TEXAS TECHNOLOGICAL COLLEGE
Lubbock, Texas

MINUTES OF THE CAMPUS PLANNING COMMITTEE

Meeting No. 207 January 23, 1964

A meeting of the Campus Planning Committee was held at 9 a.m. on January 23, 1964, in Room 120 of the Administration Building. Members present were Mr. E. J. Urbanovsky, Mr. Nolan E. Barrick and Chairman M. L. Pennington. In addition, Mr. R. L. Mason, Mr. O. R. Downing and Mr. John G. Taylor were present.

2610. Approval of Minutes

On motion by Mr. Urbanovsky, seconded by Mr. Barrick, the Minutes of Meeting No. 206 were approved.

2611. President's Approval of Minutes

The President approved the Minutes of Meeting No. 206 on January 4, 1964.

2612. Bookstore Addition

The excavation is complete and the basement walls are approximately 40 percent installed.

2613. Building Signs

Not all of the information necessary to clarify the situation is available as yet.

2614. Campus Lights for Library, Student Union, Music Building, Horn, Knapp, Drane, Doak and Weeks Area

It was agreed that there will be a meeting at 8 p.m. tonight to inspect the light intensity and efficiency of the installation around the new women's dormitory and after a decision is made on the type of pole and intensity, a special meeting will be held to complete the lighting plan.

2615. Classroom-Office Building (New)

After a very lengthy discussion, the CPC members agreed that it will be necessary to hold a later special meeting on the prospects of the new building.

The State Comptroller of Public Accounts and Bond Counsel are now in agreement that the 12 institutions which participate in Constitutional Building Amendment from the 5¢ ad valorem tax can issue additional bonds or notes to secure 85 percent of the remaining funds for the current ten-year period. It is estimated that Texas Tech can issue notes in the amount of $1,500,000 for additional educational and general construction.

It will be possible for Texas Tech to secure some matching grants under the Higher Education Facilities Act of 1963 which Mr. Taylor has summarized in Attachment No. 510, page 1518.

The maximum amount possible is $750,000 and the chances of getting such an amount are rather slim. A copy of Mr. Taylor's estimate on funds available is attached to and made a part of the Minutes. (Attachment No. 511, page 1519)

After a very lengthy discussion, it was agreed that it will be necessary to hold a special meeting at a later date in order to determine a recommendation.

2616. Dormitory and Dining Facilities (Project CH-Tex-150(D)

(Mr. Moore entered the meeting.)

A. Unit A (H. A. Lott, Inc., $2,764,546 - August 1, 1963)

1. Heating and Air Conditioning

A very great deal of effort has been expended in attempting to balance the heating and air conditioning, and it is thought that the condition is now pretty well corrected. The thermostats will be relocated, and the problem with the return air seems to have been solved.

2. Landscaping

In keeping with prior arrangements, the plans for the landscaping prepared by Mr. Urbanovsky and his staff were approved. Approximately 270 trees plus shrubs at an estimated cost of $8,500 are required.

B. Units B and C (H. A. Lott, Inc., $2,788,420.40 - August 1, 1964, and $3,513,215.13 - August 1, 1964)

1. Construction Progress

Progress is very satisfactory. Much of the furniture has been delivered and is installed.

2. Kitchen and Dining Room Equipment (Commercial Kitchens, Inc., $206,766)

Mr. Barrick reported that delivery has started on the buy-out equipment. Some trouble has been experienced on the manufactured items due to change orders but everything seems to now be in order.

3. Interior Decorator

After a long discussion, it was agreed by majority decision that the past practice of using an interior decorator will be discontinued.

Mr. Barrick and Mr. Moore are to undertake an intensive study of various firms which will provide the decorating services free, with the idea that we would get a complete layout which could include if the College requested, products from other manufacturers with specifications for competitive bidding. The services would include the quality of fabrics, drapes and materials--and would comprise the entire layout. It will be necessary to decide on a basic motif and a budget.

It was agreed that a special meeting will be held within the next week to ten days to hear the report and recommendation from Mr. Barrick and Mr. Moore.

4. Movable Equipment

Mr. Moore has already requested samples for the room chairs and is investigating the possibilities of other movable equipment. He was requested to continue the study and as soon as he is ready to make a recommendation to the CPC.

5. Concrete Tunnels and Extension of Underground Facilities (Anthony Company, $155,000)

Mr. Mason reported that the job is probably 99.8 percent complete.

2616. Dormitory and Dining Facilities (Project CH-Tex-150(D) (continued)

B. Units B and C (H. A. Lott, Inc., $2,788,420.40 - August 1, 1964, and $3,513,215.13 - August 1, 1964)

6. Walks, Drives and Parking Lots

Plans for the second women's dormitory are approximately 60 percent complete. If at all possible, it was agreed that efforts will be made to have the final plans and specifications for both the new women's dormitory and the new men's dormitory ready for presentation at the February 15, 1964, Board meeting.

2617. Housing (Other) and Food Service

Consolidated Food Service Units for West, Sneed, Bledsoe and Gordon Halls - November 1, 1964, and Central Food Facilities - September 1, 1964 (J. R. Francis General Contractor, Inc. - $1,480,157.10)

1. The contractor has moved onto the site. Most of the fence is up and some of the necessary jackhammer work is being done on the Consolidated Facilities. The contractor seems to be making a bit slower start than had been hoped. Some complications are developing over apparent vandalism.

2. Financing

HHFA approved the application for a federal loan in the amount of $1,373,000 on January 7, 1964, and has forwarded the Loan Agreement for approval of the Board of Directors at their meeting February 15, 1964.

3. Ground Breaking

Mr. Vaughan has scheduled the ground-breaking ceremonies for this afternoon at 2 p.m. for the Central Food Facilities and those for the Consolidated Food Facilities are to be scheduled at a later date.

(Mr. Moore left the meeting.)

2618. Entrance Marker

The Saddle Tramps have requested permission to make the presentation to the Board of Directors at the February 15, 1964, meeting. Their presentation would include the overall plan for fund raising.

The Campus Planning Committee would like to secure the information from the architects on cost and materials prior to the Board meeting in order that everyone will have as much information as possible.

2619. Infirmary

(Dr. Kallina entered the meeting.)

Dr. Kallina reported that he and his staff have been studying the layouts since the last meeting of the CPC, and they concur in the thought that bed space is the primary consideration. Also, they feel that the maximum amount of bed space can be realized from two large wards in the extension on the second floor. It would be necessary to have at least one single bath.

It was agreed that additional studies will be made and a recommendation made to the Board of Directors at the meeting on February 15, 1964, for architects and the general project.

(Dr. Kallina left the meeting.)

2620. Killgore Beef Cattle Center

A. Additional Funds

An additional gift of $34,937 was made available by the Killgore Foundation on January 16, 1964, to complete the furnishing, equipment and landscaping of the Center.

B. Center (Walter E. Wirtz, $378,839)

It was agreed to recommend the final acceptance date of January 16, 1964.

According to a news release on January 20, 1964, the 110 bulls have been moved into the new pens.

C. Feed Mill

Mr. Barrick reported that apparently 60 percent of the original contract is complete. With the additional funds, there will be other items added and those will be added by change orders.

D. Roads, Parking and Landscaping

Mr. Urbanovsky reported that the plans are about 80 percent complete.

It was agreed that it will be necessary, if at all possible, to have the plans and specifications completed and bids taken in time for contract awards at the meeting of the Board of Directors on February 15, 1964, in order that the work may be done prior to the dedication on March 12, 1964, which is the date of the Field Day.

E. Equipment

Mr. Barrick presented a list of furniture for Founders and Reception Rooms at the budgeted amount of $8,000 and has checked the items with Mr. Weymouth and Dean Thomas. All were in agreement on the style and the amount. The equipment was approved.

Mr. Barrick said Mr. Short, the architect, has been requested to see if the contractor would like to handle as change orders the venetian blinds in the building, and the wooden floor in the Founders Room in lieu of the rug. At the present time, he is waiting for a reply from Mr. Short.

F. Plaques

The various plaques and developments to date were discussed, with additional information being needed before a decision can be made.

2621. Playa Lake Pits

A check will be made to determine the status of the lakes.

2622. Psychology and Speech (H. A. Lott, Inc., $911,000 - January 22, 1964)

A. Psychology ($452,000)

Construction Progress

Mr. Barrick reported that he is expecting a request from the contractor to make final inspection at any time.

B. Speech ($459,000)

1. Construction Progress

Mr. Barrick reported that he is expecting a request from the contractor to make final inspection at any time.

2622. Psychology and Speech (H. A. Lott, Inc., $911,000 - January 22, 1964) (continued)

B. Speech ($459,000)

2. Seating

The seating has been ordered.

3. Stage Rigging

The stage rigging has been ordered.

The sum of $565 was added to Item 2605-B by the Campus Planning Committee after the last Minutes were prepared and the Board of Directors approved.

C. Utility Lines

Acceptance Date

A final acceptance date of December 20, 1963, was recommended.

D. Walks, Drives and Parking

The plans are almost entirely complete and a contract award will be recommended to the Board of Directors at the February 15, 1964, meeting.

2623. Walks in Front of the Administration Building, Chemistry Building and Social Sciences Building Area

Mr. Urbanovsky presented and discussed the studies to date.

M. L. Pennington
Chairman

The meeting adjourned at 12:40 p.m.

Campus Planning Committee
January 23, 1964
Attachment No. 510
Item 2615

Higher Education Facilities Act of 1963
(P. L. 88-204)

Title I of the law, which covers the granting of funds up to one-third of the cost of a project to build facilities for mathematics, foreign languages, engineering and the sciences, is the most pertinent section of the law as far as Texas Tech is concerned. This part of the law requires each state to set up a commission which will accept and review preliminary applications. The Department of Health, Education and Welfare reported that they thought they would have some details and guide lines worked out for the operation of these commissions in February or early March, and that the Governors should, as promptly as possible, get their commissions set up. A cutoff date for receipt of applications for matching funds will be established by each state commission, and they will approve the applications in priority order, so the funds will be distributed as far as they will go to the top priority projects.

Title II of the law covers construction and improvement of graduate facilities. These applications go straight to the Department of Health, Education and Welfare, where they will be reviewed by a special committee. No detailed instructions or procedures have been worked out in this area yet.

In discussing Title II, the federal people conducting the meeting seemed to stress the development of cooperative research facilities between two or more colleges and universities, or other research facilities and colleges and universities. The other thing stressed was the spreading of research facilities throughout the country.

Title III covers the loan provisions of this law, whereby the Government will loan up to three-fourths of the construction cost at their latest interest rate, with the college or university providing the other one-fourth. In the meeting, it was brought out that the colleges must have their one-fourth of the funds available at the time of construction. Offhand, it does not appear that we can use this Title III section very well, as our only method of securing these funds would be to charge a building use fee which, by itself, would not be enough to fund a project of any size. Unless something further develops, it looks like we need to concentrate on Title I and Title II of the law.

The supervision and inspection of the construction of these facilities will probably be handled by the HHFA staff. It looks like there could be more detail with this than we now have with HHFA.

Where the law mentions grants for construction of undergraduate academic facilities, this does not necessarily mean all undergraduate facilities, as some graduate facilities can be included. The Government's definition of academic facilities is "classrooms, laboratories and libraries."

Campus Planning Committee
January 23, 1964
Attachment No. 511
Item 2615

TEXAS TECHNOLOGICAL COLLEGE
Lubbock, Texas

January 21, 1964

CONSTITUTIONAL AMENDMENT BUILDING FUNDS

State Comptroller's estimate of funds available prior to December 31, 1968, and beyond the present sinking fund requirements — $1,908,533

$1,908,533 X 85% = $1,622,253

$1,450,000 X 3% X 47 months = $170,375
170,375 (Feb. 1, 1964 - Dec. 31, 1967)
(360-day basis)
$1,620,375

Estimated Construction Funds Available

Ad Valorem Tax	$1,450,000
Estimated earnings on Treasury bills, savings and loans investments and time deposits	50,000
Subtotal	$1,500,000
Possible College Facilities Grant Funds (maximum of 1/3)	750,000
Total Estimated Funds	$2,250,000

TEXAS TECHNOLOGICAL COLLEGE
Lubbock, Texas

MINUTES OF THE CAMPUS PLANNING COMMITTEE

Meeting No. 209 January 30, 1964

A meeting of the Campus Planning Committee was held at 5 p.m. on January 30, 1964, in the Physical Plant Auditorium. Members of the Campus Planning Committee present were Mr. E. J. Urbanovsky, Mr. Nolan E. Barrick and Chairman M. L. Pennington. In addition, Mr. Robert L. Mason, Mr. John G. Taylor, Mr. O. R. Downing and Mr. Mark Gosdin were present.

Saddle Tramps present were Ken Snyder, Paul Dinsmore, Royal Ferguson, Jerry Blackwell, David Beckman, Kent Hance, James Cole and Ronnie Botkin. Mr. Joe Winegar, sponsor, was also present.

The architects were represented by Mr. Howard Schmidt.

2625. Entrance Marker

The purpose of the meeting was to hear the estimated cost and description of materials from the architects in keeping with arrangements made at the last meeting of the CPC and the Saddle Tramps. Mr. Schmidt presented the picture and scale model and said that the architects have discussed the problems, materials, maintenance and costs with many equipment manufacturers and fountain suppliers.

1. Seal

The architects found that it is virtually impossible to get a cast bronze seal 12 feet in diameter and that it would cost more than the project. The estimated cost is $75,000. Granite suppliers were next contacted and they reported that the seal can be made in polished granite approximately one foot thick. The seal and the name can be sandblasted in the face and a permanent color can be used over the wording if necessary or desired.

2. Pump House

The space under the platform on which the seal rests would provide an ideal place for the pumps, filter equipment, etc.

3. Fountains

Mr. Schmidt said that a good bit of work has been done studying the problems of wind, maintenance, blowing dust, and ice. A good bit of checking was done with a firm in Dallas which has a rather large fountain with eight tiers of water. The report is that the nozzles are very important. There is equipment available for fountains which would reduce the velocity in the water in the sprays according to the wind and hold the velocity to an acceptable level. The Dallas fountains are within eight feet of a driveway and the wind control devices have presented the development of any problems. It was felt that the wind problem could be handled. The towers of water at Texas Tech would be as clean and straight as possible.

4. Freezing

It was found that it is better to leave water in the pool in winter than to leave the pool dry, as the water protects the finish of the walls and bottom. It is possible to operate the sprays in freezing weather.

2625. Entrance Marker (continued)

5. Pump

The sprays would require a 50-horsepower motor, and it would cost approximately 50 cents per hour to operate it. Using an 18-hour day, the cost for electricity to operate the pump would amount to approximately $270 per month. There are means to handle the scale which forms in the nozzles, and there are other provisions similar to those of a swimming pool which need to be recognized.

6. Water

It is estimated that 1,000 gallons per minute will be circulated through the system and with a loss of one-half of one percent, the maximum cost would be $48.60 per month. The pool will hold 66,000 gallons and if it is drained and refilled once a week, the cost would be approximately $80 per month.

7. Lights

In addition, some electricity would be required for the lights, and the estimate was not available at the time of the meeting as the College must supply some of the information.

8. Maintenance

Some maintenance labor would be involved on the part of the College, but it will not be a major factor.

It was estimated that a top figure per year for maintenance could be as high as $6,000. There could be a good many economies of operations. For example, the fountains probably would not run 18 hours per day, and in very severe weather the fountains probably would be cut off. It was recommended to the architects that the fountain be drained once each week, and it will be necessary to remove debris from time to time. However, it probably will not be necessary to drain and refill the pool once each week.

Mr. Schmidt said that he would formally summarize and present the maintenance cost, including the estimated amounts for lights and labor. A copy of the summary under the date of January 31, 1964, along with the estimated cost of the construction prepared by Schmidt and Stuart, is attached to and made a part of the Minutes. (Attachment No. 512, page 1523)

9. Construction Cost

Next, the items listed in Mr. Schmidt's letter of January 31, 1964, and the estimated amounts were discussed individually. The total estimated cost for construction is $55,950.

Mr. Schmidt mentioned that the granite seal would have etched letters on both sides. If bronze lettering were used, it would be on one side only and would add $3,000 to the cost.

The landscaping, utility supply, sewage and necessity for a transformer were discussed.

After consideration, it was agreed that the Campus Planning Committee would recommend the construction to the Building Committee at the next meeting of the Board of Directors, and that the Saddle Tramps would present for approval the plan to raise funds.

M. L. Pennington
Chairman

The meeting adjourned at 6 p.m.

Campus Planning Committee
January 30, 1964
Attachment No. 512
Item 2625 - 5

SCHMIDT
and
STUART

Architects & Engineers

Howard W. Schmidt
John S. Stuart
H. A. Sessions
C. Berwyn Tisdel

1602 Avenue Q
Lubbock 1, Texas
Dial PO 5-8881

January 31, 1964

M. L. Pennington
Vice President for Business Affairs
Texas Technological College
Lubbock, Texas

RE: Entrance Marker
Texas Technological College

Dear Mr. Pennington:

Below find the breakdown of the construction estimate for the referenced project we presented to the Campus Planning Committee and Saddle Tramp representatives on January 30, 1964. This estimate is based on the project as presently designed and as indicated on the plot plan, perspective, and as further shown by scale model. The estimate is as follows:

Removal of existing drives	$ 1,500.00
New curbs and gutters	1,950.00
New paving	3,000.00
Masonry fences and retaining walls	6,000.00
Terraces and walks	7,000.00
Pool and bridge construction	6,000.00
Pool coping	500.00
Granite base for College Seal	1,000.00
Granite seal with sandblasted design (2 sides)	8,000.00
Fountain and lighting equipment	15,000.00
Installation of fountain and lighting equipment	2,000.00
Architectural and Engineering fees (approximately)	4,000.00
TOTAL	$55,950.00

Alternate:

To use bronze for design on seal (one side) ADD $3,000.00

The above project costs do not include landscaping, sprinkler system, or "outside" utility estimates which would be necessary to complete the entrance marker. Mr. Elo Urbanovsky stated that landscaping and sprinklers might cost $5,000.00 and Mr. Robert Mason has stated that utilities (water, storm drains and electrical) might cost between $3,000.00 and $5,000.00. Each of these figures might be studied further.

An estimate of the maximum monthly operating and maintenance expenses that might be expected are as follows:

50 HP pump $0.50/hour x 18 hours/day $9.00/day x 30 days		$ 270.00/mo.
40 - 500W lamps $0.20/hour x 6 hours/day $1.20/day x 30 days		$ 36.00/mo.
Filling pool with new water once per week (probably more than adequate) 66,000 gal - $0.32/M	Approx.	$ 80.00/mo.
Make-up water for evaporation ½ of 1% of 1000 gal/min 5 gal per min 300 gal/hour x 18 hours = 5400 gal/day 174,000 gal per mo @ $0.32	Approx.	$ 56.00/mo
Maintenance Labor One man 30 min/day "policy" for trash 5 days/wk @ $2.00/hour		$ 20.00/mo
One man 2 hours once a week Draining and cleaning pool @ $2.00/hr (Again, probably more than necessary)		$ 16.00/mo
		$ 478.00/mo
	or	$5,736.00/year

In addition, certain chemicals would be required periodically to treat the water for algae, scale, etc.; however, it is next to impossible to estimate this expense at this time.

We hope you understand that without the benefit of detailed working drawings and since fountains in West Texas are still a rarity, these estimates are very difficult to determine. It should be obvious that we are most pleased with the design and with the enthusiasm of the Saddle Tramps Organization and feel very privileged to be participating in this significant project for Texas Tech.

Very sincerely,

SCHMIDT and STUART
ARCHITECTS and ENGINEERS

/s/ Howard W. Schmidt
Howard W. Schmidt, A.I.A.

HWS:mec(g)

TEXAS TECHNOLOGICAL COLLEGE
Lubbock, Texas

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Mr. Schmidt mentioned that the granite seal would have etched letters on both sides. If bronze lettering were used, it would be on one side only and would add $3,000 to the cost.

The landscaping, utility supply, sewage and necessity for a transformer were discussed.

After consideration, it was agreed that the Campus Planning Committee would recommend the construction to the Building Committee at the next meeting of the Board of Directors, and that the Saddle Tramps would present for approval the plan to raise funds.

M. L. Pennington
Chairman

The meeting adjourned at 6 p.m.

Campus Planning Committee
January 30, 1964
Attachment No. 512
Item 2625 - 5

SCHMIDT
and
STUART

Architects & Engineers

Howard W. Schmidt
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1602 Avenue Q
Lubbock 1, Texas
Dial PO 5-8881

January 31, 1964

M. L. Pennington
Vice President for Business Affairs
Texas Technological College
Lubbock, Texas

RE: Entrance Marker
Texas Technological College

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An estimate of the maximum monthly operating and maintenance expenses that might be expected are as follows:

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Filling pool with new water once per week (probably more than adequate) 66,000 gal - $0.32/M	Approx.	$ 80.00/mo.
Make-up water for evaporation ½ of 1% of 1000 gal/min 5 gal per min 300 gal/hour x 18 hours = 5400 gal/day 174,000 gal per mo @ $0.32	Approx.	$ 56.00/mo
Maintenance Labor One man 30 min/day "policy" for trash 5 days/wk @ $2.00/hour		$ 20.00/mo
One man 2 hours once a week Draining and cleaning pool @ $2.00/hr (Again, probably more than necessary)		$ 16.00/mo
		$ 478.00/mo
	or	$5,736.00/year

In addition, certain chemicals would be required periodically to treat the water for algae, scale, etc.; however, it is next to impossible to estimate this expense at this time.

We hope you understand that without the benefit of detailed working drawings and since fountains in West Texas are still a rarity, these estimates are very difficult to determine. It should be obvious that we are most pleased with the design and with the enthusiasm of the Saddle Tramps Organization and feel very privileged to be participating in this significant project for Texas Tech.

Very sincerely,

SCHMIDT and STUART
ARCHITECTS and ENGINEERS

/s/ Howard W. Schmidt
Howard W. Schmidt, A.I.A.

HWS:mec(g)

TEXAS TECHNOLOGICAL COLLEGE
Lubbock, Texas

MINUTES OF THE CAMPUS PLANNING COMMITTEE

Meeting No. 210 February 13, 1964

A meeting of the Campus Planning Committee was held at 9 a.m. on February 13, 1964, in Room 120 of the Administration Building. Members present were Mr. E. J. Urbanovsky, Mr. Nolan E. Barrick and Chairman M. L. Pennington. In addition, Mr. O. R. Downing and Mr. John G. Taylor were present.

2626. Approval of Minutes

On motion by Mr. Urbanovsky, seconded by Mr. Barrick, the Minutes of Meetings Nos. 207, 208 and 209 were approved.

2627. President's Approval of Minutes

The President approved the Minutes of Meeting No. 207 on January 25, 1964, Meeting No. 208 on February 5, 1964, and Meeting No. 209 on February 5, 1964, with the following reservation:

"The Minutes of Meeting No. 209 are approved insofar as submission of the project to the Board. I do not know that I am completely sold on the idea of spending $15.71 per day for operation but I am willing to be convinced."

2628. Bookstore Addition (H. A. Padgett, Jr., $238,499 - August 1, 1964)

Progress continues to be satisfactory, although the severe weather has interfered to some extent.

2629. Campus Lights for Library, Student Union, Music Building, Horn, Knapp, Drane, Doak and Weeks Area

Tentative plans showing the location of the lights were studied. The estimated number of poles required is 83, and the estimated cost is $200 per pole installed.

It was agreed to request Mr. Moore and his staff to study carefully the location of the proposed lights around the dormitories and report their findings in time for the next CPC meeting.

2630. Dormitory and Dining Facilities (Project CH-Tex-150(D)

A. Unit A (H. A. Lott, Inc., $2,764,546 - August 1, 1963)

Landscaping

Progress

Mr. Urbanovsky reported that bids for the materials to be purchased were opened yesterday and that the total is within the budgeted amount.

B. Units B and C (H. A. Lott, Inc., $2,788,420.40 - August 1, 1964, and $3,513,215.13 - August 1, 1964)

1. Construction Progress

The inside work is progressing satisfactorily. Some delay was experienced in the delivery of roof tile which has now arrived, but the installation has been delayed somewhat by bad weather.

2. Kitchen and Dining Room Equipment (Commercial Kitchens, Inc., $206,766)

Some of the buy-out equipment is beginning to arrive, and all of the equipment to be fabricated is now in the shop of the contractor. Complete delivery is expected early next month.

2630. Dormitory and Dining Facilities (Project CH-Tex-150(D) (continued)

B. Units B and C (H. A. Lott, Inc., $2,788,420.40 - August 1, 1964, and $3,513,215.13 - August 1, 1964)

3. Movable Equipment

(Mr. Mark Gosdin entered the meeting.)

Mr. Moore reported that the plans of the lounge and cafeteria space have been received and contacts made with various firms to submit layout proposals and recommendations.

4. Walks, Drives and Parking Lots

The tentative drawings were discussed in detail, and the following time schedule was agreed on:

February 29, 1964	Plans and specifications ready
March 7, 1964	Send to HHFA
March 21, 1964	Advertise in papers
March 28, 1964	Advertise in papers
April 4, 1964	Advertise in papers
April 9, 1964	Open bids
April 11, 1964	Board approval

As the plans on Unit B will follow those for Unit A and those for the new men's hall, Unit C, will be substantially the same in style, it was agreed to ask the Board of Directors if it would be acceptable to allow us to go ahead and open the bids in time for the next meeting of the Board.

2631. Housing (Other) and Food Service

Consolidated Food Service Units for West, Sneed, Bledsoe and Gordon Halls - November 1, 1964, and Central Food Facilities, September 1, 1964 (J. R. Francis General Contractor, Inc., $1,480,157.10)

Construction Progress

Satisfactory progress is being made, although progress has been slowed to some extent by bad weather.

2632. Infirmary

It was agreed to recommend two wards and bath facilities on the second floor east. The cost is estimated at $71,000 and the money is available.

It was agreed to recommend that construction begin as soon as school is out and completed prior to the beginning of the fall term, if possible.

It was agreed, due to the fact that it will be a small job and relatively complicated from a mechanical standpoint, to recommend an architect's fee of 6 percent with the architects recommended as follows:

1. DeWitt and Spencer
2. Cantrell and Burns
3. Brasher and Goyette

2633. Killgore Beef Cattle Center

A. Equipment

All of the equipment is on order, with the exception of one file cabinet, and should be delivered in time for the dedication on March 12, 1964. Bids are being taken at the moment on the installation of venetian blinds.

2633. Killgore Beef Cattle Center (continued)

B. Feed Mill

1. Equipment and Foundation (Brown-McKee, $62,838)

The construction is approximately 80 percent complete, and a detailed inspection will be made next week.

2. Building and Rail Cover (Stout Steel Builders, $9,795)

It, too, is approximately 80 percent complete.

3. Rail Conveyer System (Stewart Engineering and Equipment Company, $10,251)

The system is almost completely installed.

C. Plaques

The plaques are on order and will be installed prior to March 12, 1964.

D. Roads, Parking and Landscaping

On February 12, 1964, bids were opened and read aloud in Room 120 of the Administration Building in the presence of nine interested persons. A copy of the bid tabulation is attached to and made a part of the Minutes. (Attachment No. 513, page 1528)

The CPC recommended that a contract award be made to Wright Bros. Paving and Dirt Work, 3803 Northeast 10th Street, Amarillo, Texas, in the amount of $21,969.15. Plans and specifications were sent to a total of seven bidders in the Amarillo area, but only the one bid was received. The prices have been carefully checked and found to be in order. Since the original estimates were made, a drainage problem has developed, and it has been necessary to increase the concept and also it has been necessary to include curb and gutters to aid with the drainage problem and to protect the landscaping.

2634. Naval Training Center

There is nothing new to report on the agreement.

2635. Playa Lakes

Dean Thomas has reported that Dr. Marvin Dvoracek of the Agricultural Engineering Department will supervise the construction of the playa lake pits. The excavation by the Highway Department has not started yet.

2636. Psychology and Speech (H. A. Lott, Inc., $911,000 - January 22, 1964)

A. Psychology ($452,000)

The Psychology Building has been completely checked by college personnel and the project architects, and it is recommended that it be accepted as complete on February 3, 1964.

B. Speech ($459,000)

The Speech and Hearing Clinic has been completely checked by college personnel and the project architects, and it is recommended the portion be accepted as complete on February 3, 1964, in order that the Clinic may be used by the Speech Department.

C. Walks, Drives and Parking Lots

On February 12, 1964, bids were opened and read aloud in Room 120 of the Administration Building in the presence of nine interested persons. A copy of the bid tabulation is attached to and made a part of the Minutes. (Attachment No. 513, page 1528)

2636. Psychology and Speech (H. A. Lott, Inc., $911,000 - January 22, 1964)

C. Walks, Drives and Parking Lots (continued)

The CPC recommended a contract award to Frank Hodges, Cement Contractor, of Lubbock, at a unit price of 32.4 cents per square foot for 4" unreinforced walk and 40 cents per square foot for 5" reinforced walk at an estimated total cost of $7,884, the final amount to be determined by actual measure, for the work included in the plans and specifications. Until other construction in the area is complete, it is impossible to install the walks to the west of the Speech Building and the drives and parking lots.

2637. Walks in Front of the Administration Building, Chemistry Building and Social Science Building Area

The tentative plans for the Administration Building only were discussed. It was agreed that the use of brick would be very attractive. However, the brick may be more expensive than can be afforded. There does need to be considerable imporvement in the walks in the area of the Administration Building, as well as the others mentioned above. It was estimated to lay an adequate amount of brick around the Administration Building could run as much as $25,000.

It was agreed that Mr. Urbanovsky and his staff will continue the study and report back.

M. L. Pennington
Chairman

The meeting adjourned at 11:10 a.m., the next meeting to be at 4 p.m. on February 14, 1964, with the Building Committee of the Board of Directors.

Campus Planning Committee
February 13, 1964
Attachment No. 513
Items 2633-D and 2636-C

BID TABULATIONS
February 12, 1964
2 p.m.

THE CONSTRUCTION OF WALKS AND DRIVES, LUMP SUM BID
KILLGORE BEEF CATTLE CENTER

CONTRACTOR	BID BOND	ADDENDA #1 ACKNOWLEDGED	BASE BID
Bi-Co Pavers Inc.			
Boren Construction Company			
Chitwood & Son, Asphalt Contractors			
L & M Asphalt Paving and Repair			
J. Lee Milligan, Inc.			
C. D. Taylor Construction Company			
Wright Brothers Paving & Excavating	X	X	$21,969.15 (A)

(A) Includes crushed caliche as specified. Alternate Bid of $19,400 for pit-run caliche.

THE CONSTRUCTION OF WALKS AT
SPEECH AND PSYCHOLOGY BUILDINGS

CONTRACTOR	BID BOND	UNIT PRICE 4"	UNIT PRICE 5" Reinforced	BASE BID
Elmer M. Calhoun	X	$34.75	$41.75	$8,444.75
Frank Hodges Cement Contractor	X	32.40	40.00	7,884.00
Welch Brothers Cement Contractors	X	34.75	43.00	8,457.25

TEXAS TECHNOLOGICAL COLLEGE
Lubbock, Texas

AGENDA FOR THE JOINT MEETING
OF THE CAMPUS AND BUILDING COMMITTEE AND CAMPUS PLANNING COMMITTEE
TO BE HELD AT 4 P.M. IN THE OFFICE OF THE PRESIDENT
FEBRUARY 14, 1964

2638. Classroom-Office Building (New)

Consider the recommendation that the next building be a general classroom-office building and that studies be made by the April meeting of the Board in order to recommend the project(s), site, time schedule, financing and architects, or as much information as possible.

2639. Dormitory and Dining Facilities (Project CH-Tex-150(D)

Units B and C (H. A. Lott, Inc., $2,788,420.40 - August 1, 1964, and $3,513,215.13 - August 1, 1964)

Walks, Drives and Parking Lots

The plans and specifications are not yet complete, but those for Unit B will follow those for Unit A, and those for Unit C will follow substantially the same pattern.

With permission of the Board, it is requested that the CPC be allowed to complete the plans and specifications and take bids in time for a contract award at the meeting of the Board of Directors on April 11, 1964, in order to maintain the time schedule.

2640. Entrance Marker

Consider the recommendation of the CPC for construction of the Entrance Marker as described in the CPC Minutes of Meeting No. 209, and the fund drive to be presented by the Saddle Tramps.

2641. Infirmary

Consider the recommendation to add a minimum of 14 beds to the infirmary at an estimated cost of $71,000 and the employment of DeWitt and Spencer of Lubbock as architects for this project.

2642. Killgore Beef Cattle Center

1-passed OK

A. Center (Walter E. Wirtz, $378,839)

Consider the recommendation of January 16, 1964, as the final acceptance date for the building and other work performed by Walter E. Wirtz.

B. Roads, Parking and Landscaping

1.-passed OK

Consider recommendation of a contract award to Wright Bros. Paving and Dirt Work of Amarillo in the amount of $21,969.15. A copy of the bid tabulation is attached to the Minutes of Meeting No. 210, page 1528.

2643. Psychology and Speech (H. A. Lott, Inc., $911,000 - January 22, 1964)

1-passed OK

A. Psychology ($452,000)

Consider the recommendation of February 3, 1964, as the final acceptance date.

B. Speech ($459,000)

-passed OK

Consider the recommendation of February 3, 1964, as the final acceptance date for the Speech and Hearing Clinic only.

C. Utility Lines (Anthony Company, $6,500)

1-passed OK

Consider the final acceptance date of December 20, 1963.

D. Walks, Drives and Parking Lots

1-passed OK

Consider the recommendation of a contract award to Frank Hodges Cement Contractor, of Lubbock, in the amount of $7,884 for construction of walks around the Psychology and Speech Buildings, with the exception of the walks to the west of the Speech Building.

Financing - if study proves advisable, authorize Finance Comm. to act for Board between meetings to issue a note on notes to secure const. Bldg. assrnd. funds available for new bldg and insist to best advantage for the college.

TEXAS TECHNOLOGICAL COLLEGE
Lubbock, Texas

MINUTES OF THE CAMPUS PLANNING COMMITTEE

Meeting No. 211 February 14, 1964

A joint meeting of the Campus and Building Committee and the Campus Planning Committee was held at 4 p.m. on February 14, 1964, in the Office of the President.

Members of the Campus and Building Committee of the Board of Directors present were Mr. Wilmer Smith, Chairman, Mr. Harold Hinn and Mr. Herbert Allen. Other members of the Board of Directors present were Mr. Manuel DeBusk, Mr. R. Wright Armstrong, Mr. Roy Furr, Mr. Charles Mathews, Mr. J. Edd McLaughlin and Mr. Al Allison.

Members of the Campus Planning Committee present were Mr. E. J. Urbanovsky, Mr. Nolan E. Barrick and Chairman M. L. Pennington. Others present were Dr. R. C. Goodwin, Dr. W. M. Pearce, Mr. W. H. Butterfield, Mr. John G. Taylor, Mr. Robert L. Mason and Mr. R. B. Price.

In order that the results of the meeting of the Board of Directors may be included in the Campus Planning Committee Minutes for record purposes, the action taken by the Board at the meeting on February 15, 1964, will follow that of the Campus and Building Committee for each item.

2638. Classroom-Office Building (New)

Approved a new Classroom-Office Building as the Number 1 priority project, with studies to be made by the April meeting of the Board of Directors in order to recommend the site, time schedule, financing, architects and other needed information. The studies are to include all research possible for matching funds and all other sources between now and 1968. The need for a Classroom-Office Building was recognized, but needs in other areas should be recognized also.

(The Board of Directors approved.)

2639. Dormitory and Dining Facilities (Project CH-Tex-150(D)

Units B and C (H. A. Lott, Inc., $2,788,420.40 - August 1, 1964, and $3,513,215.13 - August 1, 1964)

Walks, Drives and Parking Lots

Authorized the CPC to complete the plans and specifications and take bids in time for a contract award at the meeting of the Board of Directors on April 11, 1964.

(The Board of Directors approved.)

2640. Entrance Marker

(The following members of the Saddle Tramps entered the meeting: Mr. Ken Snider, President, Mr. Paul Dinsmore, Past President, Mr. James Cole, Cochairman of the Entrance Marker Committee, Mr. Tom Edwards, Chairman of Publicity, Mr. David Beckman, Chairman of Campus Promotion, Mr. Jerry Blackwell, Chairman of Ex-Students Promotion, and Mr. Bill McCulloch, Chairman of Civic Lubbock Promotion.

Also present was Mr. Wendell Newman, who was the Chairman of the Entrance Marker Project until he graduated in January, 1964.

The Project Architects, Mr. Howard Schmidt and Mr. John Stuart, entered the meeting also.)

2640. Entrance Marker (continued)

Approved the construction plans as described in the CPC Minutes of Meeting No. 209 and the plans for the fund drive as presented by members of the Saddle Tramps.

(The Board of Directors approved.)

2641. Infirmary

Approved the recommendation to add a minimum of 14 beds to the Infirmary at an estimated cost of $71,000 and the employment of DeWitt and Spencer of Lubbock as architects at a fee of 6 percent.

(The Board of Directors approved.)

2642. Killgore Beef Cattle Center

A. Center (Walter E. Wirtz, $378,839)

Approved January 16, 1964, as the final acceptance date.

(The Board of Directors approved.)

B. Roads, Parking and Landscaping

Approved a contract award to Wright Bros. Paving and Dirt Work of Amarillo, in the amount of $21,969.15.

(The Board of Directors approved.)

2643. Psychology and Speech (H. A. Lott, Inc., $911,000 - January 22, 1964)

A. Psychology ($452,000)

Approved February 3, 1964, as the final acceptance date.

(The Board of Directors approved.)

B. Speech ($459,000)

Approved February 3, 1964, as the final acceptance date for the Speech and Hearing Clinic portion only.

(The Board of Directors approved.)

C. Utility Lines (Anthony Company, $6,500)

Approved the final acceptance date of December 20, 1963.

(The Board of Directors approved.)

D. Walks, Drives and Parking Lots

Approved a contract award to Frank Hodges, Cement Contractor of Lubbock, in the amount of $7,884 for the construction of walks around the Psychology and Speech Building, with the exception of walks to the west.

(The Board of Directors approved.)

M. L. Pennington
Chairman

The meeting adjourned at 6:10 p.m.

TEXAS TECHNOLOGICAL COLLEGE
Lubbock, Texas

MINUTES OF THE CAMPUS PLANNING COMMITTEE

Meeting No. 212 March 10, 1964

A meeting of the Campus Planning Committee was held at 1:30 p.m. on March 10, 1964, in Room 120 of the Administration Building. Members present were Mr. E. J. Urbanovsky and Chairman M. L. Pennington. Mr. Bill Felty sat in for Mr. Nolan E. Barrick. In addition Mr. Robert L. Mason, Mr. O. R. Downing and Mr. John G. Taylor were present.

2644. Approval of Minutes

On motion by Mr. Urbanovsky, seconded by Mr. Felty, the Minutes of Meetings Nos. 210 and 211 were approved.

2645. President's Approval of Minutes

President Goodwin approved the Minutes of Meeting No. 210 on February 16, 1964, and Meeting No. 211 on February 21, 1964.

2646. Antenna Farm

Projects with Stanford University and the University of Illinois are continuing.

2647. Bookstore Addition (H. A. Padgett, Jr., $238,499 - August 1, 1964)

A. Construction Progress

Progress in general is satisfactory, and the steel frame is pretty well in place.

B. Fixtures

Time Schedule

It was agreed that sketches are to be submitted to the bidders by April 15, 1964, and bids opened in May in time for approval by the Board at the meeting on May 30, 1964.

It was agreed that Mr. Felty would check with Mr. Cole to see what help is needed in the drawing of the plans.

2648. Building Signs

The problem is still under study.

2649. Burlington Engine

In order to carry out the wishes of the Board of Directors, it was agreed on February 20, 1964, that the only logical site to store the engine is at the end of the present spur, and a trip was made to the site with Dr. Holden. The engine and tender will require approximately 80 feet of trackage and would leave room for about four boxcars. In order to make the storage safe, it was agreed that it would be necessary to enclose the engine and tender completely in chain link fencing and to light the area. Subsequent developments indicated that the enclosed area must be about 96 feet long. Mr. O. R. Downing was requested to work with Dr. Holden to prepare the plans for the "cage" and to secure prices on the installation.

2649. Burlington Engine (continued)

Mr. Downing reported that he had checked with Dr. Holden, and Dr. Holden feels that it will not be necessary to enclose the entire engine and tender with a "cage," but that a chain link fence of six feet height with three strands of barbed wire on top would be adequate to protect the locomotive.

In keeping with Dr. Holden's ideas, it was agreed to install the protective fencing at a cost of $740, including lights for the area, and that steps be taken to install the fencing without further delay. Mr. Taylor was requested to check with Dr. Holden to see if he could finance the installation through Museum funds.

2650. Campus Lights for Library, Student Union, Music Building, Horn, Knapp, Drane, Doak and Weeks Area

Due to a death in the family, Mr. Moore has been unable to report on his study of the location of the proposed lights, and the recommendation will be delayed.

2651. Classroom-Office Building (New)

A. Architects

Various architects in Lubbock and over the State were discussed, and it was agreed that further study will be undertaken before a recommendation is made.

B. Site

With the limited funds available, it was agreed that it should be as close to utilities as possible. Pedestrian access, parking and other future buildings should be important considerations. Various locations were considered, and it was agreed that additional study should be undertaken before a recommendation is made to the Board at its next meeting.

C. Financing

The note has been sold to Rowles, Winston and Company for 2 7/8 percent interest, and delivery is to be made after the next meeting of the Board of Directors, when a set of resolutions for the sale can be authorized.

D. Time Schedule

It will be impossible to make a time schedule until more is known of the project.

2652. Dormitory and Dining Facilities (Project CH-Tex-150(D)

A. Unit A (H. A. Lott, Inc., $2,764,546 - August 1, 1963)

1. Landscaping

The remainder of plant materials is due for arrival about March 15, 1964.

2. Heating and Air Conditioning

Problems are still being experienced in either overheating or cooling in various zones, and the contractor is still diligently working on the problem.

3. Mortar in the Brick and Stone

Apparently a poor quality of mortar has been used in some places on Unit A. The architects have made a complete inspection and are in process of taking corrective measures.

2652. Dormitory and Dining Facilities (Project CH-Tex-150(D) (continued)

B. Units B and C (H. A. Lott, Inc., $2,788,420.40 - August 1, 1964, and $3,513,215.13 - August 1, 1964)

1. Construction Progress

Progress seems to continue to be satisfactory on both projects.

2. Kitchen and Dining Room Equipment (Commercial Kitchens, Inc., $206,766)

The contractor will send the complete list of equipment for Unit B on March 16, 1964, and a crew to install it. The shop work on the equipment for Unit C is 60 percent complete, and the contractor will ship the entire order as soon as it is complete. The time of shipment is anticipated in about three weeks.

3. Movable Equipment

Mr. Moore is working on the movable equipment, but was unable to appear at the meeting.

4. Walks, Drives and Parking Lots

Bids are to be opened at 2 p.m. on April 9, 1964.

2653. Entrance Marker

Total gifts received by the Office of Development as of noon, March 10, 1964, amounted to $4,353.47.

2654. Final Inspections

It was agreed that it might be well for the CPC to review the final inspection procedures to see if all phases are adequately covered.

2655. Housing (Other) and Food Service

Consolidated Food Service Units for West, Sneed, Bledsoe and Gordon Halls - November 1, 1964, and Central Food Facilities, September 1, 1964 (J. R. Francis General Contractor, Inc., $1,480,157.10)

Construction Progress

The progress has been slow, and some difficulty has been experienced in maintaining a fence at the consolidated kitchen-dining room site. It was agreed that other arrangements will need to be made for the fencing, but that the area should not be refenced until excavation actually begins on the south side.

2656. Infirmary

Mr. Felty reported that the architects are working on the plans and specifications, and he was requested to check with them to see if it would be possible to have the preliminary plans and specifications completed in time for study by the Campus Planning Committee prior to the April 11, 1964, Board meeting, and to have the final plans and specifications ready in time to take bids and make a contract award at the May 30, 1964, meeting of the Board of Directors, in order that construction may start as soon as school is out and be completed during the summer months if at all possible.

(Mr. Barrick entered the meeting at 2:35 p.m.)

2657. Killgore Beef Cattle Center

A. Dedication

The dedication ceremony is scheduled on March 12, 1964.

B. Equipment

All the equipment is in with the exception of a few chairs, the manufacturing of which was delayed by a strike. The company is going to lend chairs for the dedication.

C. Feed Mill

1. Equipment and Foundation (Brown-McKee, $62,838)

All the equipment is on hand and is in the process of being installed now.

2. Building and Rail Cover (Stout Steel Builders, $9,795)

The contractor has made good progress since he received the "go sign," and the building probably is all closed in by now.

3. Rail Conveyer System (Stewart Engineering and Equipment Company, $10,251)

The equipment is all on hand and is awaiting installation.

D. Plaques

Delivery of the plaques is due tomorrow, and attempts will be made to have the plaques installed before the dedication.

E. Roads, Parking and Landscaping (Wright Bros. Paving and Dirt Work, $21,969.15)

The contractor is making good progress and if the weather is not too bad, it is anticipated that the roads and parking will be completed in time for the dedication. Additional time will be required for landscaping.

2658. Library

Book Return

The Student Council requested the CPC to study the possibility of a book drop. The consensus of the CPC was that a walk-up book return could be fairly easily and logically installed, but a drive-up return would be very complicated and expensive. There seemed to be no readily feasible solution to a drive-up return, but it was agreed that a further study will be made.

2659. Long-Range Utility Plan

Mr. Mason's memos of November 17, 1962, and November 22, 1963, are attached to and made a part of the Minutes. (Attachment No. 514, page 1537)

After considerable discussion, it was agreed that it would be necessary to develop a long-range utility plan as soon as enough specific information on the college building program is available to make a determination.

2660. Museum

A copy of Dr. Holden's request of February 25, 1964, to the Campus Planning Committee is attached to and made a part of the Minutes. (Attachment No. 515, page 1538)

2660. Museum (continued)

After discussion, it was agreed to see if someone can be made available to work with Dr. Holden to develop a floor plan for the Industrial Unit as quickly as possible in order that it may be used to raise funds. However, it was strongly felt that it is impossible to make an overall master plan without a great deal of additional study, and the location of the Industrial Unit would be subject to the development of the overall master plan. It was the consensus that it would be well to hire professional help to prepare the long-range plan, preferably to be financed by other than college funds under the guidance of the Campus Planning Committee and Dr. Holden.

2661. Music Building

Additional Office Space in Lobby Area

The consensus was that it might be possible to provide the suggested office space in the lobby of the second floor, but the feasibility of using that on the first floor was doubted. It was agreed that a rather comprehensive study will need to be made of possible available space in the Music Building and elsewhere on the campus before a decision can be made.

2662. Naval Training Center

With the exception of a few minor details, the terms of the lease are pretty well agreed.

The Navy has requested that the construction of new facilities be postponed one year due to a financial complication that has arisen over the Tulsa station. The CPC has no objection to the additional year's extension, provided the College can use the land for agricultural purposes.

2663. Playa Lakes

The playa lakes are being excavated at the present time.

2664. Psychology and Speech (H. A. Lott, Inc., $911,000 - January 22, 1964)

A. Speech ($459,000)

Status

The stage rigging and hardware are in place. The curtain should be completely installed in about three weeks. Shipping of the seats has been promised on March 14, 1964. The carpet is installed.

B. Walks, Drives and Parking Lots (Frank Hodges, $7,884)

The work has started, but delay has been experienced due to bad weather.

2665. Textile Engineering Building Heating

The heating has been improved in general, but some difficulty is still being experienced in some areas.

2666. Utilities

A. Cutoffs

A copy of the original arrangement on utility cutoffs is attached to and made a part of the Minutes (Attachment No. 516, page 1539) in order that it may be available for future use and guidance.

2666. Utilities (continued)

B. City Removal of Overhead Service

It was agreed that it will be necessary to remove the telephone poles south of the new men's residence hall and to run the telephone service to the west underground. Mr. Mason was requested to see if the telephone company would pay the expenses of direct burial of the line and, if so, it will be necessary for the College to put a pipe under Flint Avenue in order to pull the service under the street.

2667. Walks in Front of the Administration Building, Chemistry Building, and Social Sciences Building Area

The projects are still under study.

2668. Walk from Music Building to Student Union

Mr. Urbanovsky said he would be able to install the walk.

M. L. Pennington
Chairman

The meeting adjourned at 4:40 p.m. in order for the CPC members to look at the exterior of the Speech Building.

TEXAS TECHNOLOGICAL COLLEGE
Lubbock, Texas

Office of Supervising Engineer

November 17, 1962

Mr. M. L. Pennington
Vice President and Comptroller
Campus

Re: Long Range Utility Plans

Dear Mr. Pennington:

Long range planning of utility services at Texas Tech entails continuous study of each utility: steam, condensate return, chilled water for air conditioning, natural gas, water, the sanitary sewer system, the storm sewer system and the electrical distribution system.

For some three years prior to the design of the new steam generating system in 1958, studies were made of steam needs for each existing building on the campus. The estimated needs and probable location of all proposed buildings were then given due consideration before arriving at the size of the new boiler unit. The unit was then selected on the basis of having capacity to supply the needs of the College until it enters into the next round of building from Constitutional Amendment Funds in 1968.

The sizes of piping within the distribution system of each utility service are carefully selected as each extension is made from the existing system, so as to accommodate ultimate needs for additional construction which may come into any area at some future date.

It is felt that the present basic system for each service is of ample size to serve the needs of the College for the foreseeable future. However, continuous observations and studies of loads to all buildings must be made. The condition of all components of each system must be appraised. We must detect, observe, and institute remedial action on all weak points of the present system as such occur. This will be very important during each of the next few winters as well as the next few summers. We must determine and maintain a current evaluation of the amount of spare capacity present in each utility system. This we expect to do.

At the same time we must keep up to date, as nearly as possible, on probable size and location of all future buildings, together with expected dates such buildings may be constructed.

It seems entirely possible that if the high-rise, large-capacity type dormitory unit is utilized on locations west of Flint Avenue in the future, consideration will be given to the installation of a relatively small hot water or low pressure steam boiler to supply the needs of the structure. Such a system would be completely automatic in operation. A system such as this was installed in the Physical Plant Building. Likewise, the air conditioning for such a dormitory unit might be provided from equipment installed to serve only the needs of the building. Such buildings will naturally be separated by considerable distance from other such units due to requirements for the parking of cars and outdoor recreation for occupants.

It may be found that a heat-pump system may be appropriate to install in certain of our future buildings. Such a system would provide heating as needed, or cooling when such is required.

Present studies do not indicate that the College will be likely to enter into the field of generating its own electricity within the very near future. We have a very favorable electric rate at the present which does not include a demand charge. This is probably due to having two power companies in Lubbock, each of which is eager to have the College as a customer. To provide electric generating and substation equipment to serve the College would require an initial expenditure of several million dollars. With the demand for additional classrooms, offices and research facilities that the College will experience during the ensuing years it does not appear likely that we shall want to establish and operate our own electric generating facilities, although the idea will be kept in mind as a possibility, at all times. Properly trained personnel to operate and maintain such a system will be of considerable significance in this consideration.

The Institutional Self-Study Report of the Committee on the Physical Plant to the Steering Committee stated, "The occasion should never arise when the Director of Utilities awakens some morning only to learn that the heating plant cannot produce enough steam to heat the newest building on the campus." It is our plan to guarantee that such cannot come about.

We feel that during the next couple of years the existing system, as installed and as operated, will provide the evidence needed for planning the design of future additions to the utility system. At the same time we plan to keep abreast of current developments and installations for institutions such as Texas Tech so as to be able to make the proper recommendations as the needs of the College require additions to its utility systems.

Sincerely yours,

/s/Robert L. Mason

Robert L. Mason
Supervising Engineer

RLM:mm(b)
cc: Mr. O. R. Downing

Campus Planning Committee
March 10, 1964
Attachment No. 514
Item 2659

MEMORANDUM
From
OFFICE OF SUPERVISING ENGINEER

Texas Technological College
Lubbock

TO: Mr. M. L. Pennington DATE: November 22, 1963

SUBJECT: Philosophy of Long Range Planning for Utility Services at Texas Technological College

During growth stages of a college, as the institution moves past the "small" category it becomes more inconvenient to shut off utility services for even a short period of time. Greater numbers of people become effected by interruptions, research programs will be underway which require continuous use of utility services, classrooms and the Library will be in use from early morning until late at night, custodians will perhaps be working a schedule from before midnight until approximately 7 a.m.

Loop feeding of utility services such as electricity, steam, gas and water provides the most economical and feasible systems to assure continuous service to any particular building. Each utility loop may follow the perimeter of the inner campus, and receive feed from two sources, usually at approximately opposite points on the loop. Individual building services will then be extended radially from the perimeter loop to the building itself.

Isolation switches installed in electrical circuits, valves and interconnections in service lines for gas, water and steam enable sufficient pressure to be maintained at all points and provide the necessary flexibility to maintain continuous service.

Utility planning, along with other campus planning, must be projected well into the future. Long range utility plans must be developed from the campus plan, with adequate allowance made for changes in concept and program which may be planned for any particular area of the campus.

Equipment must be purchased by competitive bidding, but it must have been carefully specified to assure dependable, economical performance. It must be chosen to operate for periods without attention. Monetary savings in maintenance and operation costs can be realized by controlling basic fans, pumps, compressors, etc., from remote central locations, and by the use of pilot lights to indicate whether equipment components are in operation.

In summary, the expansion of the college heating plant, and the extension of each utility service line on the campus has been planned and installed from the basic thought of providing adequately for the long range needs of a growing college in the most economical manner possible, both in initial capital investment and in costs for maintenance and operation of the systems throughout the years.

/s/Robert L. Mason

Robert L. Mason
Supervising Engineer

RLM:mm(b)

Campus Planning Committee
March 10, 1964
Attachment No. 515
Item 2660

THE MUSEUM

TEXAS TECHNOLOGICAL COLLEGE
Lubbock, Texas

February 25, 1964

To: The Campus Planning Committee

From: W. C. Holden, Director of the Museum

In Re

A Master Plan for
the Future Museum Building

1. Need for a Master Floor Plan as soon as possible.

A committee from the Texas Ginners Association came to see me a few days ago. They were concerned about what progress had been made toward getting the old Tyler horsepower gin, now in storage in our warehouse, reconstructed. I explained to them our disappointment over failure of the proposed city mill tax; but assured them that in time we would build the Industrial unit to house it. The committee said it was ready to help raise the money to build the Industrial unit, and as soon as they had (1) an architect's elevation drawing and (2) an interior drawing showing the skeleton of the old gin (showing the original solid oak timbers), they would be in position to go to the gin manufacturers for financial help. They intimated that the Ginners Association itself would provide some funds. They are anxious to have these drawings by the annual meeting of the Association the first week in May. They feel they can raise the funds and have the Industrial unit complete within two years.

2. Our Problem.

Assuming that it will be four or five years (maybe longer) before the College will have funds to build the main initial unit in exchange for the present building, it seems to me we cannot very well plan, or locate, the low-cost Industrial unit until we at lease have a master floor plan of the main unit. Certainly for reasons of administrative cost, visitor traffic control and other considerations, the Industrial unit should be contiguous to, and at the rear of, the main unit.

If we could go ahead as soon as possible and make a basic master plan for the main unit and agree on its dimensions, we could then locate the metes and bounds of the Industrial unit, prepare complete plans for it and turn the ginner boys loose to raise the money and proceed with construction as soon as possible.

It will be in this Industrial unit that we would place the locomotive and other items of transportation. It is our thought that the Industrial unit will be financed entirely from private sources.

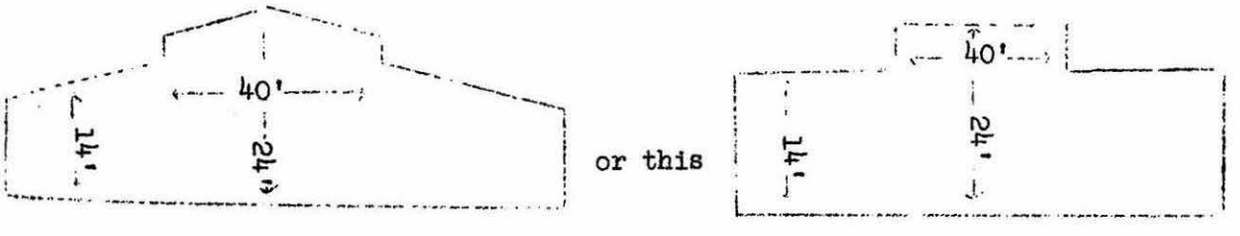
Suggestions for the Master Plan

Since it became obvious a few years ago, due to unprecedented student enrollment and traffic congestion here in the academic heart of the campus, that the Museum should be moved to the periphery of the campus, we have visited a score of other museums, studied their building plans and talked with their staffs as to the good points and mistakes in their buildings. We are certainly cognizant of the mistakes in our present building. One of many examples: the only access to the two main galleries on the first floor from storage, or from the preparator's area, is through a single door 34" wide and 6' 4" high. Furthermore, this door opens onto a narrow passage so that no object over 6' long (assuming it is less than 34" wide and 6' 4" high) can be maneuvered through it. Recently we were offered, as a loan by NASA, a replica of one of the space capsules. We found we could not even get it into the Rotunda without knocking a hole in the wall 8' wide. For what they may be worth, we will list the special considerations we believe should be borne in mind in the making of a master plan.

1. Economy. So great is our need for square footage, we feel that utmost economy of construction should be observed with respect to the various units and still be compatible with the utilization of each. Although the size and shape would necessarily have to be different, it is our opinion that the plan and appearance of the College Maintenance Building could be used as a general approach. That building has a great deal of charm, harmonizes with the overall college architecture and yet has economy of construction.

2. The Industrial Unit. Assuming that this unit will be at the rear of the main unit, it can be of low-cost construction with floor slab poured directly on the ground or on a slight fill, its walls of sheet metal, fabricated board or concrete cinder blocks. It would not require a ceiling. Summer temperatures could be made bearable by cross ventilation and winter by some blower heaters above as is the case in the big warehouse of the Maintenance Building.

   The roof of one section of this unit would need to be 24' above the floor to accommodate the old gin, locomotive, a windmill and other tall items. Perhaps a third of this unit should be of this height. The remainder need not be over 14' in the clear. The Ginners' committee suggested the shape of the Industrial unit might be like this:



   The span of the tall section would need to be 40'. Columns of the 14' sections could be on 20' centers.

   Perhaps the architects can figure up a shape better than either of the above.

   I suggest the initial Industrial unit be planned 120' x 120', but with the idea it can be extended on one side from time to time, as need arises, and funds for the purpose are available.

   The only "extravagance" we need to observe in the Industrial unit is to provide plenty of lighting circuits. They should be laid in concrete floor at least one outlet for each 400 sq. ft., each outlet capable of furnishing 800 watts. About the same ratio of circuits should be provided overhead.

In the end (the side to be extended) should be a large door 10' x 16'. The door leading into the main unit should be 8' x 8'.

In our opinion, there should be windows, high up, on both sides to permit cross ventilation during the summer months (after the dust storms are over).

No partitions are necessary in the Industrial unit at the outset. Later, it may be advisable to put in some of the movable variety.

3. The Main Unit.

This unit will necessarily cost more per sq. ft. than the Industrial unit. It is an adage of museum planning that the storage, workshop, laboratory area equal in square footage the exhibit area. It is our conviction that the main unit should consist of one main floor for exhibits with a full basement for storage, work area and laboratories. The reasons for a basement are two: (1) it makes for economy of square footage, and (2) it provides a fairly even temperature, most essential to storage, without need for air conditioning.

Basement. Assuming there will be a basement, it is my thought that:

(1) Its ceiling should be 8½' or 9' in the clear.

(2) Its ceiling should be 3' to 4' above the grade. This would permit some windows of short height above the grade on either side of the basement for cross ventilation during the hot summer months. I strongly recommend against any excavated areaways for basement windows. We have had too much grief with the areaways of the present building.

(3) If such windows are installed, they will need to have bars and heavy screen to discourage pilferage.

(4) It will be desirable to provide some plumbing for water outlets and sink drainage for some classrooms and laboratories in paleontology, archaeology, mineralogy and natural history, and for workshop and preparator's areas.

Main Floor. Should have one section with a 20' ceiling which would permit of reconstruction of fossil skeletons. We now have in storage almost a complete Imperial elephant which when mounted will stant 15' to 16' high. Dr. Green hopes to secure from the Utah National Dinosaur Park a dinosaur skeleton of huge size. The other sections of the main floor can have 12' ceilings.

In addition to the exhibit area on the main floor there should be:

(1) An auditorium with an inclined floor to seat 350 to 400. Such an area serves multiple purposes and is the heart of museum activity. Our present auditorium is in constant use.

(2) Planetarium. This unit I believe should be located outside the main unit but connected with its visitor traffic system. We hope to get the Planetarium unit privately financed, but it should be a part of the Master Plan because of utility of use as well as appearance.

(3) Six offices for staff.

(4) Conference room and reference library.

(5) File room.

(6) Kitchen adjacent to art area and auditorium.

Electrical Circuits. Much thought should be given the wiring of the main floor. Little money need be spent on electrical fixtures, but many, many circuits should be provided.

Air Conditioning for the main floor is strongly recommended. We can economize on other facets, but indulge ourselves for this one "luxury" (necessity).

Doors and Passageways. Every gallery should be connected with the loading dock, with workrooms, and with storage with doors and passageways not less than 8' wide and 8' high.

Lift or Elevator. A hydraulic lift with a platform 8' x 8' x 20' should connect the basement with the main floor. This would be used only for freight. Ambulatory traffic would be by stairs.

Windows. It is recommended that windows on the main floor be only in the offices.

Size of the Main Unit.

It is assumed that the unit which the College will build in exchange for the present building will be the heart, or the control portion, for the main unit. The size of the part the College will build is not for me to determine. However, in every instance when the basis of trade has been discussed with the Administration, and on at least four occasions in consultation with members of the College Board, square foot for square foot has been mentioned, and in no instance has any other basis been indicated.

I asked Dr. Earl Green to figure the square footage of the present building. Give or take a few square feet, his measurement is as follows:

Exhibit space (2nd and 3rd floors)	18,000 sq. ft.
Storage and work area (basement and attic)	18,000 sq. ft.

Visitor Traffic Control. It is most essential that all visitors to all galleries, including the Industrial unit, the galleries to be built soon and all those which will be added in the future, shall enter and leave the museum through one main entrance where a guard can observe all who come and go. Even the American Museum of Natural History with 13 acres of floor exhibit space and several million visitors a year has such a traffic system.

Rest Rooms. One with three commodes and two urinals for men and one with five commodes for women. If the budget can afford it, in addition the lady members on our staff would like a one-commode rest room in the vicinity of the offices.

Exterior Lines and Finish. The College Architect would know about this matter much better than I. In the interest of economy, I am sure everyone will want to keep the outside features as simple as possible and still have them harmonize with campus architecture generally. The CPC and Campus Architect have been doing an excellent job of this in all buildings of recent construction. The combination of balance, mass, Spanish arches and mission tile has produced an effect with both charm and economy. It has occurred to me that a porch immediately in front of the main entrance of the new museum building with 2, 3 or maybe 4 arches, and just a bit of mission tile might do the trick.

Future Additions. The Museum Association plans to raise from outside sources during the next 10 to 15 years over $1,000,000 for additional units. The master plan, it seems to me, should allow for expansion in three directions: for the main unit on either side, and for the Industrial unit at the back.

Parking Lot. A parking area (at first about 2 acres, later it can be increased) can be planned either in front or on one side. Probably in front would be better, and then it would never be in the way of expansion of the building.

Assuming the main unit will have a basement, caliche from it can be spread immediately on the parking area. (Heaven only knows when we will be able to get a topping put on!)

Entrance Foyer. The entrance foyer needs to be planned with great care. It should be so designed that a four-way traffic control can be effected. Access to each of four areas should be so arranged that any one of the four can be used without access to the other three. These areas are (1) The Main Exhibit galleries, (2) the classrooms and laboratories in the basement, (3) the auditorium and (4) the Planetarium. On the attached sketches I hope to give a clearer idea of what I mean.

The Peter Hurd Mural. It is our hope it will remain where it is. In the interest of public relations, I think we should let the donors make the final decision, but I am encouraged to believe they will agree for it to remain in the present building.

In Summary. The foregoing is only a few of the basic suggestions which should be borne in mind in making a long-range master plan for the museum. There are hundreds of small suggestions (some very important) which can be given in conference with whoever the CPC and Campus Architect select to make the plans.

Attached are some sketches which show the way I have come to visualize the overall master plan. These are entirely suggestive, and are intended as something to depart from. No doubt they can be improved upon, and to do so will not hurt our feelings in the least. In fact, we welcome constructive changes. In all, we have an open mind.

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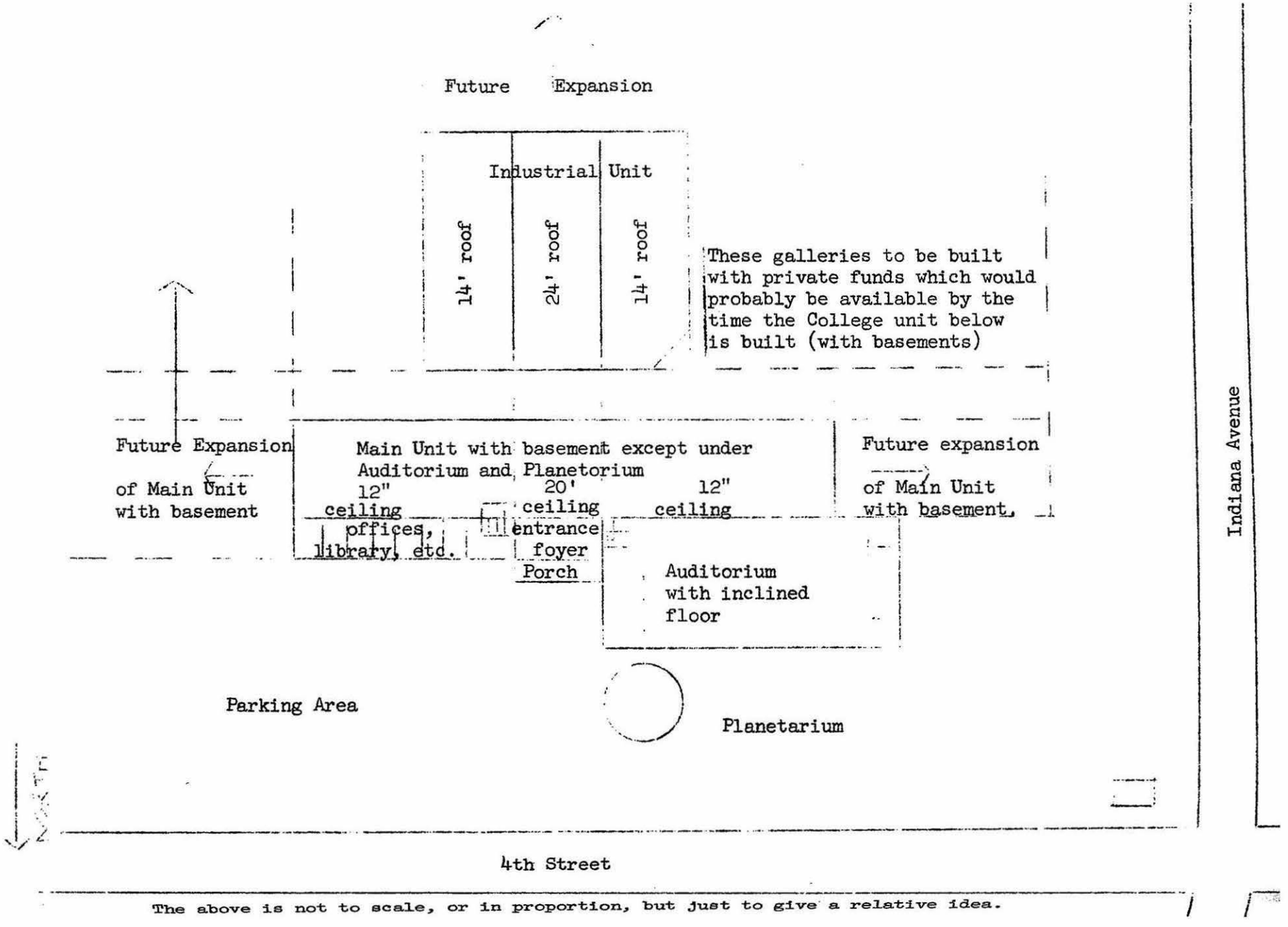

The above is not to scale, or in proportion, but just to give a relative idea.

Campus Planning Committee
March 10, 1964
Attachment No. 516
Item 2666-A

TEXAS TECHNOLOGICAL COLLEGE
March 25, 1958

(Revised) Policy Procedure No. 1

Subject: INTERRUPTION OF ELECTRICAL, GAS, WATER AND HEATING SERVICE

I. Installation of electrical, gas, water or heating equipment, cut-in to new electrical, gas, water or heating sources, etc., require occasional interruptions of service. The procedures announced herein are designed to reduce such interruptions to the minimum and to forewarn the activities concerned.

II. Responsibility of the Supervising Architect and College Engineer:

The Supervising Architect and/or the College Engineer will inform the Director of Building Maintenance and Utilities whenever it becomes necessary to interrupt electrical, gas, water or heating service due to a contractor's requirement. The contractor should be informed on receiving a contract that electrical, gas, water or heating interruptions should be anticipated and announced as far in advance as is feasible, and that the cut-in will be at a time most convenient to the College, e.g., late at night, weekends or holidays.

III. Responsibility of the Director of Building Maintenance and Utilities:

A. Requirements which can be predetermined:

The Director will inform the heads of departments of the effected areas of a contemplated electrical, gas, water or heating interruption in sufficient time to permit any necessary adjustments of operations. The Director will determine at the time of notification <u>any potential</u> loss from deterioration of foods, agricultural laboratory activities, etc., which might result from these interruptions. Should such potentials exist, the Director will take measures to prevent or minimize loss to the extent of his resources.

B. Emergency interruptions:

Unforeseen circumstances may require an electrical, gas, water or heating cutoff. In such cases, the Director will immediately notify the department heads concerned, furnishing them with an estimate of the time period of interruption.

IV. Responsibility of department heads:

<u>It is essential that department heads or other personnel charged with the activity inform their associates or assistants of pending electrical, gas, water or heating interruptions</u> in order to complete the notification and prevent calls to the Maintenance and Utilities Department.

A further requirement exists in <u>emergencies</u> for access to rooms containing electrical panels, gas, water or heating controls. In most cases, the Building Maintenance and Utilities employees have keys to obtain access. However, in those instances when this is not the case, a responsible person with keys must be available to permit the workman to enter the essential area with the least possible delay.

(NOTE: This supercedes Policy Procedure No. 1.)

M. L. Pennington
Vice President for
Business Affairs