable due to the likelihood of a General Fund rescission and a softening in the research awards and expenditures.

Attached is a revised budget incorporating changes in the State Appropriated Income & Expense, with notations at the right hand side of the page. The pattern of expenditures within sponsored Research has been adjusted on the basis of recent activity. The benefits within the CSM columns have been submitted by each of the Fund Managers and are summarized. The unspent portion from the prior year has now been budgeted and included in each of these same columns.

Action/Motion Requested:

Approval of the revised 1987-88 Operating Budget.

1987-88 FINANCIAL PLAN

2BUD023
12/17/87

	State	Sponsored Research (Direct)	CSMF Endowed/Restricted	CSMF Unendowed/Restricted	CSMF Unendowed/Unrestricted	Total Direct CSMF Support	CSMF Loans	Restricted CSM	Agency Funds	Auxiliaries	Combined	ED and GENERAL COMMENTS
INCOME:												
Education & General												
General Fund	\$10,310,885										\$10,310,885	
GF Recision	(206,218)										(206,218)	Estimated 2% reduction
Tuition	10,457,674										10,457,674	Revised Estimate. PE Fld 30k
Ind Cost Recoveries	1,800,000										1,800,000	Reduced by 200,000
Other Cash	200,000										200,000	Increased by 50,000
Sponsored Programs		\$9,000,000	\$1,088,035	\$2,887,643	\$1,000,000	\$4,975,678	\$707,530	\$895,605	\$605,100		16,183,913	
Auxiliaries										\$4,315,600	4,315,600	
Prior Yr Roll Forward	325,000				119,538	119,538					444,538	
TOTAL INCOME	\$22,887,341	\$9,000,000	\$1,088,035	\$2,887,643	\$1,119,538	\$5,095,216	\$707,530	\$895,605	\$605,100	\$4,315,600	43,506,392	
EXPENSE:												
Total Faculty												
Avg Compensation	\$47,670	\$47,670	\$47,670	\$47,670		\$47,670						
FTE	218.6	58.5	0.6	9.9		10.5					287.6	
Total Compensation	10,420,662	2,788,695	28,602	471,933		500,535					\$13,709,892	
Faculty Charge-outs												
Avg Compensation	47,670											
FTE	(14.0)										(14.0)	Reduced by 2 FTE
Total Compensation	(667,380)										(667,380)	
Admin Faculty												
Avg Compensation	48,440											
FTE	32.2										32.2	-1.8FTE
Total Compensation	1,559,768										1,559,768	
Classified Staff												
Avg Compensation	28,915	28,915	28,915	28,915		28,915						
FTE	187.8	15.6	0	1.5		1.5					204.9	-8.0FTE
Total Compensation	5,430,237	451,074	0	43,373		43,373					5,924,684	
Graduate Assistants												
Avg Compensation	29,360	29,360	29,360	29,360	29,360	29,360						
FTE	32.7	70.5	0.5	1.8	0.0	2.3					105.5	
Total Compensation	960,072	2,069,880	14,680	52,848	0	67,528					3,097,480	
Hourly												
Avg Compensation	10,672	10,672	10,672	10,672		10,672		\$10,672				
FTE	16.3	33.7	0.2	2.7		2.9		0.0			52.9	
Total Compensation	173,954	359,646	2,134	28,814		30,949		0			564,349	
Operating Expense/Travel	1,758,794	2,340,705	0	0		0					4,099,499	Supp by Aux. Cut Spec Events(30k)
Program Support			0	0	0	0					0	
Departmental Support			149,564	402,680	146,871	699,115					699,115	
Library Books/Journals	405,690		0	0	0	0					405,690	
Utilities	1,168,200										1,168,200	
Micro Computer Project	11,000										11,000	
Financial Aid												
Undergrad-State	500,000							789,499			1,289,499	100,000 added
Grad-State								106,106			106,106	
Undergrad-Other			802,170	1,125,025	402,956	2,330,151	\$707,530		\$605,100		3,642,781	
Grad-Other					96,909	96,909					96,909	
Marketing	128,000										128,000	Reduced by 22,000
Research Development	750,000					0					750,000	
FTE	3.0										3.0	
Capital Outlay	50,000	990,000	26,041	219,909		245,950					1,285,950	Reduced by 150,000
Safety(OCE)	25,000										25,000	Reduced by 25,000
Pynts to St Agencies	112,000										112,000	Includes addl Attorney General fees
Reserve/unallocated	101,344		64,844	543,061	472,802	1,080,707				\$110,000	1,292,051	
Auxiliaries										4,205,600	4,205,600	
TOTAL EXPENSE	\$22,887,341	\$9,000,000	\$1,088,035	\$2,887,643	\$1,119,538	\$5,095,216	\$707,530	\$895,605	\$605,100	\$4,315,600	\$43,506,392	
TOTAL FTE	476.6	178.3	1.3	15.9	0.0	17.2		0.0	0.0	0.0	672.1	

1988-89 FINANCIAL PLAN

	State	Sponsored Research	CSMF Endowed/Restricted	CSMF Unendowed/Restricted	CSMF Unendowed/Unrestricted	CSMF Total Direct Support	CSMF Loans	Restricted CSM	Agency Funds	Auxiliaries	Combined	ED and GENERAL COMMENTS
INCOME:												
Education & General												
General Fund	\$10,343,505										\$10,343,505	CSM=3.805%; assume no inc Higher Ed +5.5%
Tuition	10,710,536										10,710,536	
Ind Cost Recoveries	1,900,000										1,900,000	
Other Cash	200,000										200,000	
Sponsored Programs		\$8,600,000	\$1,230,667	\$2,140,039	\$300,000	\$3,670,706	\$730,000	\$1,126,400	\$650,000		14,777,106	
Auxiliaries										\$4,392,800	4,392,800	
Prior Yr Roll Forward	101,344				472,045	472,045					573,389	
TOTAL INCOME	\$23,255,385	\$8,600,000	\$1,230,667	\$2,140,039	\$772,045	\$4,142,751	\$730,000	\$1,126,400	\$650,000	\$4,392,800	\$42,897,336	
EXPENSE:												
Total Faculty												
Avg Compensation	\$48,468	\$48,468	\$48,468	\$48,468	\$48,468	\$48,468						No salary increase included
FTE	208.0	55.0	0.8	9.0	1.0	10.8					273.8	-10.6 FTE
Total Compensation	10,081,344	2,665,740	38,774	436,212	48,468	523,454					\$13,270,538	
Faculty Charge-outs												
Avg Compensation	48,468											
FTE	(16.0)										(16.0)	Additional 2.0 FTE charge-outs
Total Compensation	(775,488)										(775,488)	
Admin Faculty												
Avg Compensation	50,029											No salary increase included
FTE	31.0										31.0	-1.2 FTE net
Total Compensation	1,550,899										1,550,899	
Classified Staff												
Avg Compensation	30,888	30,888	30,888	30,888		30,888						5.0% mandated salary increase
FTE	187.8	13.9	0.7	2.8		3.5					205.2	
Total Compensation	5,800,766	429,343	21,622	86,486		108,108					6,338,218	
Graduate Assistants												
Avg Compensation	30,530	30,530	30,530	30,530	30,530	30,530						+4.0%
FTE	32.7	64.8	2.0	2.6	3.1	7.7					105.2	
Total Compensation	998,331	1,978,344	61,060	79,378	94,643	235,081					3,211,756	
Hourly												
Avg Compensation	11,100	11,100	11,100	11,100		11,100		\$11,100				+4.0%
FTE	16.3	31.0	0.8	3.4		4.2		8.0			59.5	
Total Compensation	180,930	344,100	8,880	37,740		46,620		88,800			660,450	
Operating Expense/Travel	1,840,794	2,236,473	8,700	10,000		18,700		41,400			4,137,367	
Program Support			115,000	380,000	110,000	605,000					605,000	
Departmental Support			288,892	195,223		484,115					484,115	
Library Books/Journals	405,690		8,939	5,000		19,675					439,304	
Utilities	1,209,100										1,209,100	+3.5%
Micro Computer Project	36,000										36,000	
Financial Aid												
Undergrad-State	575,000							911,300			1,486,300	+75,000
Grad-State								84,900			84,900	
Undergrad-Other			416,400	540,000	409,600	1,366,000	\$730,000		\$650,000		2,746,000	
Grad-Other			65,400	235,000		300,400					300,400	
Marketing	128,000										128,000	
Research Development	750,000		27,000			27,000					777,000	
FTE	3.0										3.0	
Capital Outlay	0	946,000	170,000	135,000		305,000					1,251,000	
Safety(OCE)	50,000										50,000	
Pymts to St Agencies	118,000										118,000	
Reserve/unallocated	306,019					89,659	89,659			\$40,000	435,678	
Auxiliaries										4,352,800	4,352,800	
TOTAL EXPENSE	\$23,255,385	\$8,600,000	\$1,230,667	\$2,140,039	\$772,045	\$4,142,751	\$730,000	\$1,126,400	\$650,000	\$4,392,800	\$42,897,337	
TOTAL FTE	462.8	164.7	4.3	17.8	4.1	26.2		8.0	0.0	0.0	661.7	

Note: CSMF expenditures are projected based on prior year expected income through gifts and investments.