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SCHEDULE

October 30, Appleton  Butte Des Morts Golf Club
                      3600 W. Prospect Avenue
October 31, Madison  The Edgewater Motor Hotel
                      666 Wisconsin Avenue
November 1, Milwaukee Milwaukee Exposition & Convention Center
                          & Arena (MECCA)
                          500 W. Kilbourn Avenue

SEMINAR AGENDA

8:30 - 9:00 A.M.  Registration, Coffee
9:00 - 9:30 A.M.  Natural Gas Pricing, Supply and Promotions
                  ANR Pipeline Company
9:30 - 10:00 A.M. Natural Gas: New Technologies
                  and Recent Equipment Developments
                  Gas Research Institute
10:00 - 10:15 A.M. Break
10:15 - 11:45 A.M. Successful Natural Gas Applications
                  Guest Architect and Engineer Speakers
11:45 - 12:00 P.M. Question and Answer Session
12:00 Noon Refreshments and Lunch

For additional information, contact Wisconsin Natural Gas Industry, care of ANR Pipeline Company (414) 547-5528. Attention: Mr. William Goudey.
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Did You Hear The One About . . .

Put a couple of architects in a room, give them a beer, a glass of wine, or a cup of mineral water . . . and before long they might be making negative comments about their ability to practice architecture profitably.

Did you hear about the architect who inherited a million dollars? He couldn’t decide what to do with it so he decided he’d keep practicing architecture until it was all gone.

This “joke” seemingly told whenever a group of architects get together, could be reflective of one of the most serious problems facing contemporary architects. What’s that problem? Perhaps it’s that architects have a habit of putting themselves down in terms of their ability to command income and profits commensurate with their abilities. It seems logical that this self depreciation can only lead to these barroom stories becoming truths in the eyes of architects, owners, and the general public.

No one is suggesting that the financial rewards involved in architecture are similar to those involved in brain surgery. In fact, architects do deserve more money than they currently command. What’s interesting is that if you’re in a car with a bunch of architects and you pass by a roadside fruit stand, someone will say, “That’s a fellow who couldn’t make it practicing architecture.” A car full of bus drivers, osteopaths, shoe salesmen, or accountants would not make the same statement.

The problems facing contemporary architecture are great enough without the need for architects to bad mouth themselves.

Make your 1985 New Year’s Resolution early . . . don’t put down architecture. There is a strong belief and consensus within the architectural community that their services and profession have tremendous benefits to the general public; this commitment should be promoted.

/ SN T THAT "MICE VAN DER ROHE." THE FAMOUS GERMAN ARCHITECT?

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wisconsin architect/october 1984
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Terminal Building Expansion
Milwaukee Mitchell Field

By Grace B. Stith

Airport for the year 2000! When completed in fall of 1985, that is what Milwaukee's newly expanded General Mitchell Field will be. Designed as a major gateway to Milwaukee, the new airport will project the image of the city as an exciting place, worthy of a second look.

Construction has been going on for months behind the scenes. "When did you build this?" was the repeated reaction of regular users of Milwaukee Airport when the new concession area was first opened June 30th. "We believe that reaction proves the success of our four years of research, planning, and drawing," comments Jordan A. Miller, AIA president of Miller and Meier and Associates, Architects and Planners, Inc. of Milwaukee. "In fact, we were tearing apart and building for weeks before most people realized anything was going on."

Miller and Robert D. Cooper, executive vice-president of the architectural firm, dealt in depth with airlines, FAA representatives, and Airport Director Barry Bateman. Complicated construction details proceeded without interrupting a single flight schedule. This was possible because the building has been constructed behind the old terminal. The northern half, which will duplicate the recently opened concession lobby, will follow the same pattern.

Also worthy of a second look is the unique financing of this project. The $42,000,000 terminal expansion used no taxpayer money. Milwaukee County issued 25-year bonds to be paid by the airlines who use the airport. Airlines also finance airport operating expenses.

Blending "old" with "new" has been an important part of the planning. The parking ramp, built about ten years ago, is connected by its bridges at the third floor level to the new building concession lobby.

In the final phase, the essential headaches of travel — tickets and baggage — will be handled with ultimate convenience, largely through functional separation. The roadway serving the terminal will (Continued on Page 11)
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be split into parallel arrival and departure roadways, the departure roadway serving the new ticketing building and the arrival roadway serving the remodelled baggage claim building. This separation will decrease traffic congestion since traffic will be defined and controlled from the time it enters the grounds to the parking ramp on arrival and departure roadways.

Visitors to the new facility are immediately aware of its spatial openness. A skylight over the concession lobby fills this space with diffused natural light, which adds a feeling of spaciousness to the interior and is also energy efficient using insulated glass.

Finishes selected are "high-tech", as sleek and sophisticated as the aircraft serving the airport. Typical of this is the material chosen for the exterior walls. Like a thin pliable skin, the panels have a thermoplastic core sandwiched between two sheets of aluminum. It lies extremely flat and also creates an effective barrier to dampen sound and vibration.

The three-dimensional space frame structure is explained by Miller as a perfect example of "architecture as art". Travelers can gaze upward to myriad white triangles which belie the structural job they perform. This "high-tech" design, symbolic of air travel today, offers efficiency and speed. The amenities provided — a place to rest, eat, drink, shop, or wash-up, offer today's traveler choices during waiting time, also a part of traveling.

The architects considered everyone in their sensitive design. In addition to spacious restrooms which really work for wheel chair travelers, there is a separate nursery where either parent can use the diaper changing tables and special facilities for family travel.

The resulting combination of function and aesthetics will give Milwaukee an efficiently operating airport, and will serve as a prime attraction for industry to Milwaukee and to Wisconsin. The design portrays a region deeply rooted in technology and committed to a celebration of life. It is intended to reinforce Milwaukee's image of "gemutlichkeit and exuberance". The entire scheme, the architect explains, was designed to "visually connect sky and ground, preparing the waiting traveler for the experience of flying".
1. Concession lobby, looking toward NW from concourse E.

2. South window wall with view to runways. High-tech lighting fixtures above some of the lobby seating add special convenience to travelers.

3. Looking from lobby toward SE where food service is located.

4. Detail of space frame structure and insulated glass skylight.

5. Concessionaire area, where each shop keeper designed their own space. Service core is located behind tile wall.

6. Burgundy glazed tile wall, laid by Stark Mantel & Tile Co., becomes a reflective mirror of activity in the mall.

7. Canvas umbrellas, striped awnings, and plants give a feeling of warm hospitality to the coffee shop area.

8. Back-lit bar of glass blocks lends a sophisticated atmosphere to the lounge area.

9. Skychef operates two large dining rooms suitable for banquets or meetings.
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Building design requirements included the development of a two-story addition to the west and north elevations of the present two story structure, a one story concourse and gate wing, and an enlarged basement area. Interior space requirements include expanding ticket counter, baggage, air freight, display, and lease space facilities and adding a coffee shop, bar and restaurant. The second floor interior design requirements include the addition of corporate and administrative office space for Air Wisconsin, Inc. Terminal sizing requirements were established by utilizing a computer forecasting method called linear regression analysis.

The airport terminal is located on a relatively flat piece of land situated in the middle of the entire air operations area of the airport. It is the focal point of all air operations, business and pedestrian flow. Because it reflects the hub of activity, the design was required to illustrate the importance of the terminal as a first impression image of the community from a visitor’s perception. The entire interior of the original building required complete renovation to accommodate the needed expansion of services.

An energy conscious design solution was utilized in the following building features:

- A passive solar interior was constructed in the gate and concourse areas which utilized a southern exposure and glazed glass system to penetrate a dark quarry tile slab. This system acts like a heat sink which captures and maintains energy.

- A skylit atrium area was constructed to allow direct lighting to enter the center hub of the terminal spaces as well as reduce lighting energy consumption.

The design solution also integrates a steel structure framing system with no bearing walls which allows for future expansion in any direction. The gate and concourse areas are structurally designed to receive a future second floor addition.

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What Is "True" Construction Management

By Robert A. Schulz, P.E.
Morse/Diesel, Inc.

If I were to ask for the definition of Construction Management, I would get many opinions and definitions. Two of those definitions might be as follows:

1. Construction Management is the provision of professional services on a fee basis to assist an Owner/Client in constructing a project on time and within budget. These services include, but are not necessarily limited to, selection of bidders, conceptual budgeting, scheduling, expediting, site coordination and payment review.

2. Construction Management is exactly what the two words imply. The management of construction. Construction Management is the organizing and constructing of a project within a time frame, budget and parameters as established by the customer.

I would be less than honest if I didn't tell you in advance that my feelings of Construction Management are slanted toward the means and methods used by Morse/Diesel rather than what we commonly know as Construction Management in this area.

My definition is: Construction Management is a professional service provided to an Owner by a firm which, as a member of the team, acting as the Owner's agent, assumes total responsibility to manage the construction process from inception through completion of the project, acting at all times as the Owner's alter ego. It is the last portion of this definition that in essence defines the "TRUE" portion of Construction Management. Webster defines alter ego as a second self, especially a trusted friend. Morse/Diesel's philosophy is that you cannot own or have interest in a construction company, an architectural firm or an engineering consulting firm and at the same time be a "true" construction manager. By providing Construction Management services exclusively on a professional services basis, Morse/Diesel removes itself from the influences and prejudices which can affect the Owner/Designer/Builder relationship. One cannot serve two masters at the same time.

Construction Management was an idea demanded by the times. Up until the early 1900's, all builders employed all the skilled labor necessary for the construction of a project, bought the materials and completed projects with little or no outside assistance. In the truest sense, they were general contractors. Early in this century, skilled laborers began to offer their services in return for a lump sum, "Lumpers", as they were called, performed the service and the contractor bought the materials.

When lumpers began buying their own materials, they became subcontractors. Because construction is comprised of a group of skills, sub-contracting quickly spread to all facets of the construction process. As this occurred, the role of the general contractor changed from that of a provider of services to that of a purchaser of services and overseer of service suppliers.

All of this evolved without significant change to the manner in which buildings were built, however. Owners realized a need for a building, retained an architect, and invited general contractors to bid on the cost of transferring the design to reality. The contractor's bid was and remains today the sum of the sub-contracts, job overhead, plus profit.

Morse/Diesel believes that the only completely effective way an Owner can control the level of quality, cost and schedule of a building project is to have at his side throughout pre-planning, planning, design and construction phases a competent construction professional who can give direction to planning and design as well as buy services and materials and see to it that all was put in place properly and according to schedule.

Morse/Diesel further recognized that the CM service is one of professional counsel and management, property provided on a professional fee basis. As Morse/Diesel innovated such Construction Management methods as scope planning and buying, critical path methodology, fast tracking and other techniques which clearly demonstrated a superiority to the traditional process, the industry began to change. This Construction Management approach to building challenges the very fundamental relationships that had existed among those involved in the construction process.

The services provided by Construction Management as a member of the team are generally broken down into two phases, - the pre-construction phase and the construction phase. The pre-construction phase is the most important because it is during this phase that the Construction Manager actually controls and manages the process. The typical tasks performed by the Construction Manager during this phase are to:

1. Review schematic and preliminary plans, outline specifications and advise the Owner and architect thereon. Prepare a conceptual budget based on a trade-by-trade breakdown.

2. Consult throughout the design phase with the architect and recommend economies consistent with requirements of the program and sound construction practice while maintaining the aesthetic qualities desired by the architect.

3. Prepare a detailed cost budget based on schematic plans and run budgets as the plans are developed. Where possible all estimating should be in-house without the use of subcontractors. When subcontractors are used, a market is immediately established.
which may not correspond to the fair value for the product.

4. Continually advise the architect during preparation of final contract documents. Advise further with respect to availability and pricing of materials, merits of alternative systems, value engineering, trade jurisdictions, practicability of details, extent of off-site prefabrication, and packaging for bidding.

5. Review the contract documents. Bring apparent discrepancies and omissions to the attention of the architect. Recommend potential bidders and bid packages.

6. Provide a final cost estimate prior to issuance of bid documents. Aid in cost analysis and preparation of possible alternatives to the base bid for each package.

A. Receive, tabulate and forward to the architect all inquiries of bidders, together with recommendations of action to be taken. The architect will prepare and issue all necessary addenda.

B. Tabulate, analyze and evaluate all bids and make appropriate recommendations to the Owner regarding contract awards. This is done by meeting with each contractor and scoping the project in detail to insure that all the bids are what is generally referred to as "apples-and-apples".

7. Prepare preliminary construction schedule for entire project.

8. Develop a cost value for each activity, based on the schedule developed, for use in preparing an expenditure forecast schedule (projected cash flow).

9. During all phases, make such reports to the Owner as in the opinion of the construction consultant and Owner shall be necessary. Attend conferences as are required.

CONSTRUCTION PHASE

I. General Management And Coordination

A. Coordinate and superintend the work to be performed by all of the contractors through to completion and see to it that the materials furnished and the work performed are in accordance with the drawings, specifications and contract documents. This coordination and inspection should in no way supersede the inspection of the architect or his aesthetic or engineering judgment.

B. Coordinate the efforts of all contractors to insure that the project is on schedule and is well constructed in accordance with the contract documents.

II. On-Site Management

A. Establish on-site organization and lines of authority in order to carry out the overall plans of the Owner and architect in all phases of the project on a totally coordinated and efficient basis.

B. Establish and implement procedures for, and maintain coordination among the Owner, architect, the various contractors and outside agencies having jurisdiction with respect to all aspects of the project.

C. Prepare and develop an on-site record-keeping system which will be sufficient in detail to satisfy an audit by the Owner.

D. Assist the Owner in obtaining the general building permits and certificates of occupancy as required.

E. Coordinate the obtaining of all legally required permits, licenses and certificates.

F. Coordinate all aspects of the work with all local municipal authorities, governmental agencies, utility companies, etc., who may be involved in the project.

G. Hold job meetings when necessary, attended by the contractors, architect and Owner's representative to discuss procedures, progress, problems, scheduling and open items.

H. Coordinate the work of all contractors until final completion and acceptance of the project by the Owner to insure that the materials furnished and work performed are in accordance with the contract documents and that work on the project is progressing on schedule, culminating in a comprehensive final inspection.

III. Coordinate Testing And Controlled Inspection

A. Develop and establish for the Owner's benefit and for his use a quality inspection control system in order to insure that the standards of construction called for are met.

B. Develop a checking and testing procedure which will insure that all systems are adequately tested and balanced prior to their acceptance.

IV. Coordinate Shop Drawing Submissions

A. Receive, review for compliance with the Contract Documents shop drawings, materials and all items submitted by the contractor. Requests for approval of subcontractors, delivery schedules, material lists, shop drawings, samples, and the like are commented upon and submitted to the architect for concurrent approval.

B. Monitor and implement the flow of all documents and materials to insure the proper sequence of approvals by the architect so as not to delay the progress of the work.

V. Review All Progress Payment Requests

A. After award of contract, sit down with contractor and prepare a schedule of estimated values of the main branches of the work totaling the amount of the contract.

B. Together with the architect, review and approve payment requests and forward to Owner for payment.

VI. Process All Change Order Requests

A. Receive and review all change order requests from the contractors. Review unit prices, time and material changes and similar items. Consult with the architect, and after mutual agreement, submit recommendations to the Owner.
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B. Review all changes proposed by the Owner and/or architect and make recommendations to the Owner and/or architect regarding their practicability, costs and effect on completion schedule.

C. Monitor and advise upon requests for changes required by field conditions and progress of the work, and obtain approval from the Owner and the architect.

VII. Provide & Supervise General Condition Items

A. Procure as many general condition items as possible on a competitive basis. If due to the nature of the work such as OSHA protection and general clean up, it is impossible to get competitive bids, provide such labor force, at cost, required to do such work.

VIII. Provide Scheduling Administration

A. During the course of construction, the construction manager will make an analysis of the materials and equipment that will be required on the job. He will determine requirements for dates when shop drawings must be approved, fabrication and manufacture begun and completed, and delivery dates required on the job. He will maintain a scheduling system to expedite materials and equipment deliveries through the course of construction. Generally, a standard bar chart is used for this and all scheduling purposes as it is the easiest for all to follow and understand.

IX. Close Out The Project

A. At the proper time, coordinate the preparation of punchlists, together with the architect, indicating the items of work remaining to be accomplished, and insure that these items are completed in an expeditious manner. Help prepare certificates of substantial and final completion.

B. Assemble all guarantees, warranties, etc., as required by the contract documents and forward them to the Owner, certifying that they are complete and cover all work as required.

C. Coordinate and expedite the preparation by the contractors of operating manuals and similar instructions; obtain architect's approval to insure that they are sufficiently comprehensive; and forward them to the Owner, certifying that they are complete and cover all items as required by the contract documents.

D. Receive, check and forward to the Owner all lien waivers required prior to issuance of final certificate of completion and final payment to contractors. Make recommendations on the withholding of payments to contractors where deemed necessary to protect the Owner. Determine value of uncorrected work.

E. Expedite the contractor's preparation of "as-built" drawings of the entire project in accordance with the terms of the specifications. The completed "as-built" drawings shall be subject to the approval of the architect and submitted to the Owner for its records upon final completion of the project.

During the late 1960's and early 1970's, the term Construction Management became very much in vogue. It was during this time when there was relatively little inflation so that prices could be rather accurately predicted in the foreseeable future. It was during this period of time that a lot of general contractors, architects, engineers and others added the term "Construction Management" to their plaques. Everything was glorious until the oil embargo in the mid-1970's during which prices shot up dramatically. Because of the inexperience of many so-called construction management firms, many projects during this time came in way over budget. I am not saying that Morse/Diesel didn't get caught with the same unknowns. But because of our experience and expertise, we were able to keep it to a minimum. Because of the oil embargo and resulting inflation, many lenders in recent years and up to the present have gone to what is called Guaranteed Maximum Price contracts. Morse/Diesel as a company initially refused to be involved with these types of contracts because it took away from the true construction management philosophy. Actually, what we were becoming were general contractors in a sense of the word. However, as the saying goes, you cannot fight City Hall. We had to eventually agree to these guaranteed maximum price contracts which comprise approximately 40% of our construction management volume today. When a guaranteed maximum price contract is required, several things happen:

1. Fees are higher.

2. The start of construction is delayed because the drawings must be nearly complete before work is started.

3. A contingency is required.

4. There is a tendency to have an adversarial relationship with the Owner which again does not fit the definition of true construction management.

Many people in the "Construction Management Business" today are purely construction coordinators. This is not what construction management is. A construction manager is required to have strong and forceful people both in the office and in the field who can actually manage the job and not just coordinate it.

The future of construction management is up for grabs. We see more guaranteed maximum price contracts; we see that hand shakes are less likely and every "I" must be dotted and all "Ts" crossed. And no matter how carefully we control or handle the job, we see many more claims.
An Architect Responds

By David Torphy, AIA
Kahler • Slater • Torphy • Engberg

I've read the article you wrote with an eye toward understanding more about how construction managers benefit architects. It has special interest for me because of the key role Morse-Diesel has in the design process for the Menominee Valley Prison where the construction manager serves as a consultant to the design team.

Our firm has worked with more than a few CM's, and I agree with you that more than a construction coordinator is needed by most clients; advocacy for the owner's best interests is of prime importance. Too often a construction manager's personnel are being "managed" by sub-contractors.

True construction management (read "good" for "true") requires talent, just as any worthwhile professional service does. It takes special people to bring about a special project. A good CM should directly influence the course of a project by promoting functional adequacy, sound construction methods, cost/benefit balance, timely delivery, and (at all times) client satisfaction. Note that "true" construction managers give service to owners for the same reasons architects do.

A growing number of architects now place a significant value on the expertise a good construction manager has in support of pre-construction activities. We see your access to accurate cost data and the ability to offer constructive advice about alternative materials and methods of construction definite pluses for the design team. You also bring pragmatism to the process, thus tempering the caprice of an undisciplined designer. In the area of mechanical and electrical engineering design, your work at the early stage of a project can be effective in the same way an architect benefits from sound criticism and challenge when the basic decisions are made.

On the matter of control, I see it in a different light. I believe control should be shared according to the degree of actual responsibility each participant in the team has. It takes power to gain control over the results, but in design and construction one assumes that a successful project is a goal shared by everyone. I hope you don't want to put a box around a set of expert-provided services, ensure that the last word is in your camp and force everyone else to compromise. That kind of power has no place in the construction industry; power should be shared and used for checking and balancing. To do this well, construction managers must have good leadership skills including the ability to embrace many points of view and to present convincing arguments which lead to good decisions.

Construction management was born when the need of owners for better cost and schedule control became acute. Today, it seems to me, owners have become more sophisticated. They want more than low first cost as a benefit from their investment, They want more value-added services from us all. Perhaps construction management as a term is beginning to lose its original purposes as the management concept itself undergoes challenges. Critics everywhere complain that American enterprise is being managed to death. Entrepreneurial skills, particularly drive, innovation and risk taking, are being submerged by the many managerial techniques which tend to standardize everything. Our world is bored with the mean, the median, the optimum. Managed projects meet requirements but miss the boat on many intangible elements which make buildings work while delighting the user.

I think the construction industry will grow out of the expert-specialist mode, and we will become more like generalists again, working as partners with shared goals.

I hope "true" construction management as a concept and "good" construction managers as members of the construction team will be offering even more services that add value and which help owners, architects, engineers and contractors bridge the gaps of uncertainty as they conceive and execute new projects.

Sincerely,
David N. Torphy, AIA
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Effective October 1, 1984 the WSA Group Health and Life Insurance Program will be available without health evidence, even to the sole proprietor. Firms wishing to enroll in our group health and life insurance plan can do so by applying for coverage prior to November 30, 1984. It's possible that this plan won't be offered again until sometime in 1986.

The WSA Health/Life Plan is highlighted by a competitive package of rates, benefits, and services including 48 hour claims service. Optional coverages include Dental/Orthodontia and Short Term Disability Insurance. The rating history of the AIA Group Plan for Firms, of which the WSA Program is a part, has been fairly stable with employee rates increasing an average of 10.5% each year since 1978.

If further information is desired concerning our program this year, please contact Sue Esquibel or Catherine Seidler at AA&C by calling 1-800-854-0491 toll free.

What??
You've got it... a Certified Industry Hygienist.

An architect recently called the WSA office looking for a Certified Industry Hygienist (C.I.H.), as required for a team the architect was putting together to go after a job. In 10 minutes we found the answer for him. No, we aren't that smart. All we did was call the AIA library in Washington, D.C. They're there to help you (and us).

CHRISTY FLEEGE, AIA, has been appointed by Governor Earl to serve on the Historic Preservation Review Board. Christy joins JIM POTTER, AIA, who also serves on that board.

MR. CLARENCE HUETTENRAUCH, AIA/CSI/CCS, of BHS Architects, Inc. has been appointed to serve as a member of the SPECTEXT Committee of the Construction Specifications Institute. This five-person Committee is responsible for the master guide specification developed by the Construction Science Research Foundation covering Divisions 1 through 16. Mr. Huettenrauch has recently published two books, "Architectural Supervision and Administration," and "Preparation for a Roof Inspection Report," and has written various articles for national publication.

ALBIN KUBALA, AIA and ROBERT SALETRA have been named Vice-Presidents of Plunkett Keymar Reginato Architects. The firm's SAMUEL DADIAN, AIA has been elected a member of the Board of Directors.

DAVID P. BRUST, AIA has joined S-B-F Management, Inc. as Executive Vice President. Brust's responsibilities will include coordination of project architectural services, development and construction, and management of existing real estate properties. Brust previously served as principal in the Milwaukee architectural firm of Brust-Zimmerman, Inc. from 1969 to 1977 and Brust-Heike/Design Associates from 1977 to 1984.
DENNIS HORBINSKI, AIA, has been named Director of Marketing for Forward Wisconsin, Inc. His new address is 11270 W. Park Place, Suite 550, Milwaukee, Wisconsin 53224. Should you want to call and harass him at work the number is (414) 359-2359.

C. LEVONNE LAUGHINGHOUSE, Associate of Milwaukee, Wisconsin has been appointed, June 1984, to serve as a member of the Design Professional Consultant Selection Committee for the Milwaukee Metropolitan Sewerage District. The committee’s charge is 1) to establish selection criteria, 2) to review qualifications, services and design proposals rendered by engineering and/or architectural design professional consultants, and 3) to recommend appropriate selectees to the District.

R.C. SHUTTER, INC., has relocated their offices to Plaza Del Sol, 6502 Grand Teton Plaza, Madison, WI 53719. The new phone number is (608) 829-3966.

MICHAEL D. GORDON, AIA is no longer working for Durrant Architects. He has joined the staff of Potter Lawson Pawlowsky which is located at 15 Ellis Potter Ct., Madison, WI 53711. Telephone number - (608) 274-2741.

The Master of Architecture program at the University of Wisconsin-Milwaukee (UWM) recently received reaccreditation for the maximum five year period by the National Architectural Accrediting Board (NAAB). The accreditation decision was based on an extensive self-study prepared during the past year and an intensive three-day site visit by a three-member NAAB Review Team.

The UWM program was one of several to be judged against the newly adopted NAAB “Achievement-Oriented Performance Criteria”. The criteria is stated in terms of awareness, understanding and abilities that students should have achieved before graduation in four major areas: 1) History, human behavior and environment; 2) Design; 3) Technical systems; and 4) Practice. Members of the NAAB Team that reviewed the UWM Masters of Architecture program were Edward A. Sovik, FAIA (Sovik, Mathre, Sathrum, Quanbeck), Professor William L. Porter, FAIA (MIT); C. William Brubaker, FAIA (Perkins and Will).
DAEDALUS, a catalogue of accounting and management information software for engineers and architects, has been added to the WSA library. This three-ring binder contains over 200 pages of detailed information regarding different software packages available to architects and engineers. Contact persons, price, subject categories, etc., are all itemized.

To borrow this, simply drop by the WSA office or contact Sandra by telephone.

Demand has been great to borrow the two video tapes available from the WSA Library... "PROJECT MANAGEMENT" and "NEGOTIATING HIGHER FEES". To put your name on the waiting list, contact Sandra or Karen at the WSA office.

HARTMANN, RANDALL L., was approved for Student Membership in the Southeast Wisconsin Chapter.

RASCHE, DENISE, was approved for Associate Membership in the Southeast Wisconsin Chapter.

KIMLA, LISA KENNEDY, was approved for Associate Membership in the Southeast Wisconsin Chapter.

RASCHE, JAMES, was approved for Associate Membership in the Southeast Wisconsin Chapter.

KOLBERG, TERRY L., was approved for Associate Membership in the Southwest Wisconsin Chapter.

**THE WISCONSIN ARCHITECTS FOUNDATION MEMORIAL FUND**

For various reasons, individuals, families and corporations wish to make contributions in memory or in honor of an architect. A contribution to the Memorial Fund of the Wisconsin Architects Foundation is a fitting way to express such a feeling. Contributions will be acknowledged by the Foundation as shown below unless otherwise requested.

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