HSAE

HEALTH SCIENCES ARCHITECTS AND ENGINEERS INC
UNIVERSITY PARK PLAZA SUITE 704 2829 UNIVERSITY AVENUE S.E. MINNEAPOLIS, MINNESOTA 55414 (612) 378-3833

12 November 1979

Mr. Paul J. Maupin
Health Sciences Planning Coordinator
University of Minnesota
4104 Powell Hall
Minneapolis, Minnesota 55455

RE: Unit B/C Phase I-A
Minn-HP-18
Diehl Hall
Learning Resource Center
Library Remodeling Project

Dear Mr. Maupin:

It is our pleasure to submit for University of Minnesota review the completed design development documents of Unit B/C Phase I-A, Diehl Hall Learning Resource Center Library Remodeling Project.

In addition to the project drawings which have been reduced and bound herein, we have included a revised project schedule dated 12 November 1979. The new schedule indicates completion of the Library portion for Owner occupancy by 7 July 1980 with final completion of the entire project by the second week in October, 1980. Substantial completion of the entire project for Owner occupancy will occur one month prior to final project completion, however.

The Probable Cost Summary indicates the total cost to be $600,000.00. This amount represents construction cost only and does not include other attributable project costs. Upon completion of the contract document phase, another updated cost estimate will be prepared and submitted for your review.

We will be happy to meet at your convenience with the appropriate University Representatives to further review the project.

Sincerely,

HEALTH SCIENCES ARCHITECTS AND ENGINEERS, INC.

Richard J. Carlson

RJC/bs

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GENERAL DESCRIPTION OF PROJECT

The Unit B/C Phase 1-A Diehl Hall Learning Resource Center Library Remodeling Project will consist of the remodeling of existing space located on Floor Two of Diehl Hall and adjacent to the Unit B/C Floor Two East/West corridor link from University Hospitals to Masonic Hospital. This B/C corridor also intersects the North/South main Health Sciences Pedestrian Concourse.

The Diehl Hall space to be remodeled consists of existing laboratory, library reading, and the Scientific Apparatus Shop. The three existing remodeled spaces will provide a total combined area of approximately 33,000 square feet.

The existing laboratory space will be converted into new Learning Resource Center Offices by the University of Minneosta Physical Plant, and will therefore not be a part of the Architects' design responsibility. Accessibility to this area, however, will be provided in the design.

The new Learning Resource Center will provide a facility for Health Sciences students' utilization of learning materials, and will be converted from existing library reading space. A new main entrance to the LRC and lounge will be provided with the demolition of existing toilet facilities and removal of walls for connection to the B/C East/West corridor link. A service desk located adjacent to the entrance will afford visual control of the LRC, library, the check-out facility, and include offices for the librarian and assistant. New toilets will be constructed adjacent to the entrance and will include provisions for the handicapped. The LRC will contain certain N.I.C. equipment such as computer terminals, a micro-computer, and photo copy machines. One-hundred-twenty study carrels will be placed in various flexible clusters throughout the space. Certain carrels will be equipped with facilities for film illuminators, video cassettes, slide viewing, taped programs, etc. A series of small "interaction rooms" will also be constructed in, and adjacent to, this area to provide spaces for group student use.

The new Floor Two main entrance to the LRC will include graphics or directional signage to encourage entering the library from Floor Three. The existing stair adjacent to the LRC entrance will have new doors with hold-open devices to facilitate this concept. The existing central library stair will have a new enclosing wall to provide continuity of the new LRC/Library wall. The existing East Scientific Apparatus Shop will be demolished for remodeling of the library reading and stack areas. Existing stack shelving will be utilized in the library consisting of double rows of 3'-0" long units or a total of 582 stack units. Small and large reading tables will be distributed throughout the area. The existing ramp will remain to provide handicapped access to the South lower floor area.

Floors generally will be carpeted in the LRC for acoustic and housekeeping purposes, and the Library will have a vinyl asbestos tile floor for ease in servicing the stacks. The existing suspended ceiling system grid will remain in these areas and a new matching ceiling system will be extended into the Scientific Apparatus Shop. New ceiling tile throughout the existing ceiling area will be installed.

A new plaster ceiling will be constructed above the service desk/entrance area. Existing wall surfaces will remain wherever possible, and patched, and painted. New partitions will be constructed of steel studs, gypsum lath with veneer plaster, and painted.

The Scientific Apparatus Shop is the only existing space currently air conditioned and, therefore, cooling will not be provided in the remodeled area. Existing trunk and branch ductwork will remain, however, new diffusers will be installed as needed. Existing fan systems will be utilized and, therefore, new fans will not be required. A new sprinkler system will be installed throughout the entire remodeled area.

Existing strip flourescent lighting fixtures will remain in the LRC and Library Area and new matching lighting fixtures will extend into the former Scientific Apparatus Shop. The existing lighting fixtures will be cleaned, relamped, and have new lenses installed. New fluorescent lighting fixtures of a different character will be installed above the service desk area. Switching of fixtures will be provided to allow the options of utilizing selected areas of fixtures at one time.

Allowable areas for smoking generally will be confined to the remodeled Private Offices, Conference and Interaction Rooms, and the Lobby.

Phased construction of the LRC and Library is desired to facilitate its continual operation. Completion of the library space and Owner occupancy will, therefore, preceed the completion of the remainder of the project by several months. The existing laboratory space conversion into Learning Resource Center Offices by the Owner will occur during the construction of the project also.

Contractors access to the site will be from Essex Street Southeast through the driveway between Diehl Hall and Masonic Hospital to the Diehl Hall Floor Three loading dock at the Northeast corner of the Building. Use of an existing 6'-0" x 8'-0" elevator adjacent to the loading dock will be provided to the Contractor for direct access into the spaces to be remodeled on Floor Two. A Contractor's fenced area in the driveway will not be provided. The Contractor's storage and staging will occur within the spaces to be remodeled.

CONSTRUCTION OUTLINE

General Construction

Demolition

Provide all cutting, demolition, removal, patching and restoration, including removal and relocation or reuse of existing materials, equipment, systems, as well as disposition of salvaged materials or debris. Each subcontractor shall be responsible for all demolition work normal to his trade under direction of the Prime Contractor. Remove existing suspended ceilings, light fixtures, ductwork, etc. as required. Remove existing masonry of West and North walls to allow construction of new door openings and entrances. Remove existing toilet rooms, fixtures, etc. Remove existing walls and appurtenances of the Scientific Apparatus Shop as required. Place any salvagable equipment and materials in storage as directed by the Owner.

Floors

Remove existing vinyl asbestos tile, where applicable, patch and repair all existing floor surfaces as required.

LRC carpet shall be dense tufted nylon level loop with woven polypropylene backing for direct glue installation without pad. Material shall have a flame spread rating not exceeding 75.

Vinyl asbestos tile for selected areas shall be 12" x 12" x 1/8" thick of custom color equivalent to Armstrong Imperial Modern Series installed in brick pattern or to match existing where applicable. Install non-slip vinyl asbestos tile on ramp surface.

Ceramic tile in toilet rooms to be 2" x 2" x 1/4" Ceramic mosaic, unglazed, from any color group using 1/8" to 1/4" thin-set mortar method of installation.

Bases

Certain selected existing areas of base shall be patched to match as required.

Resilient bases to be 4" high top set coved type of colors selected. Provide straight base without cove at carpet areas.

Ceramic bases to be similar to American Olean C-833 cove with S-882 cap unglazed to match ceramic tile floor color and using thin-set mortar method of installation.

Walls

Certain selected existing wall surfaces shall be patched to match as required.

Primary partition system shall be framing of 3-5/8" metal studs 16" on-center with 2" sound attenuating blanket insulation and 5/8" gypsum lath screw attached with 1/16" veneer plaster smooth steel trowel for painted finish. Perimeter of partitions to be caulked, of non-combustible construction, and of full height to underside of structure above.

Ceilings

Certain selected existing ceiling surfaces shall be patched to match as required.

The LRC and Library ceilings shall be constructed using the existing suspended lay-in acoustic tile system. The existing metal tee grid will remain wherever possible and new matching grid extended into the former Scientific Apparatus Shop. Install new 2' x 4' x 5/8" thick lay-in acoustical ceiling panels equivalent to Armstrong Minaboard Tile, Classic design, plastic coated white finish, flame spread index range 0-25, STC range of 40-44.

Install suspended ceiling grillage for plaster ceilings and fascias in the scheduled areas. Screw attach 3/8" gypsum lath. Apply 1/2" thick two or three coat gypsum plaster system with final smooth steel trowel finish.

Metals

Provide and install all metal pipe and tube handrails and guardrails as indicated adjacent to ramps and the LRC entrance. Shop fabricate from tubes and pipe of smooth, unpitted, equivalent to cold rolled steel, cut and fitted to shapes, welded, ground smooth and prime painted. Field install 3/8" tempered plate glass panels and secure with metal stops and clips.

Custom Woodwork

Provide and install all plastic laminate casework items such as the service desk and adjustable shelving, including all associated hardware. Comply with quality standards of the Architectural Woodwork Institute. Plastic laminate material shall be general purpose 1/16" high pressure laminated plastic for all exposed surfaces. Core material shall be 40-45 lb. density particle board or 5 ply plywood.

Doors and Frames

Wood doors shall be 1-3/4" thick solid wood flake board core, 28 to 32 lb. density, wood stiles and rails with hardwood face veneer and medium density overlay surface for paint finish, prefitted and packaged, with five year warranty.

CONSTRUCTION OUTLINE (Continued)

Doors and Frames (Continued)

Hollow metal doors shall be 1-3/4" 18 gauge steel face sheets or heavier as required for underwriters label, trussed inner core welded construction, prime painted, reinforced and prepared for hardware installation.

Hollow metal frames shall be one piece welded construction, 16 gauge hot rolled pickled and annealed steel, prime painted, reinforced and prepared for hardware installation.

All door and sidelite glazing shall be 1/4" tempered plate safety glass with attached labels.

Hardware items shall include heavy duty mortise locks with lever handles US32D, steel ball bearing hinges US26D, forged and cast iron rack and pinion door closers with spray aluminum casing, wall mounted magnetic holders, .050 stainless steel kick and push plates US32D, with overhead stops, holders, etc. US26D. Provide Best Universal seven pin cylinders with interchangeable cores, locks keyed to Owner's system as directed.

Rolling Shutters

Provide and install a complete automatic steel rolling fire door system at lobby including motor operation, automatic closing devices and governor. Assembly shall bear Underwriters Class A label, 3 hour fire rating. Curtain shall be constructed of galvanized steel slats, of factory prime finish, complete with angle guides, brackets, and baffle, and Best Universal seven pin cylinders with interchangeable cores, locks keyed to Owner's system as directed.

Specialties

Provide and install fully recessed or semi-recessed steel, red baked enamel finish, full glass door fire extinguisher cabinets as indicated. Fire extinguishers will be provided by the Owner.

Provide and install a complete electronic book detection system equivalent to the "3M Tattle-Tape" equipment including single corridor sensing unit, book check unit, locking exit gate, two locking entrance gates, and book detection strips. Provide full service equipment warranty for one year after Owner occupancy. Vendors shall provide adequate instruction to Owner personnel in operation of system.

CONSTRUCTION OUTLINE (Continued)

Specialties (Continued)

Provide and install toilet partitions, ceiling supported, flush construction with pilasters, high pressure laminated plastic surfaces, including all hardware and attachment devices. Include all bath accessories such as toilet paper holders, sanitary napkin receptors, sanitary napkin dispenser, recessed paper towel dispenser/receptor, and grab bars in handicapped compartments.

Provide and install all tackboard and trim indicated. Tackboard to be natural cork wood, finely ground and compressed into 1/4" thick sheets with burlap back, fully washable, soil resistant, plastic coated finish, of colors as selected. Trim shall be extruded aluminum, satin finish, anodized to match tackboard color.

Equipment

Carrels, book stacks, other furnishings and equipment will be provided and installed or placed by the Owner.

Mechanical Construction

Plumbing Systems

The plumbing system will be installed in accordance with State and Municipal Codes. The plumbing services necessary for the relocated toilet rooms will be provided. The services for the existing toilet rooms will be re-routed as necessary to serve the new toilet rooms and new fixtures will be installed.

Ventilation Systems

Ventilation and heating will be provided by the constant volume supply air units presently serving the area to be remodeled.

The existing supply and return air ductwork will be reused where possible. In the existing library area the existing supply diffusers and return air registers will remain and be reused. In the existing Scientific Apparatus Lab area, the existing diffusers and branch ductwork will be removed and will be replaced with new ductwork and round diffusers to match those in the existing library space. The main ducts in this space will be reused.

The existing exhaust air fan for the Scientific Apparatus Lab area will be converted to a return air fan and connected to the supply fan in order to provide a high percentage of return air to this unit.

The existing library area is not air conditioned at this time and no provisions for cooling will be added to this unit at this time. The Scientific Apparatus Lab is air conditioned. However, to make

Ventilation Systems (Continued)

this space compatible with the existing library, the cooling section of the air handling unit will be disabled as part of the remodling.

The existing toilet exhaust system will be reused for the relocated toilet areas. The existing ductwork will be re-routed to serve the new toilets.

Heating System

The existing heating system will be reused for the remodeled area. The present system consists of steam heating coils in the air handling units, hot water reheat coils and hot water perimeter radiation.

The existing perimeter radiation consists of bare pipe concealed under radiation covers. As part of the remodeling, portions of this bare pipe will be replaced by sections of fin-tube. In addition, each section of radiation will have a self-contained control valve installed. As a final item, the radiation cover in the Scientific Apparatus Lab will be removed and replaced with new cover to match that which exists in the Library space.

Automatic Temperature Control

The existing pneumatic temperature control system will be revised to improve its performance from and energy usage standpoint. This will include the addition of items such as discharge temperature reset to minimize re-heating, revised mixed air controls to minimize outside air quantities and the addition of zone control valves on the perimeter radiation.

Fire Management

A new wet fire sprinkler system shall be installed in the remodeled area. The system will be rated as light hazard and coverage will be limited to 225 sq. ft. per head. Pipe sizing will be by hydraulic calculation. The water source for the system will be the existing 4 inch standpipes in the area to be remodeled.

The existing wet standpipe system will remain in operation. The existing fire hose cabinets will be relocated as necessary to allow for the remodeling.

Design Criteria

A. Outdoor Design Data

1. Winter (-) 19°F.
2. Summer (+) 89°F. dry bulb
   (+) 75°F. wet bulb

Design Criteria (Continued)

B. Indoor Design Data

1. Winter - All occupied areas 68°F., approximately 20% relative humidity.

C. Ventilation Rates

1. Lobby - 8 air changes/hour.
2. Meeting Rooms - 8 air changes/hour.
3. Reading Areas - 8 air changes/hour.
4. Stack Area - 1 CFM/Ft^2.

Electrical Construction

Lighting Types

Fluorescent lighting shall be provided wherever practical for economy of maintenance and operation.

Type	Description	Lamp
A	Existing 1' x 4' 2 lamp fluorescent fixture. Fixtures shall be cleaned, relamped. Furnish and install new holophane refractive grid lens.	2-F40 35W
B	1' x 4', recessed 2 lamp fluorescent with holophane refractive grid.	2-F40 35W
C	6" x 4' recessed 2 lamp fluorescent.	2-40
C-1	Same as Type "C" except 1 lamp.	1-40
D	Linear tube fluorescent.	1-40
E	Ceiling mounted single face exit light with stencil face, 6" red letters, matte white finish. Provide emergency socket. 120V.	2-T6-1/2
F	Recessed mercury vapor downlight. Provide plaster frame.	100 MV

Lighting Levels

Study carrel areas: 50 footcandles.

Task lighting for study carrel to be provided by Owner as required.

Stack Areas: 30 footcandles.

CONSTRUCTION OUTLINE (Continued)

Lighting Control	Lighting shall be controlled by existing contactor system.
Emergency Lighting	An emergency lighting system connected to a battery source shall be provided within the library at reduced levels sufficient for egress-exit illumination.
Secondary POwer Distribution	Basic existing electrical system is 120/208 volt, 3 phase, 4 wire. Existing panelboards shall be upgraded by replacing interiors.
Fire Alarm	Existing fire alarm system shall be extended. New manual stations and horns shall be provided. Provide connection to sprinkler system flow valve.
Wire, Cables and Conduit	All wire will be in conduit and will be copper conductor for branch circuits with 600 volt thermoplastic insulation. All power and light wiring will be installed in conduit. Empty conduit shall be provided for telephone services and communications.
Switches and Receptacles	Switches will be 20 ampere A.C. quiet type and receptacles will be 3 wire grounded type. Plates will be stainless steel. Special configuration receptacles shall be provided as required.
Motors and Equipment	The electrical work will include all starters, controls, disconnects, connections and wiring for motors and equipment furnished under the contract or provided by Owner.

ENERGY STATEMENT

The following energy conservation provisions have been incorporated.

1. The existing temperature control system will be revised and a discharge temperature reset system will be installed for the existing air handling units. This will minimize the reheating that will be required.

2. The existing perimeter radiation will be revised and control valves will be installed to prevent overheating of the space.

3. The mixed air control system will be revised so as to minimize the use of outside air and maximize the use of heat generated by the space lighting and the occupants.

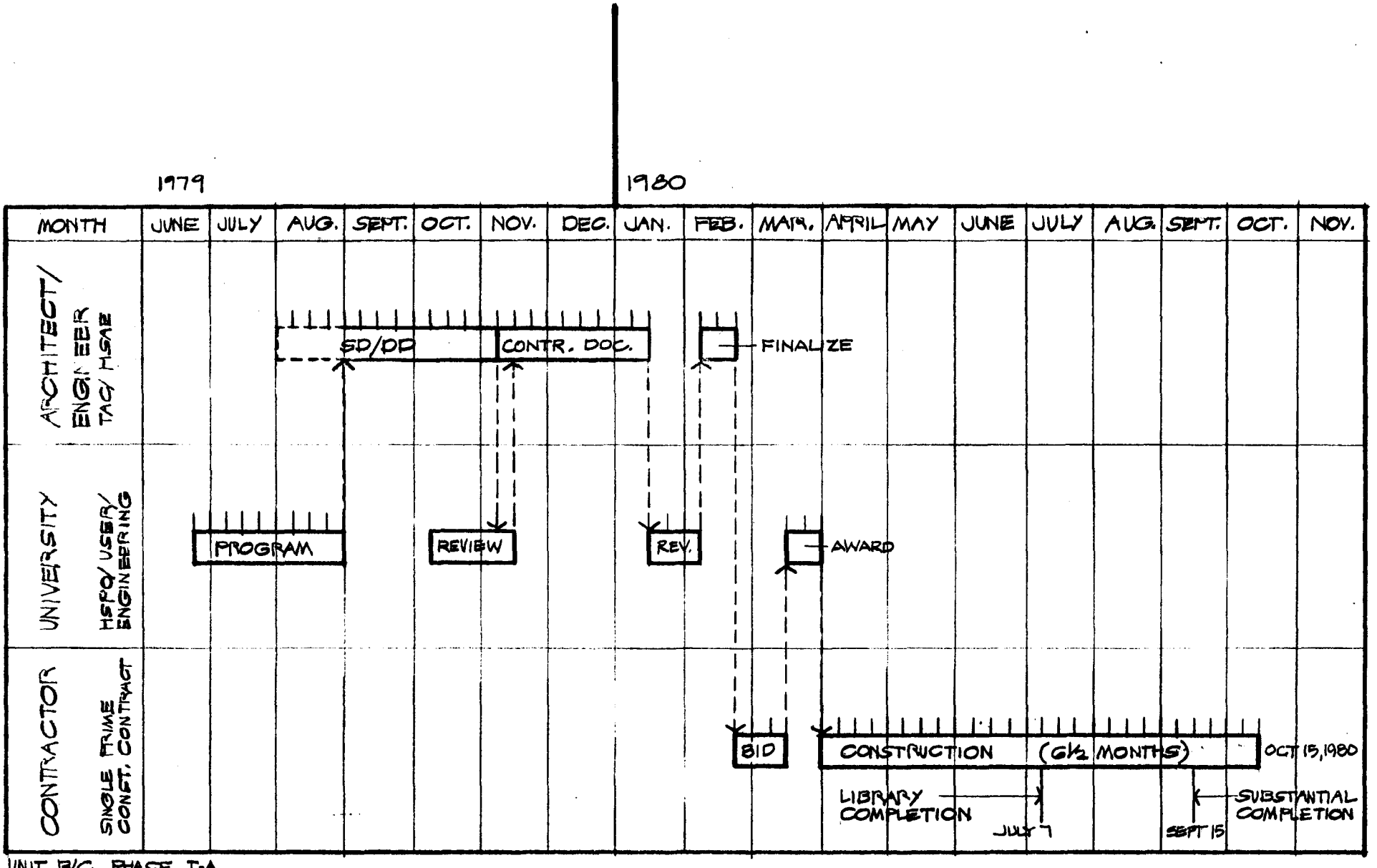
4. The exhaust air system for the Scientific Apparatus Lab will be converted to a return air system to minimize the need for outside air.

5. Lighting levels will be based on I.E.S. Lighting Handbook as maximum levels and applied as required by the Minnesota Energy Code.

6. Efficient lamps will be used to provide lighting. Fluorescent lamps exceeding 60 lumens per watt will be the primary light source.

7. Low energy ballasts will be utilized for new fluorescent fixtures.

8. Localized task lighting will be used to provide increased levels of illumination at specialized tasks and study carrels which will reduce electrical energy for lighting.



UNIT B/C PHASE I-A
DIEHL HALL LEARNING RESOURCE CENTER
LIBRARY REMODELING PROJECT

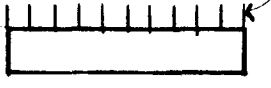
PROJECT SCHEDULE

COMMISSION NUMBER 320.02

FEBRUARY 28 1979; REVISED AUG. 8, 1979; OCT. 1, 1979; NOV. 12, 1979
HEALTH SCIENCES ARCHITECTS AND ENGINEERS INC.

LEGEND

MARKS INDICATE APPROX. NO. OF WEEKS PER EVENT



PROBABLE COST SUMMARY

A.	CONTRACTORS DIRECT AND INDIRECT EXPENSES	$180,300.00	
B.	DEMOLITION AND REMOVAL	22,170.00	
C.	CUT AND PATCH	5,000.00	
D.	NEW WORK	140,890.00	
E.	MECHANICAL	80,000.00	
F.	ELECTRICAL	100,000.00	
	SUBTOTAL		$528,360.00
	DESIGN CONTINGENCY		27,196.00
	COST ESCALATION (8%)		44,444.00
	TOTAL PROBABLE CONSTRUCTION COST		$600,000.00

THE ARCHITECTS COLLABORATIVE, INC.
HEALTH SCIENCES ARCHITECTS AND ENGINEERS, INC.

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

MEMORANDUM

MEMO TO: Unit B/C Phase I-A Diehl Hall
Library Remodeling Project
MEMO BY: Michael Pederson
DATED: 22 August 1979
SUBJECT: Project Code Investigation

The Diehl Hall Library Remodeling Project consists of expanding and remodeling the existing library space located on the Second Floor.

The proposed remodeling is of a non-structural nature and does not amount to more than 25 per cent of the value of the existing building, and therefore according to SBC Section 1.10103 D Alternations "May be made with the same materials of which the building or structure is constructed".

The occupancy of the existing library is assumed to be A2.1 Assembly, with sub occupancies of B2 for offices and workshop (scientific apparatus area). Code requires that there be a 1 hour rated separation between any A2.1 assembly area and any B2 area. If the area between Grids 4 and 6 is remodeled (by the University) as accessory spaces to the library, then a one hour separation may be required between them and the existing B2 occupancies to the west on that floor. However, it may be more appropriate to consider the library accessory areas as B2, and provide a one hour separation along Grid 6 only, with any openings being one hour rated. This would mean that the two new doors leading to the new A.V. storage area from the library would need to be one hour openings. The existing wall along Grid 6 is concrete block, extends to the structure above, and would appear to be adequate separation as it now functions.

A two hour area separation was called for between Unit B/C and Diehl Hall on the original Unit B/C Code Review of January of 1975, and would be the same at this time. This requires that the opening between Unit B/C and the library be protected by a 1-1/2 hour 'B' label assembly.

The basic area of remodeling amounts to approximately 26750 square feet between Grids 6 and 14 and Grids A and J. Using a figure of 50 square feet per person, the occupant load for the remodeled area amounts to 535. This requires 10.7 feet of exit width. The four existing exit stairs provide 14 feet of width, and the existing open stair if enclosed could provide another 5' of exit width.

With an occupant load of 535, the State Building Code Table 17B requires only a total of 4 water closets and 3 lavatories. The existing toilets provide 2 water closets and 4 urinals in the mens room and 5 water closets in the womens toilet. They make no provisions for handicapped facilities however. The new toilets will provide for at least the same number of fixtures and will include provisions for the handicapped.

Attached is a preliminary Project Code Investigation worksheet.

cc: Paul Maupin

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PROJECT CODE INVESTIGATION — SHORT FORM — HGA

PROJECT: UNIT BC PHASE I-A DIEHL HALL LIBRARY REMODELING
LOCATION: UNIVERSITY OF MINNESOTA — COMMISSION NUMBER 320.02
PROJECT MANAGER: RICHARD CARLSON — DATE: 20 AUG 79

APPLICABLE BUILDING CODE	OCCUPANCY CLASS	PROPERTY ZONE	FIRE ZONE
MINN STATE BLDG CODE WITH AMENDMENTS 1978	A2.1 ASSEMBLY		

OTHER REGULATIONS

SETBACK, FRONT:
BACK: SIDE:
MAX. ALLOWABLE HEIGHT
OFFSTREET PARKING:

BUILDING OFFICIAL UNIV. OF MINN

CONSTRUCTION TYPE			
BASIC AREA			
INCREASE FOR FIRE ZONE			
INCREASE FOR SEPARATION			
INCREASE FOR SPRINKLERS			
TOTAL MAXIMUM AREA			
MAXIMUM ALLOWANCE HEIGHT			
FIRE RATINGS:			
EXTERIOR BEARING WALLS	NA		
EXTERIOR NON BEARING WALLS	NA		
INTERIOR BEARING WALLS	NA		
STRUCTURAL FRAME	NA		
PERMANENT PARTITIONS 1705b	NON COMB		
VERTICAL OPENINGS	2		
FLOORS	2		
ROOFS	NA		
EXTERIOR OPENINGS	NA		
AREA SEPARATION WALLS	2		

UNIT LIVE LOADS READING ROOMS 60
STACK ROOMS 125

NO. & WIDTH OF EXITS/FLOOR OR AREA
3 EXITS/10.7' 3302.a

NO. & WIDTH OF EXITS FOR TOTAL BUILDING

MAX. TRAVEL DISTANCE TO EXIT
150' 3307.a

MAX TRAVEL DISTANCE WITH SPRINKLERS
N.A.

DEAD END CORRIDOR UNIT
20' 330

MINIMUM CORRIDOR WIDTH
44" 330

STREET FRONTAGE
NA

LIGHT
UBC 705

VENTILATION
UBC 705

SANITATION SEC 17B
MIN 4 WC'S
MAIN 3 LAVS

FIRE CONTROL SYSTEMS

OCCUPANCY 33A	SF	SF/P	NO. P.
1			
2 A2.1 ASSEMBLY (REMODELED AREA)	26750	50	535
3			
4			
5			
6			
7			
8			
TOTAL			

SPECIAL REQUIREMENTS
1. 2 HR SEPARATION BETWEEN UNIT BC AND DIEHL HALL 505d3
2. 1 HR SEPARATION BETWEEN ANY EXISTING B2 OFFICE OCCUPANCY AND A2.1 ASSEMBLY OCCUPANCY.

THE ARCHITECTS COLLABORATIVE, INC.
HEALTH SCIENCES ARCHITECTS AND ENGINEERS, INC.

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

MEMORANDUM

MEMO TO: Unit B/C Phase I-A
Library Remodeling Project
MEMO BY: Michael Pederson
DATED: 6 September 1979
SUBJECT: Code Review Meeting

PRESENT: Paul Maupin, Robert Swanson, Don Herron, Ron Holden, Gary Hall, Richard Carlson, Michael Pederson.

Richard Carlson gave a rundown of the project describing the architect's interpretation of applicable code requirements.

It was agreed that there should be a one hour separation between the library spaces and the existing lab spaces to the west. This will occur generally at Grid 4 and will be accomplished by the University remodeling efforts, and will not be a part of this contract.

Don Herron and Ron Holden expressed that the existing two hour separation between Unit B/C and Diehl Hall is not sufficient as an "area separation" between two separate buildings. This appears to be in conflict with the original B/C code analysis done in 1975 where a two hour separation was used with openings protected by one and one-half hour B label doors.

The new opening from the B/C corridor to the Learning Resource Center will have to be a three hour A label rolling shutter instead of a one and one-half hour B label.

There is a desire to keep B/C and Diehl Hall separate in order to avoid major alterations to the existing B/C fire management system. The B/C fire management system will not be extended into Diehl Hall.

The Diehl Hall fire management system was not remodeled as had been planned. The existing manual alarm system will be expanded as appropriate for the second floor remodeling area. In addition, the alarm should be tied into the alarm system @ Unit A.

Sprinklers will be necessary throughout the project area because it is a below grade space. This requirement may mean changing the existing ceiling system if the sprinkling system cannot easily be installed around the existing grid.

cc: Paul Maupin
Don Herron
Ron Holden

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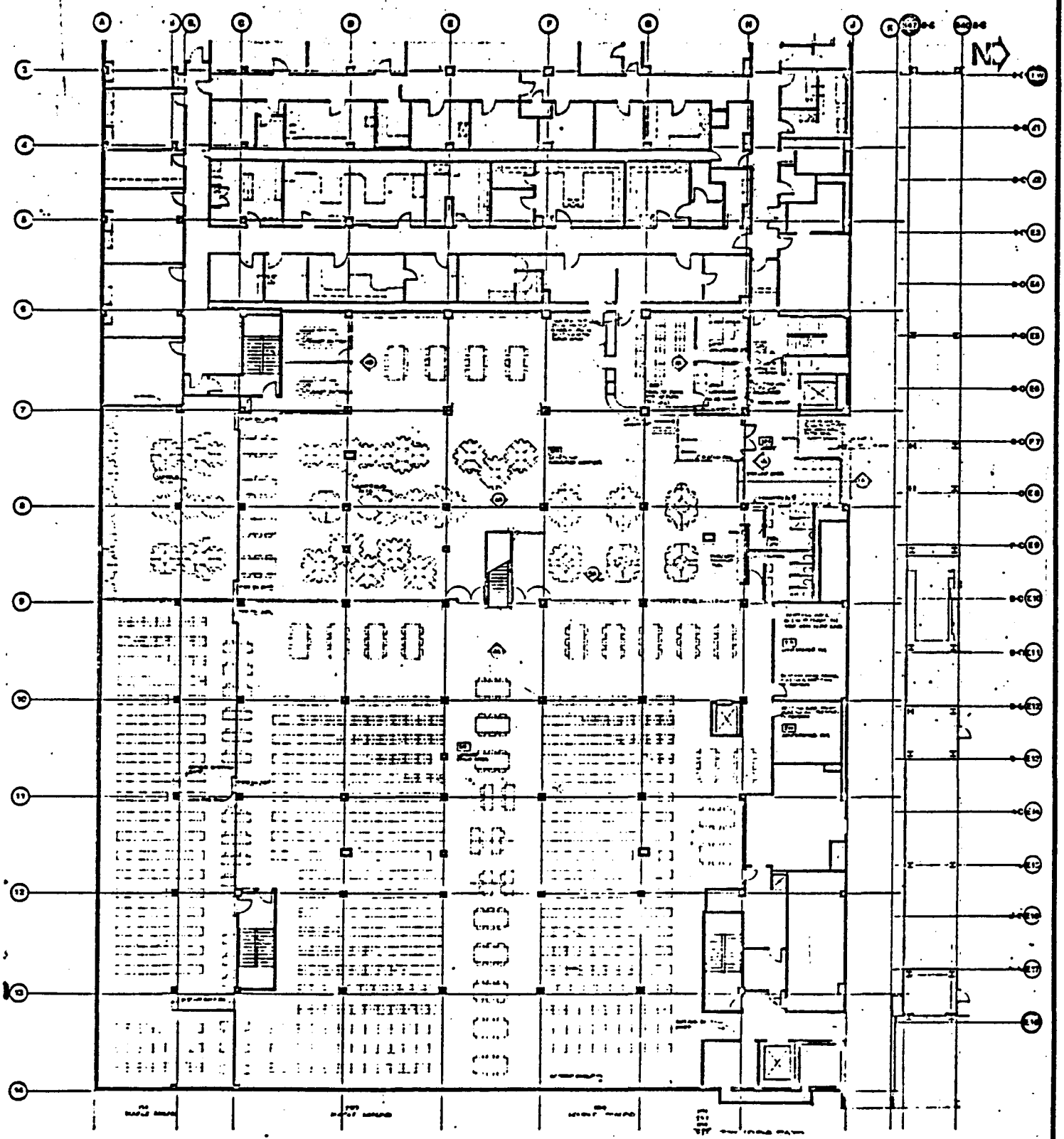


2ND FLOOR PLAN

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

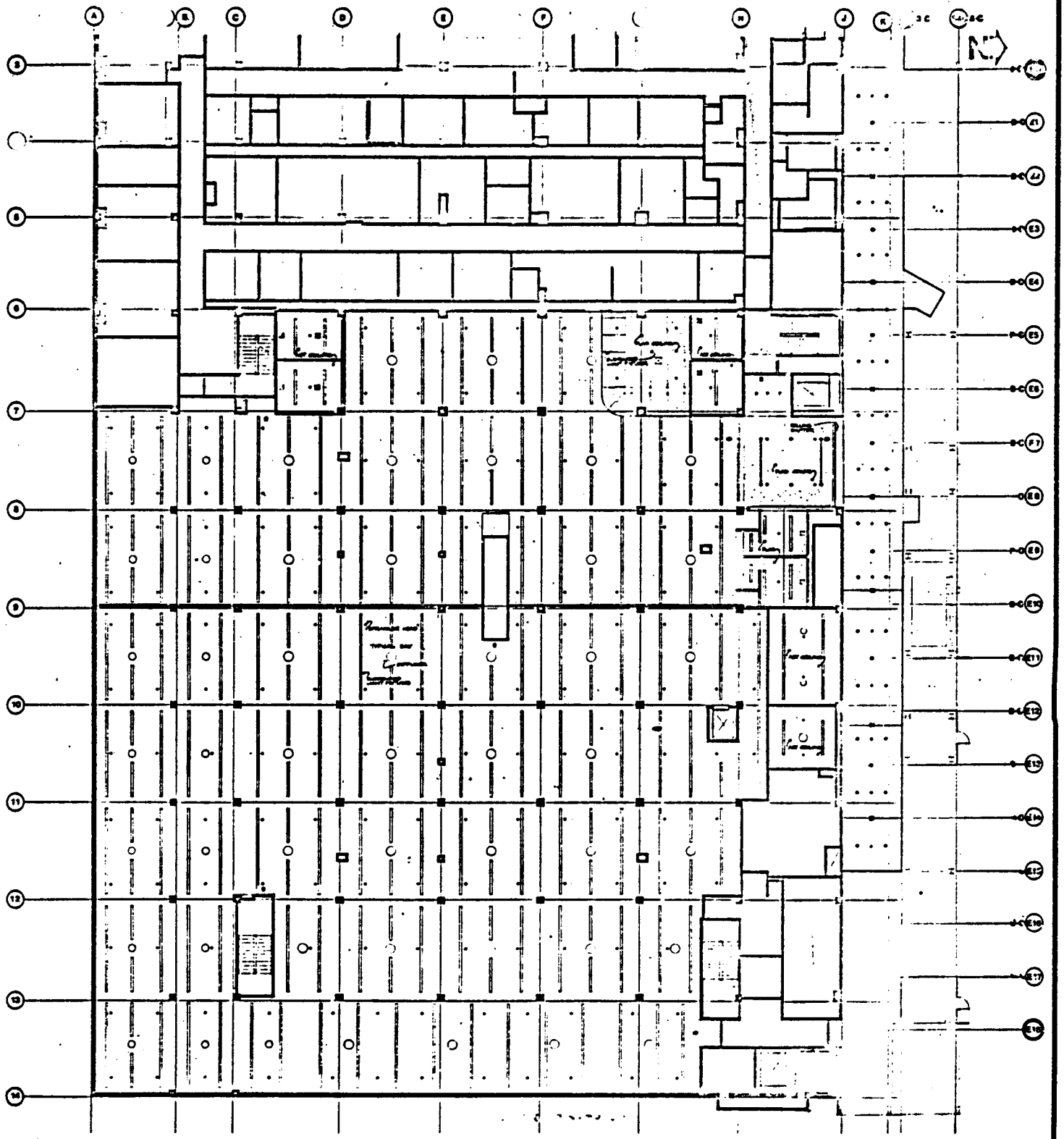
THE ARCHITECTS COLLABORATIVE, INC. CAMBRIDGE, MASS. &
THE HEALTH SCIENCES ARCHITECTS & ENGINEERS, INC.

JOB NO	3120.02
DRAWN	MP
CHECK	RC
SCALE	1/8"=1-0
DATE	26 SEP 79

DESIGN DEVELOPMENT
UNIT B/C PHASE 1-A

DIEHL HALL

A1



2ND FLOOR CEILING PLAN

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

THE ARCHITECTS COLLABORATIVE, INC. CAMBRIDGE, MASS. &
THE HEALTH SCIENCES ARCHITECTS & ENGINEERS, INC.

JOB NO	310.02
DRAWN	MP
CHECK	RC
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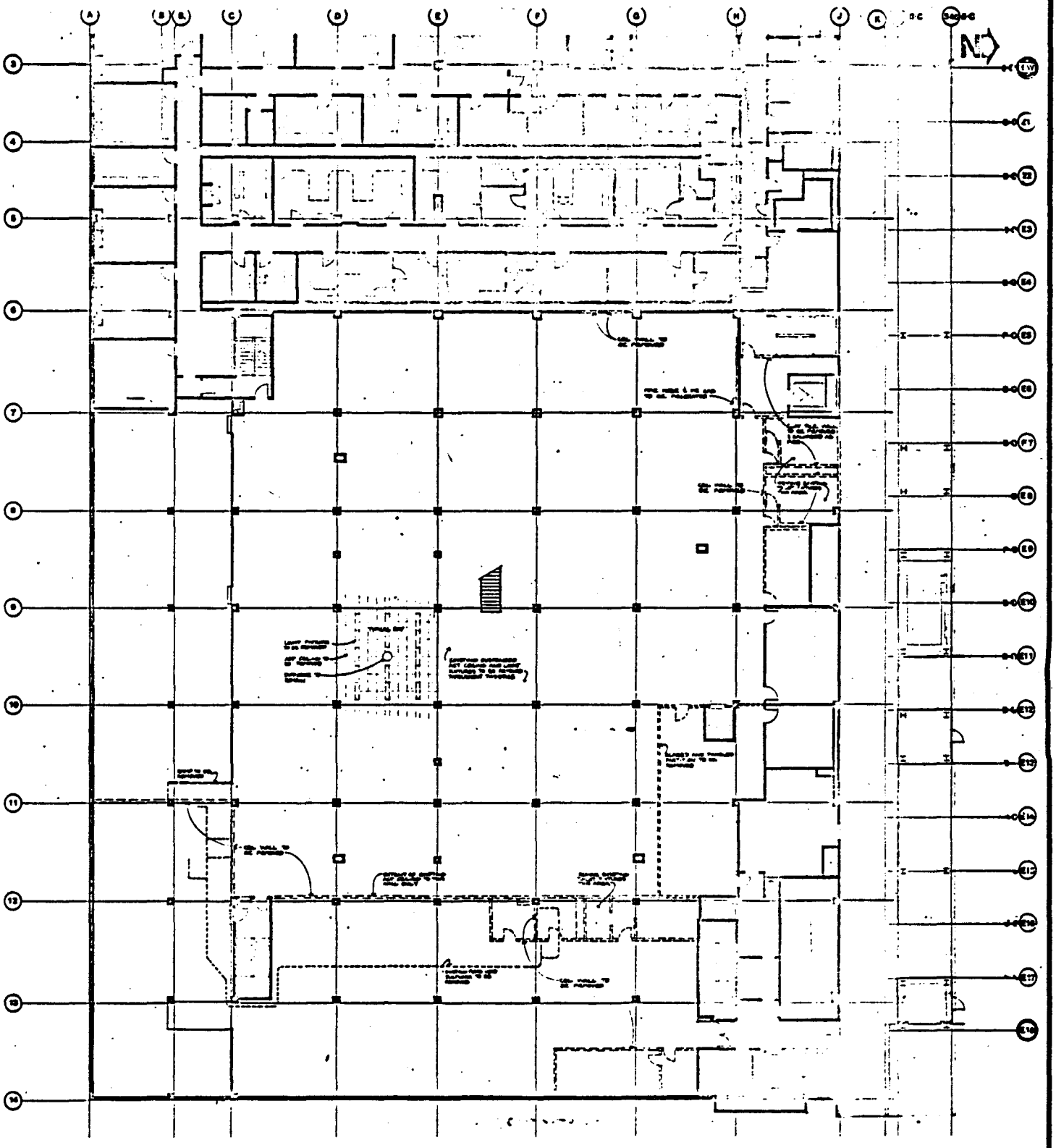
DATE	26 SEP 79

DESIGN DEVELOPMENT
UNIT B/C PHASE I-A

DIEHL HALL

SHEET NO A2



2ND FLOOR DEMOLITION

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

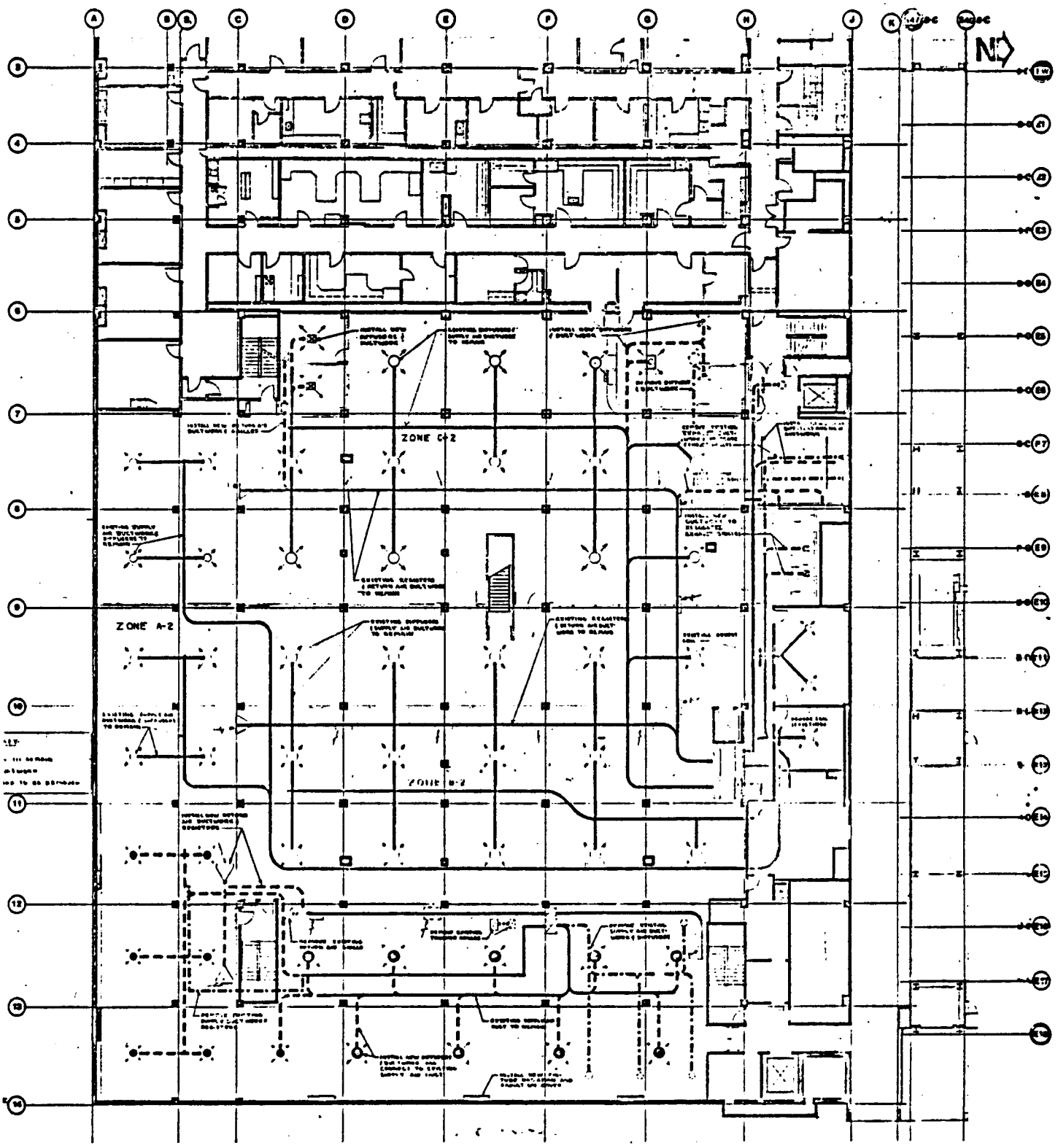
THE ARCHITECTS COLLABORATIVE, INC. CAMBRIDGE, MASS. &
THE HEALTH SCIENCES ARCHITECTS & ENGINEERS, INC.

JOB NO	320.02
DRAWN	MP
CHKD	RC
SCALE	1/32" = 1-0
DATE	26 SEP 79

DESIGN DEVELOPMENT
UNIT B/C PHASE I-A

DIEHL HALL

SHEET NO
A3



2ND FLOOR MECHANICAL

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

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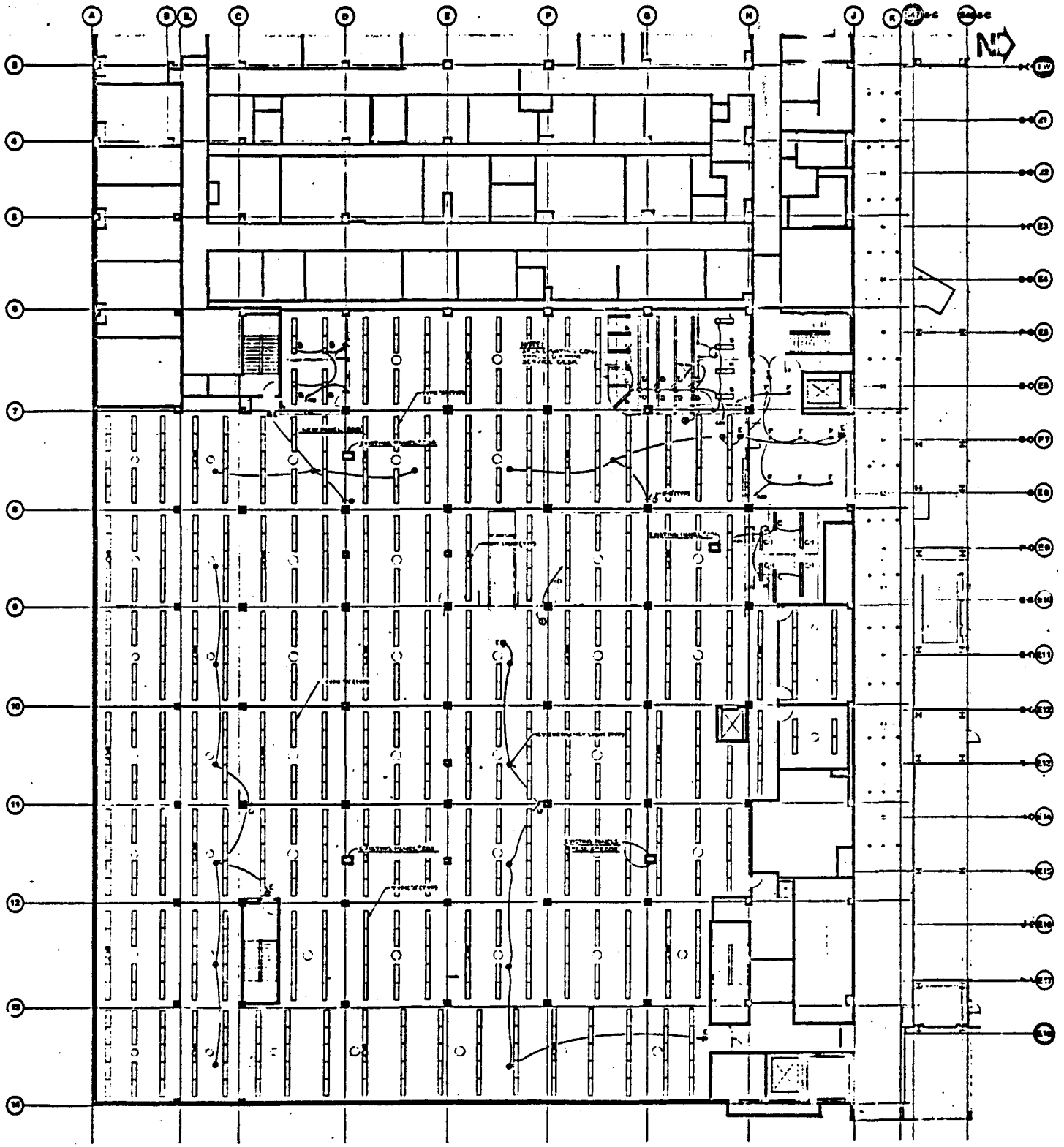
JOB NO	320.02
DRAWN	LB
CHECK	MH
SCALE	1/32" = 1-0
DATE	26 SEP 79

DESIGN DEVELOPMENT
UNIT B/C PHASE 1-A

DIEHL HALL

SHEET NO M1



2ND FLOOR LIGHTING

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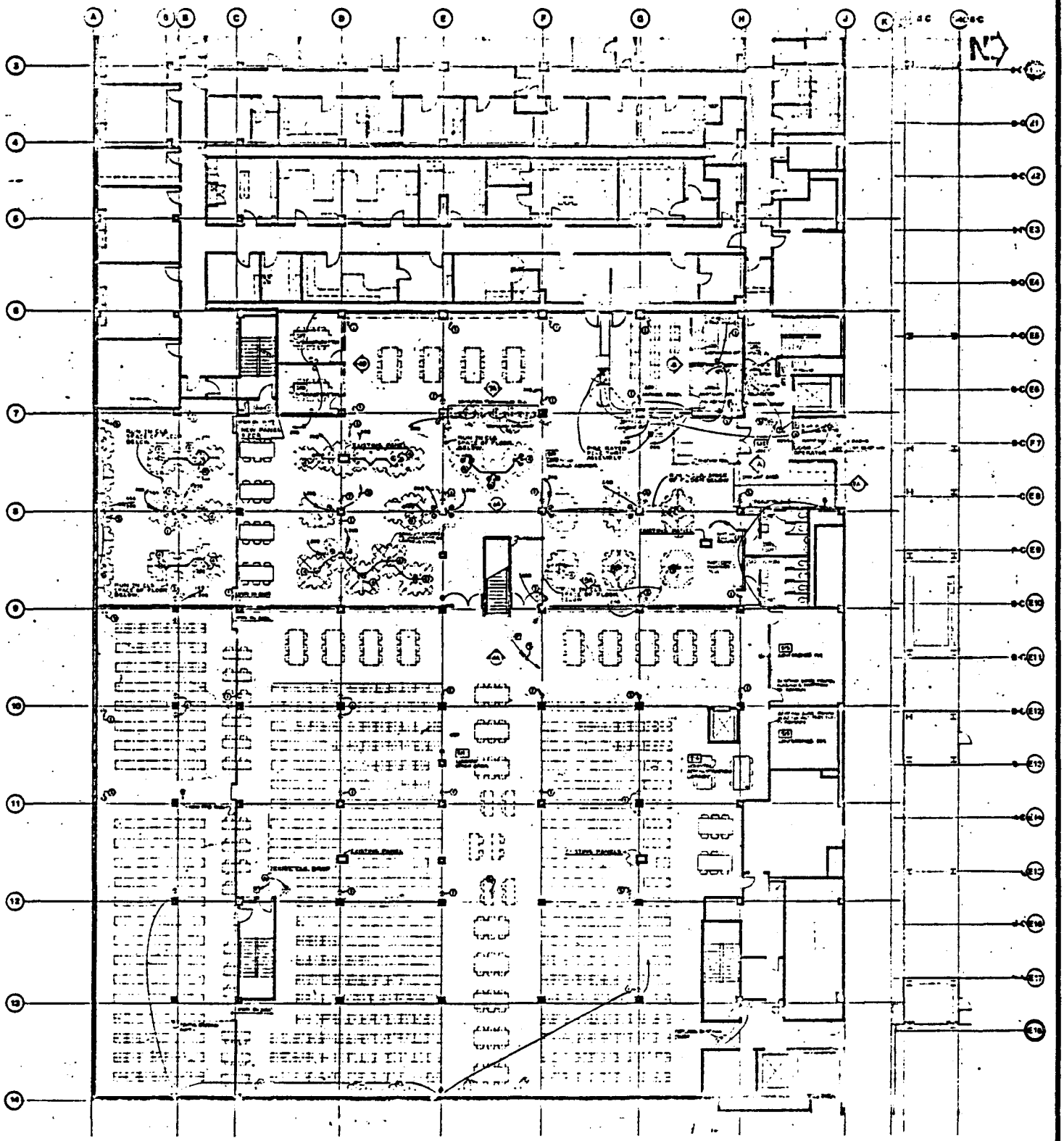
JOB NO.	320.02
DRAWN	JB
CHECK	GH
SCALE	1/32"=1-0
DATE	26 SEP 79

DESIGN DEVELOPMENT
UNIT B/C PHASE 1-A

DIEHL HALL

SHEET NO. E1



2ND FLOOR POWER

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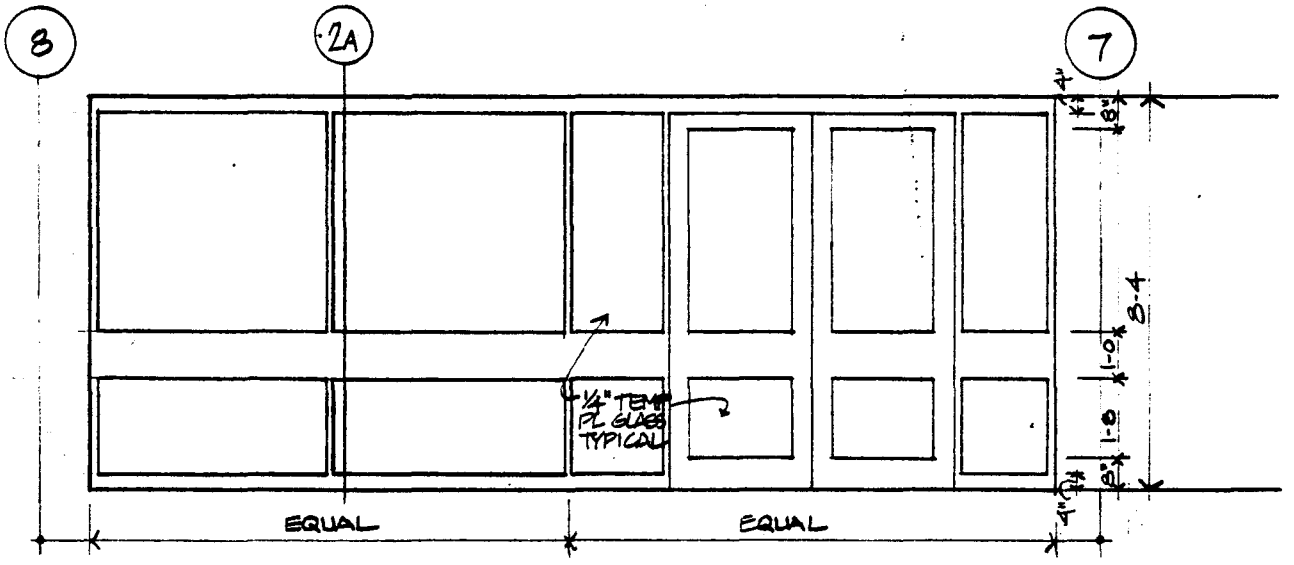
DRAWN	JB
CHECK	GH
SCALE	1/32" = 1-0
DATE	26 SEP 79

DESIGN DEVELOPMENT
UNIT B/C PHASE 1-A

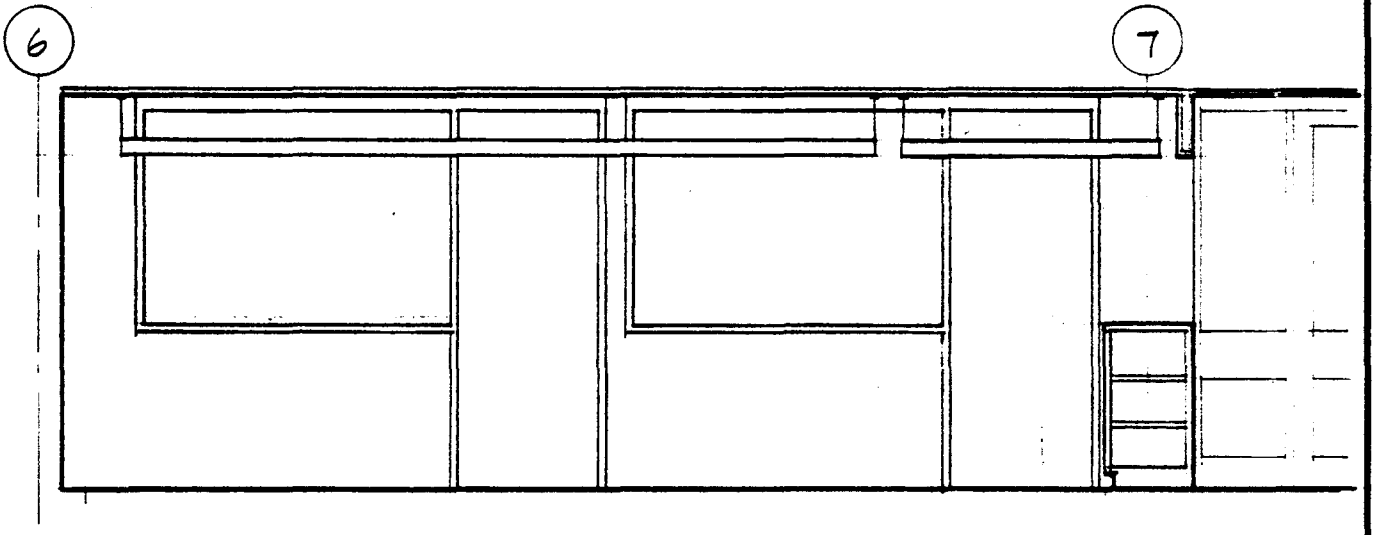
DIEHL HALL

SHEET NO. E2



A ELEVATION — LRC ENTRANCE

1/4" = 1-0



B ELEVATION — LIBRARIAN'S & ASSISTANTS OFFICES

1/4" = 1-0

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SCALE	AS NOTED
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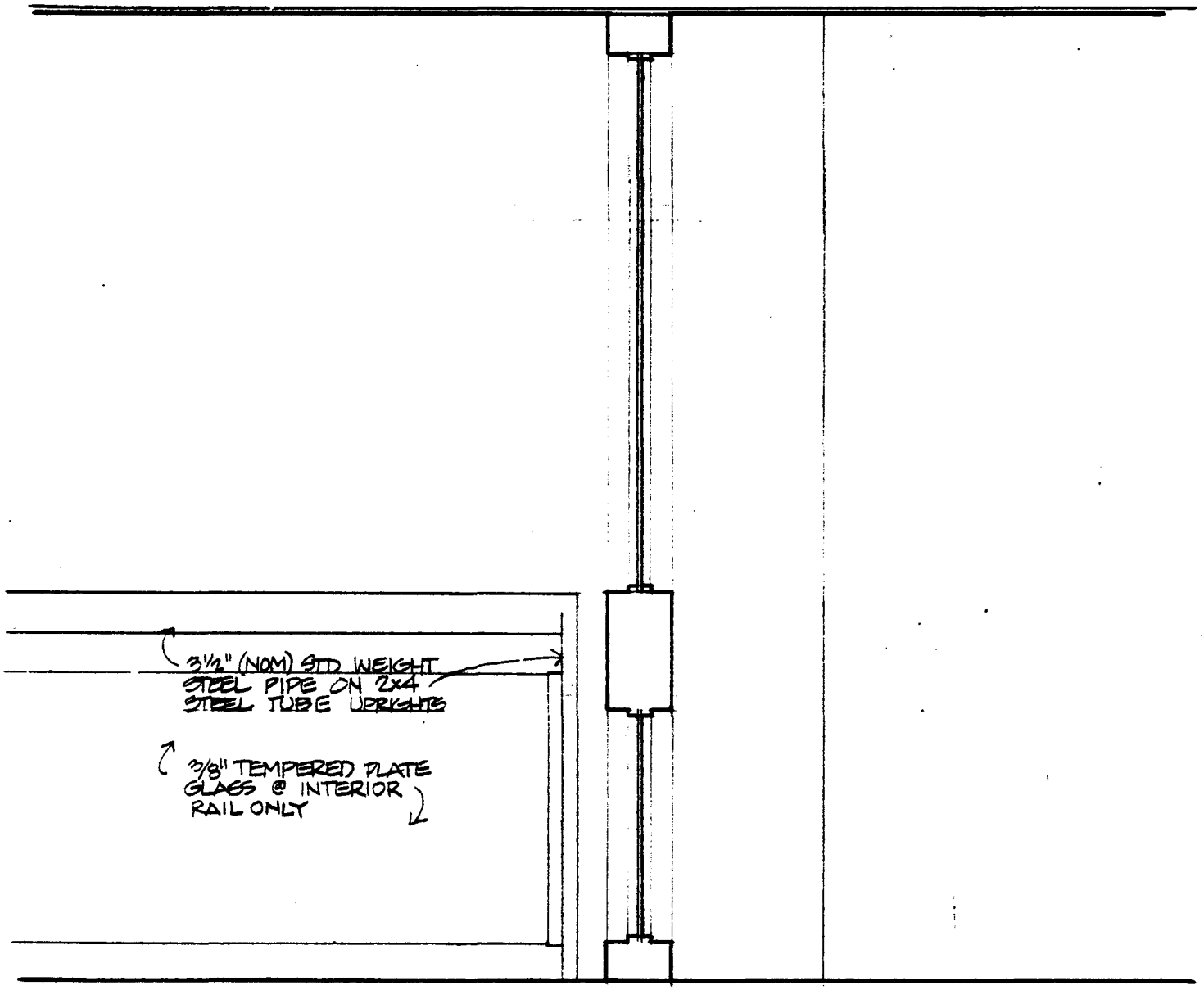
DESIGN DEVELOPMENT
UNIT B/C PHASE 1-A

DIEHL HALL

SHEET NO 1



(A) SECTION @ LRC ENTRANCE AND RAIL ELEVATION

3/4" = 1-0

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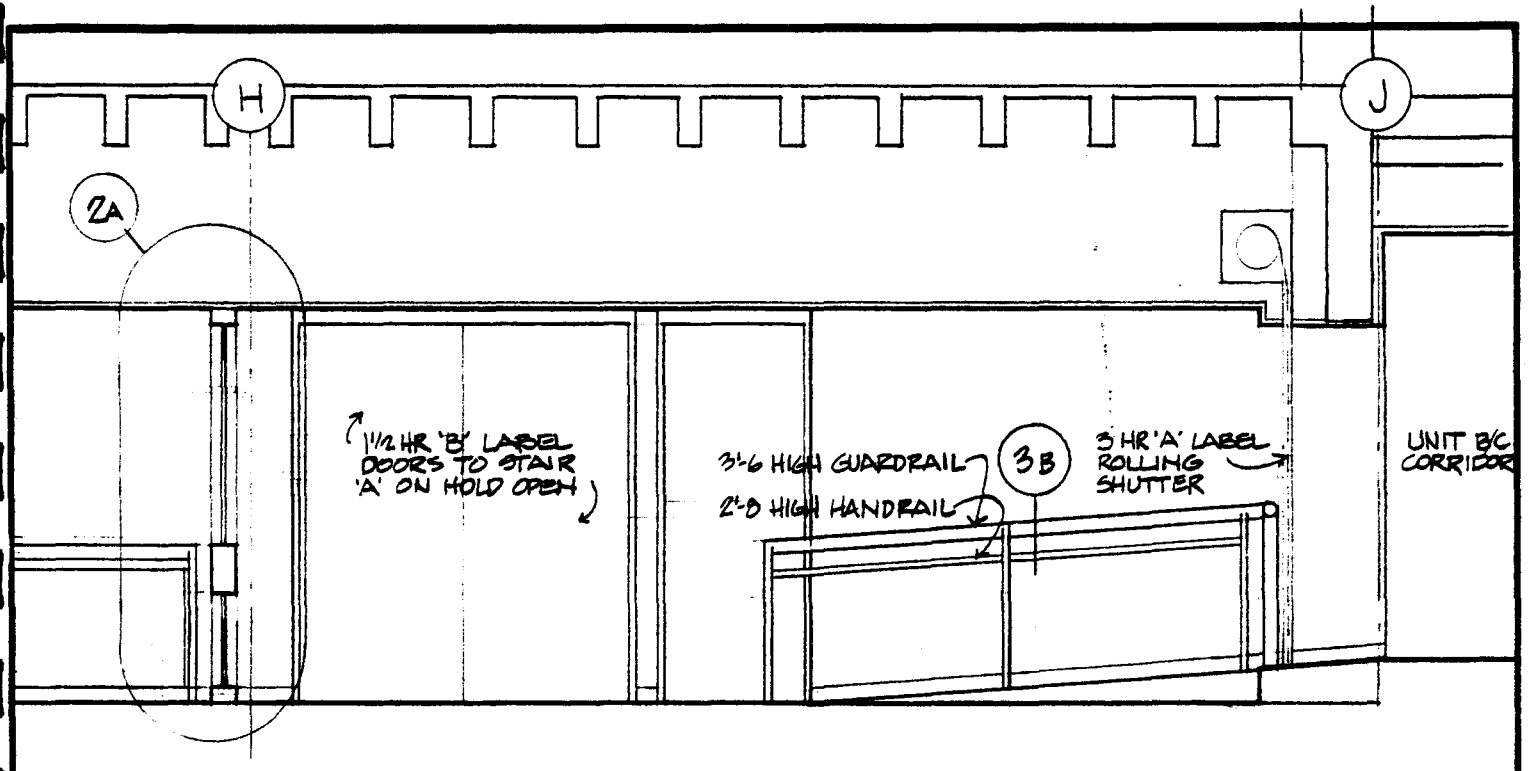
DESIGN DEVELOPMENT
UNIT B/C PHASE 1-A

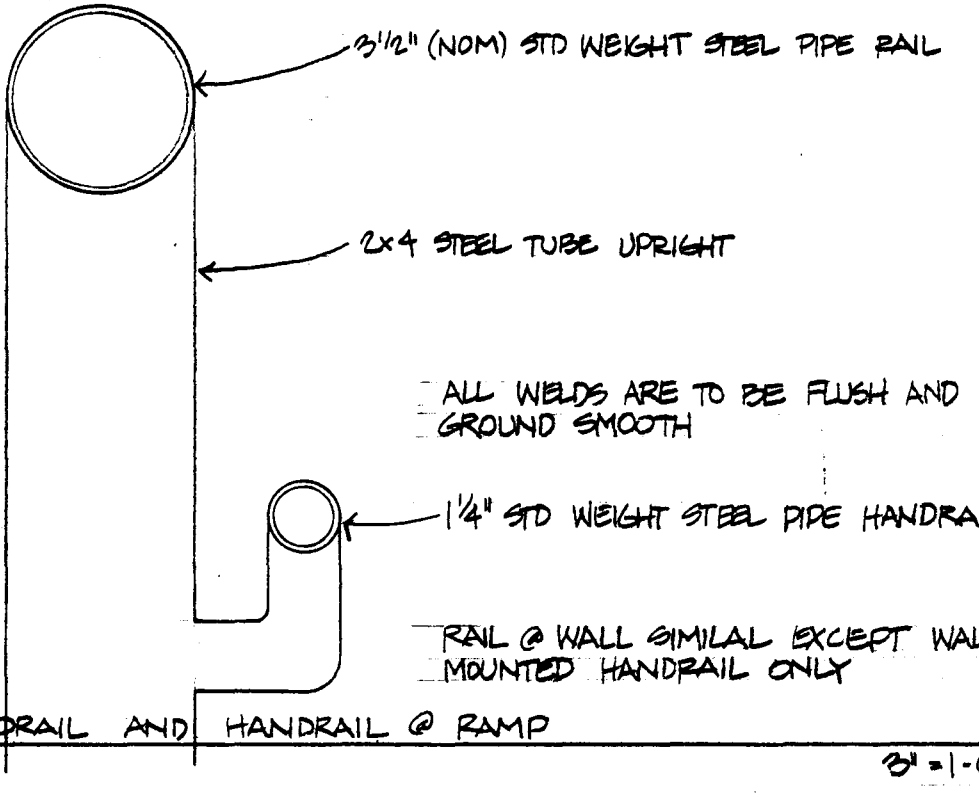
DIEHL HALL

SHEET NO 2



A SECTION @ LOBBY — INTERFACE UNIT B/C TO DIEHL HALL

1/4" = 1-0



B GUARDRAIL AND HANDRAIL @ RAMP

3" = 1-0

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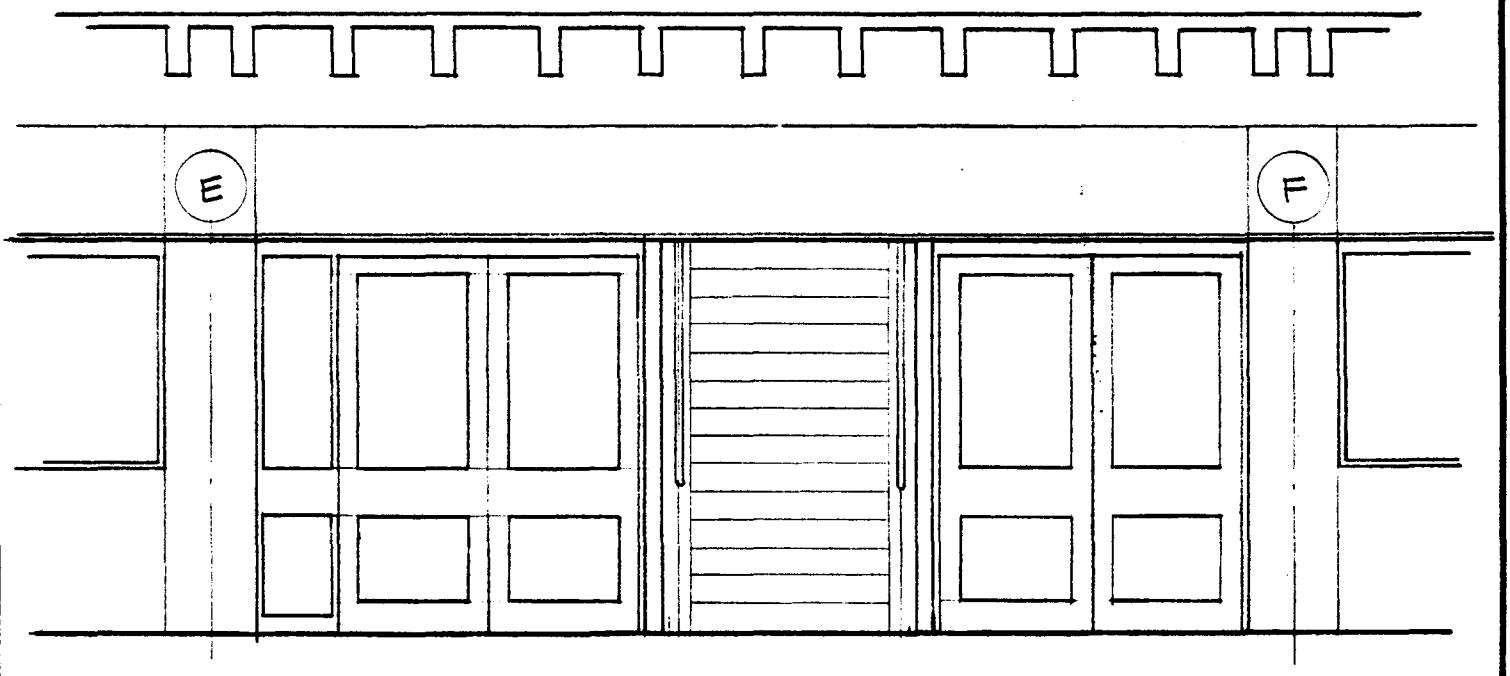
DESIGN DEVELOPMENT
UNIT B/C PHASE 1-A

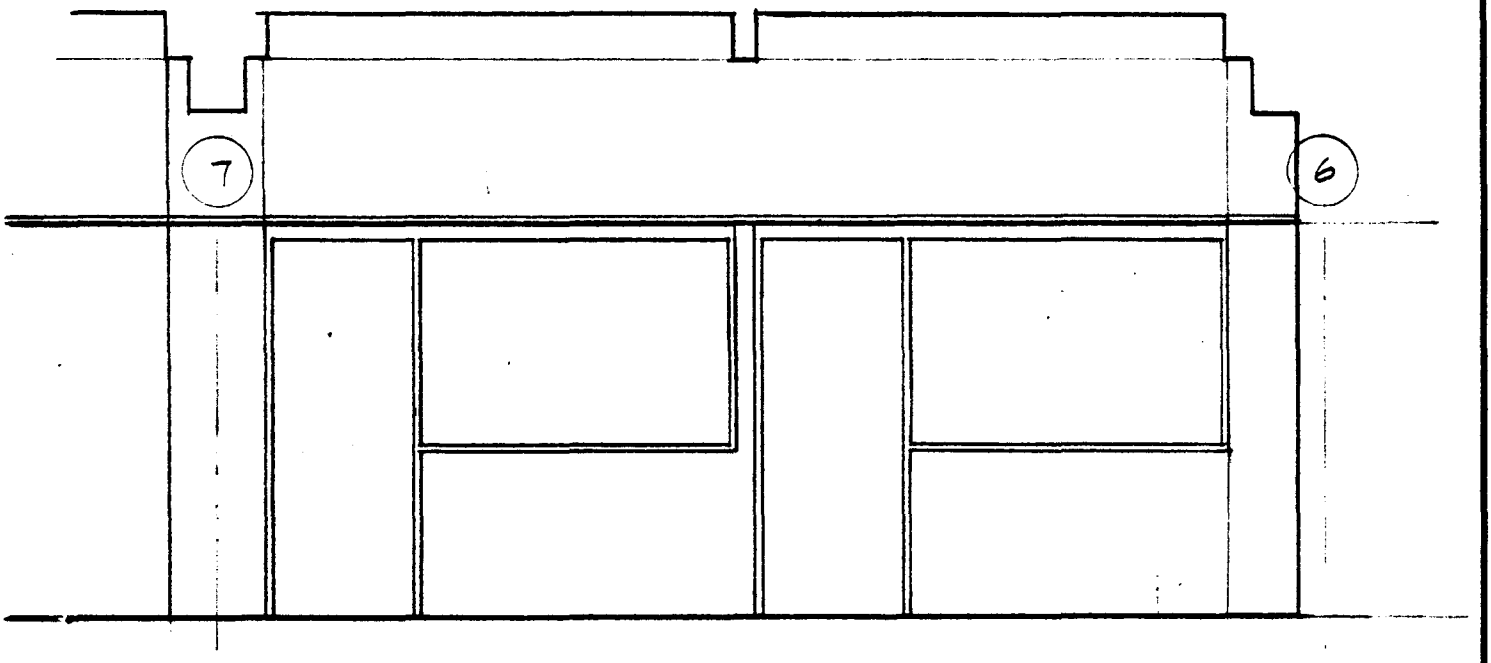
DIEHL HALL

SHEET NO 3



A ELEVATION — STAIR TO LIBRARY 3RD FLOOR & DOORS TO LRC

1/4" = 1-0



B ELEVATION — DOORS TO INTERACTION ROOMS

1/4" = 1-0

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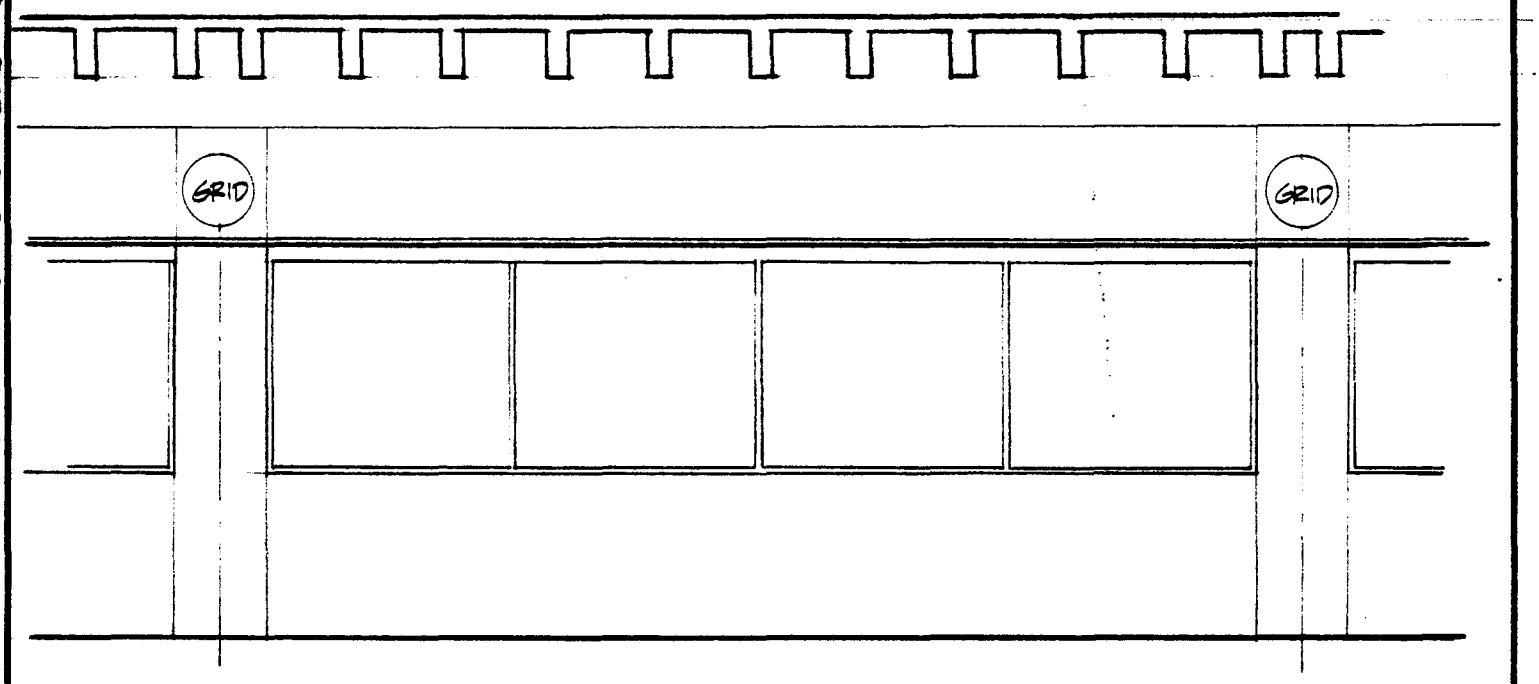
DRAWN	MP
CHECK	RC
SCALE	AS NOTED
DATE	26 SEP 79

DESIGN DEVELOPMENT
UNIT B/C PHASE 1-A

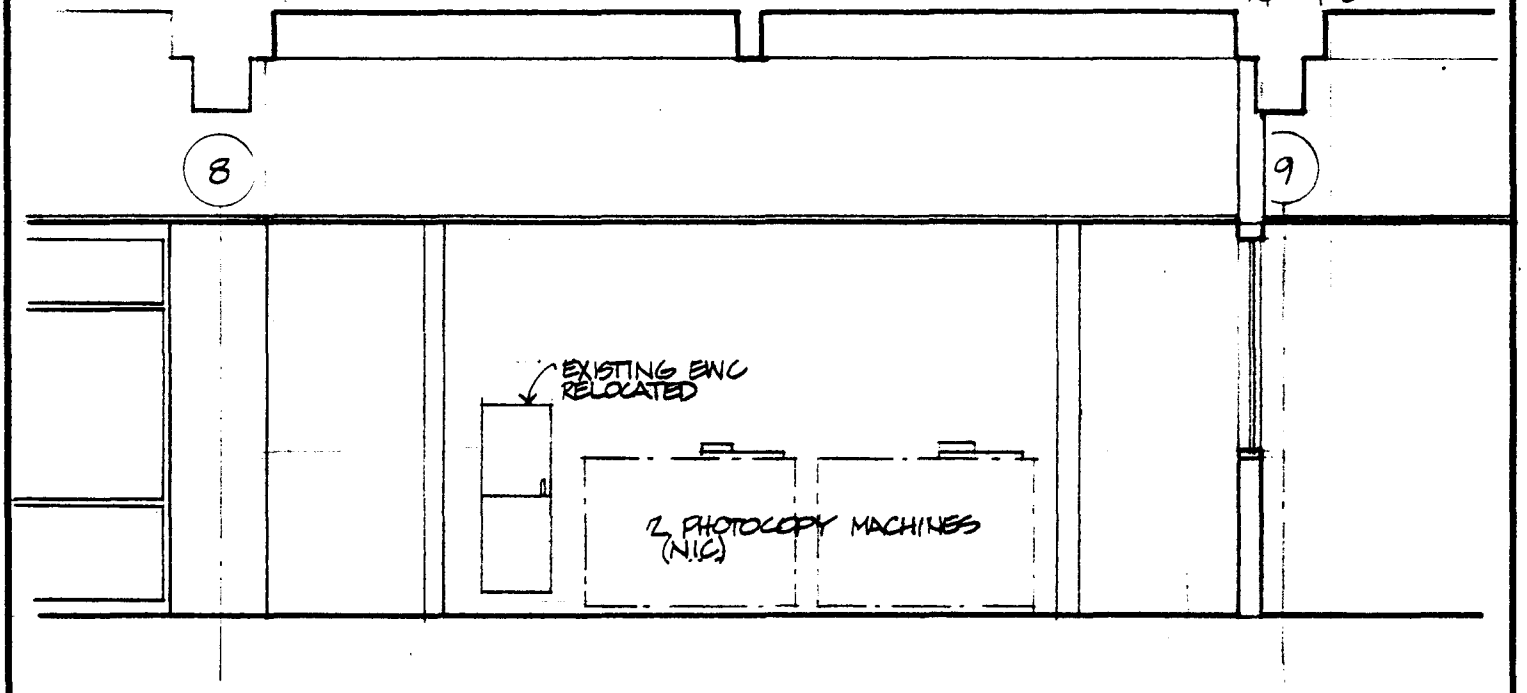
DIEHL HALL

SHEET NO 4



A ELEVATION – GLAZING BETWEEN LRC AND LIBRARY
TYPICAL BAY

1/4" = 1-0



B ELEVATION – ENTRANCES TO MEN'S AND WOMEN'S TOILETS

1/4" = 1-0

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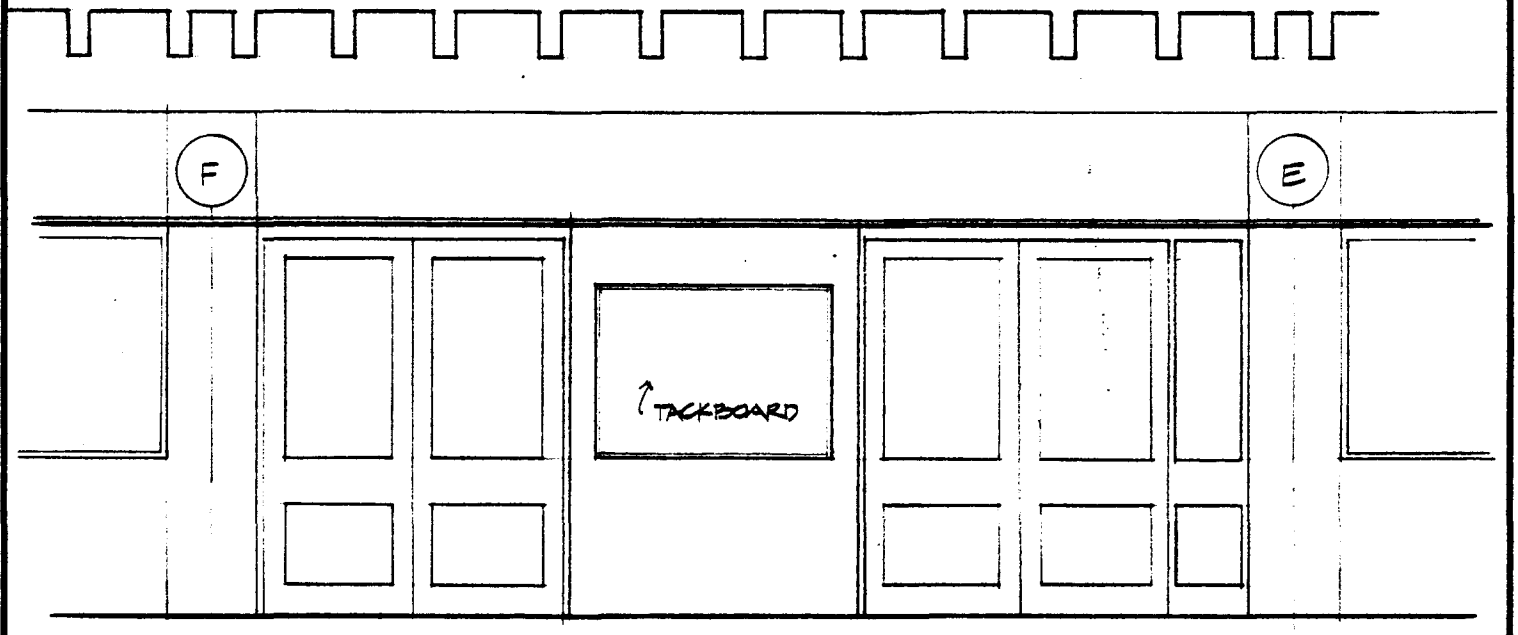
DESIGN DEVELOPMENT
UNIT B/C PHASE 1-A
DIEHL HALL

SHEET NO 5



(A) ELEVATION —

1/4" = 1-0

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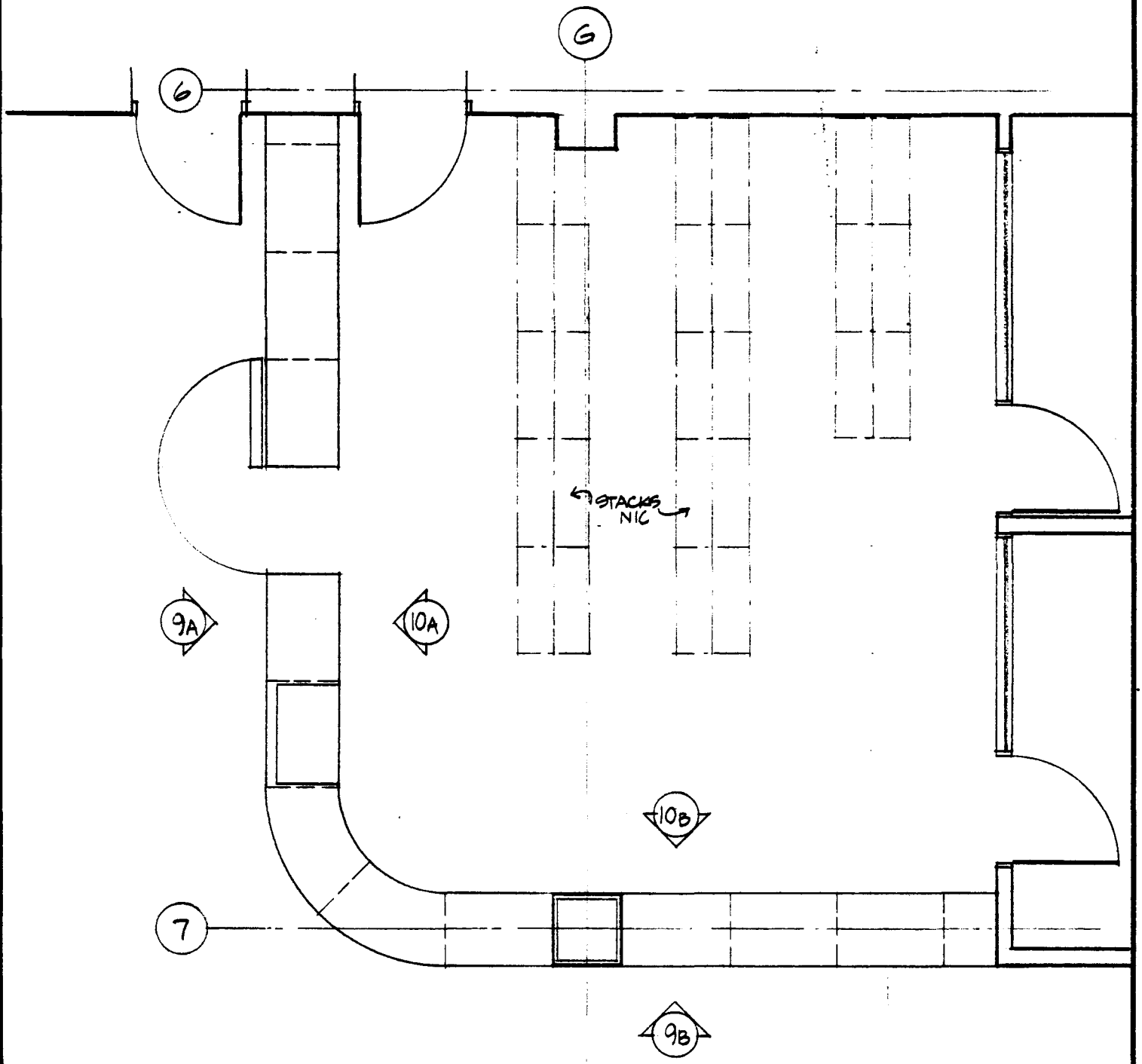
DESIGN DEVELOPMENT
UNIT B/C PHASE I-A

DIEHL HALL

SHEET NO 6



A PLAN @ SERVICE DESK

1/4" = 1-0

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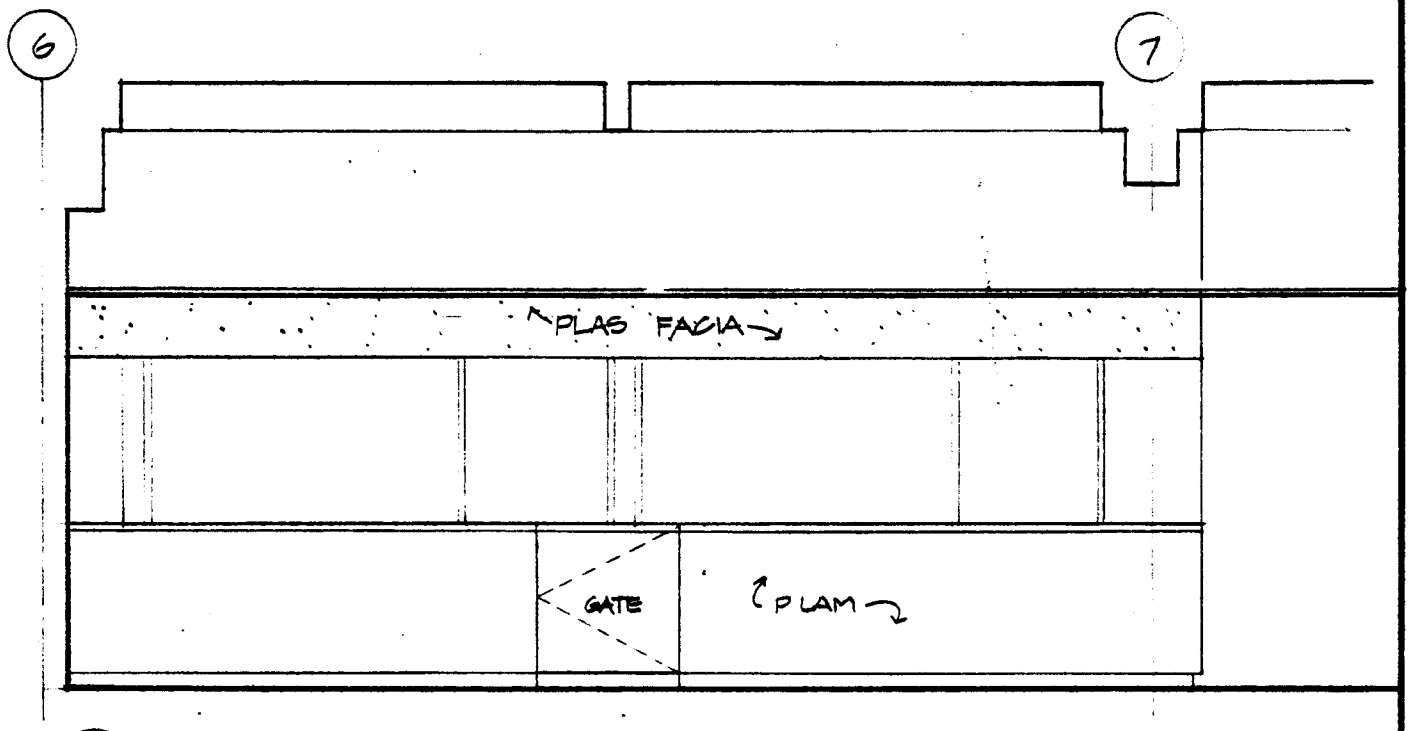
DESIGN DEVELOPMENT
UNIT B/C PHASE I-A

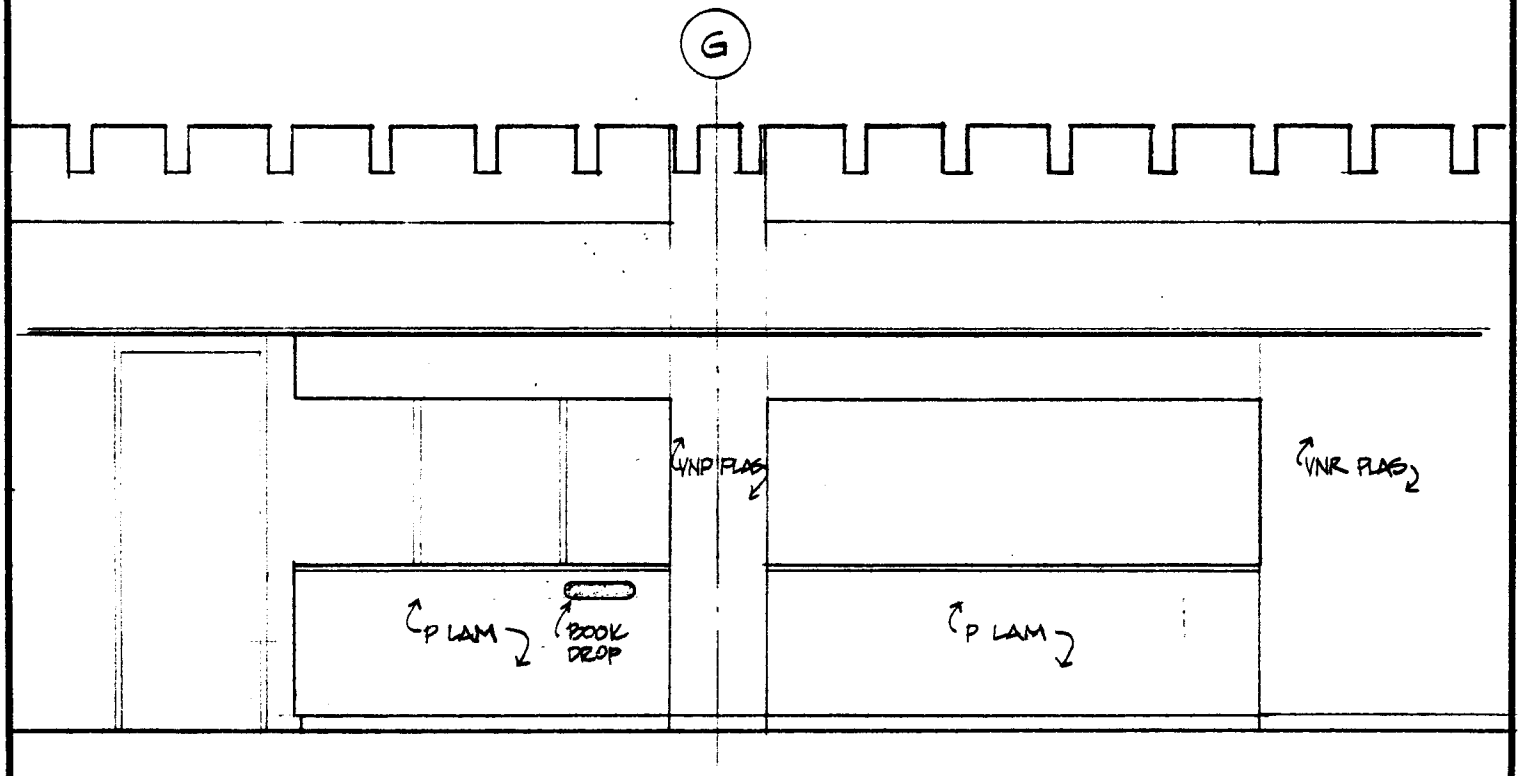
DIEHL HALL

SHEET NO 8



A ELEVATION @ SERVICE DESK

1/4" = 1-0



B ELEVATION @ SERVICE DESK

1/4" = 1-0

REV 5 NOV 79

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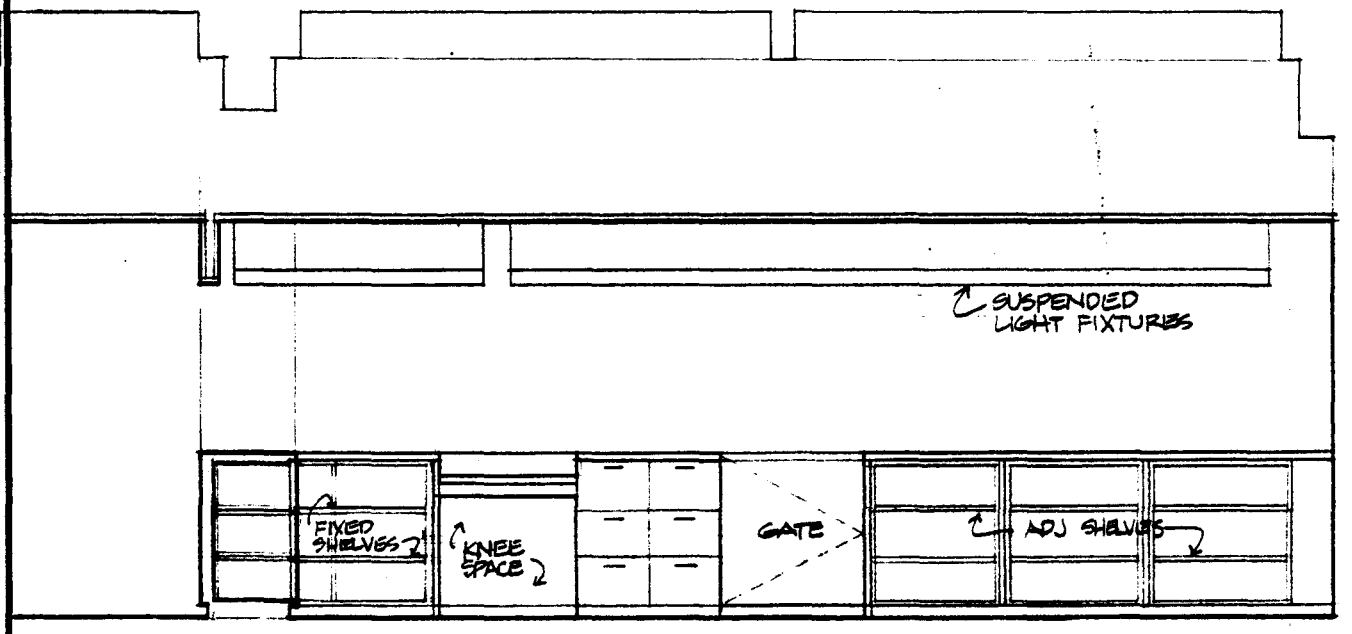
DESIGN DEVELOPMENT
UNIT B/C PHASE I-A

DIEHL HALL

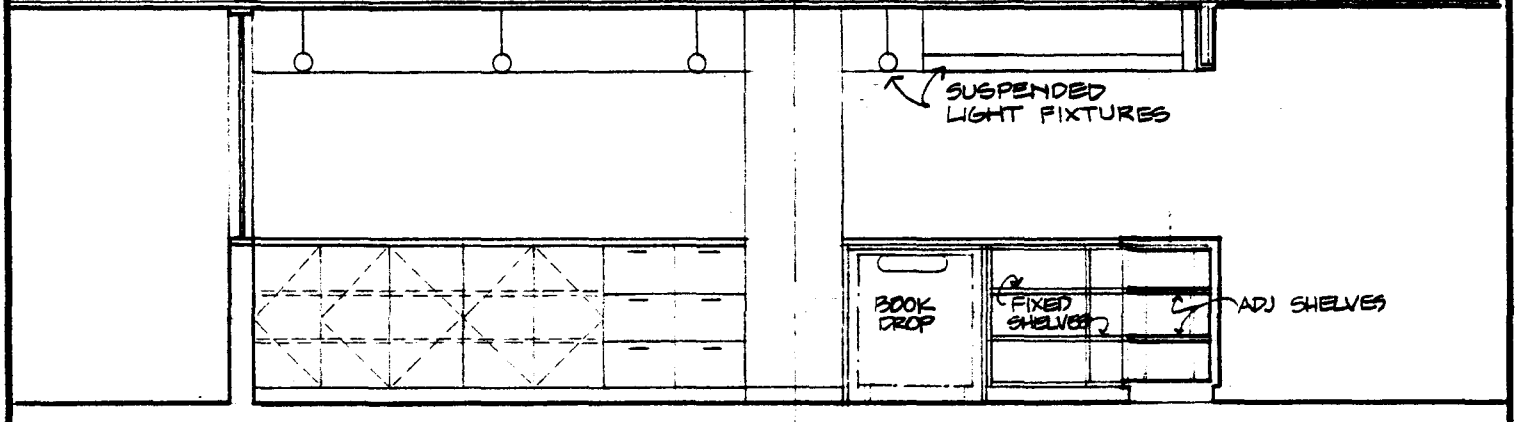
SHEET NO 9



A ELEVATION @ SERVICE COUNTER

1/4" = 1-0

G



B ELEVATION @ SERVICE COUNTER

1/4" = 1-0

REV 5 NOV 79

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THE HEALTH SCIENCES ARCHITECTS & ENGINEERS, INC.

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DESIGN DEVELOPMENT
UNIT B/C PHASE 1-A

DIEHL HALL

SHEET NO 10

HSAE

HEALTH SCIENCES ARCHITECTS AND ENGINEERS INC
UNIVERSITY PARK PLAZA SUITE 704 2829 UNIVERSITY AVENUE S.E. MINNEAPOLIS, MINNESOTA 55414 (612) 378-3833

31 October 1978

Mr. Paul Maupin
Health Sciences Planning Coordinator
University of Minnesota
4104 Powell Hall
Minneapolis, Minnesota 55455

Regarding: Unit B/C Phase III
Food Service Facility
Floor Two

Dear Mr. Maupin:

It is our pleasure to submit at this time the revised Unit B/C Phase III Food Service Facility Design Development Documents for your records.

During our final design development review meeting held October 4, 1978, the basic design scheme was accepted with the understanding that certain User Comments and suggestions would be included. We have now incorporated these requests and have further refined the basic design scheme which was presented.

As the enclosed probable Cost Summary indicates, the construction cost is now $312,260.00 including contingencies. Furnishing and installation of kitchen equipment is not included in this summary since this work will be by separate contract award. We will be happy to discuss possible cost reductions or suggest certain deductive alternates for inclusions in the Contract Documents.

Prior to the finalization of Contract Documents another cost estimate will be prepared to reflect more specifically the anticipated construction costs.

Sincerely,

HEALTH SCIENCES ARCHITECTS AND ENGINEERS, INC.

Richard J. Carlson

RJC:sed

TABLE OF CONTENTS

GENERAL DESCRIPTION OF PROJECT

The Unit B/C Phase III Project consists of finishing second floor shell space to house a new food service/dining facility and an adjacent civil service lounge and locker room.

The shell space is located on the Floor Two main pedestrian concourse and directly opposite and west of the entrance to the Clinical Auditorium.

The Food Service/Dining Facility work will consist of "finishing" the existing shell space and minor remodeling of the adjacent existing concourse space. Finishing work will include new carpet and quarry tile floors, wood and plaster ceilings, low divider wall portions of the concourse dining and pedestrian traffic, full height dry wall partitions with ceramic tile, painted finishes, and wood finishes where applicable. In addition provisions will be made for the hanging of fabric designs or banners to serve as dividers and enliven the concourse dining area.

Conditioned air will be delivered to the new spaces by means of ceiling and fascia type diffusers. Air will be returned through the kitchen exhaust system.

Task oriented work spaces will have direct fluorescent lighting while the dining space will have a combination of indirect fluorescent cove lights and direct incandescent fixtures. An area of neon lighting has been incorporated into the main serving entrance at the concourse.

The kitchen equipment is supplied by the kitchen equipment contractor under a separate contract. The rough in, however, is supplied under this contract.

The installation and connection of mechanical and electrical services will require disruption to some of the spaces below the food service facility, primarily below the kitchen area. This is to provide access in order to make connections and installations and to replace and patch finishes as required. The disruption to functions on the First Level will be minimized wherever possible by organizing and containing the majority of the disruptive work in less critical areas.

Program requirements for the civil service lounge and locker room have not been relayed to the Arhictect. Therefore this portion of the project will not be included until this information is conveyed.

CONSTRUCTION OUTLINE

GENERAL CONSTRUCTION

Floors

- Existing VAT; repair and patch as required. Use floorstone to adjust flush to quarry tile at transition areas.
- Quarry tile, 6" x 6" x ½" with non-slip abrasive finish, thin-set application.
- Carpet of nylon fibre and inert backing.

Bases

- Existing; repair and patch as required.
- Resilient A: 4" coved vinyl
- Resilient B: 4" coveless vinyl adjacent to carpet areas.
- Quarry Tile: Coved base matching quarry floor tile.

Walls

- Existing drywall; add, repair and patch as required.
- 2" x 2" x ¼" unglazed ceramic mosaic natural clay tile, thin set over gypsum board.
- Gypsum Board A: Single Layer 5/8" thick on 3 5/8" steel studs 2'-0" o.c.
- Gypsum Board B: Single Layer thick fire rated on 3 5/8" steel studs 2'-0" o.c. 1 hr. rated
- Gypsum Board C: Single layer 5/8" thick fire rated on existing steel stud framing. 1 hour rated.

Ceilings

- Existing Plaster: Repair and patch as required
- Existing Metal: Repair and patch as required.
- Plaster: ½" plaster on 3/8" gypsum lath.
- Wood: 3/4" x 3½" plain sliced red oak, transparent finish, on 1½" sound attenuation blankets between 2" x 2" nailers.

Doors and Frames

- Doors: 1 3/4" solid core wood door, paint finish, closers at rated doors. Magnetic hold open devices at selected doors.
- Frames: 16 gauge hollow metal, welded construction.

Rolling Fire Doors - Galvanized steel, motor operation, automatic closing, bearing UL Class C Label.

Low Partitions at Dining Area - Carpet on either side with oak cap to match wood ceiling. No base. One hour rated at rolling fire door.

Low Partitions at Concourse Dining - Carpet one side, no base, with wood cap and on the other side, wood Type C pattern and profile to match wood Type C of Unit A, but with transparent finish plain sliced red oak.

Kitchen Equipment - By Kitchen Equipment Contractor under separate contract. Rough-in, services for equipment, however, is provided under this contract.

Dining Area Furnishings - By Owner

MECHANICAL CONSTRUCTION

Ventilation Supply System

- Under Phase I, a single zone constant volume package air handler section was provided at the basement mezzanine level for this project. Partial ductwork was provided from mezzanine to Food Service Area. This project will add Air Handler Motor and Drive, Cooling Coil, Heating Coil, Humidifier, Filters and additional ductwork to connect Unit to Food Service Area.

  Conditioned outside air will be distributed in Dining Area and transferred to the kitchen where it will be used to make up kitchen exhaust.

Exhaust Systems

- A capped kitchen exhaust duct has been provided under Phase I from Food Service area up to the 15th Floor. In the 15th Floor Mechanical Room a centrifugal exhaust fan will be provided with discharge through the roof. The janitor's closet will be exhausted through existing capped exhaust ductwork provided.

Steam and Chilled Water

- Steam Service to the Air Handler will be extended from a capped branch at the mezzanine level. Chilled water supply and return and condensate return will be extended from capped branches in the Basement Mechanical Room immediately below.

Energy Conservation

- Two proposals under consideration are as follows:

  1. A glycol heat recovery loop from a coil in the kitchen exhaust to a coil in the air handler outside air intake.
  2. Return duct and fan (on mezzanine level) from kitchen to air handler allowing kitchen exhaust to be shut down and air returned when kitchen hoods are not in use.

Plumbing System

- Hot and Cold water services and vent piping for kitchen equipment and sinks will be extended from existing capped lines in kitchen area. Waste from floor drains and kitchen equipment will be will be connected to existing capped waste at the floor below. (This will involve the removal of some ceilings in the First Floor Area below).

Fire Protection

- The existing shell space sprinkler system will be revised for new ceiling layout.

ELECTRICAL CONSTRUCTION

Lighting

Lighting Types

- Flourescent lighting shall be provided wherever practical for economy of maintenance and operation.
- Assembly coolers, cooking, dishwashing, waste disposal areas will be lighted with gasketed damp location approved non-corrosive fixtures with glass lenses.

Lighting Levels

- Food preparation areas - 70 footcandles
- Dishwashing and clean up areas - 50 - 70 footcandles.
- Ancillary areas - 20 footcandles.

Emergency Lighting

- An emergency lighting system connected to the standby generator shall be provided within the kitchen facility and corridors at reduced levels sufficient for safety and temporary working illumination.

Secondary Power Distribution

- Basic electrical system shall be 120/208 volt, 277/480 volt, 3 phase and with new services being connected to existing secondary switchboards.
- New 120/208 volt, 3 phase and 277/408 volt, 3 phase feeders and panelboards shall be provided for the new food service area.
- Emergency power for selected critical outlets and equipment will be provided to the extent of available capacity of existing emergency facilities.

Wire, Cables and Conduit

- All wire will be in conduit and will be copper conductor for branch circuits and aluminum for feeders, with 600 volt thermoplastic insulation. All power and light wiring will be installed in conduit. Empty conduit shall be provided for telephone services and communications.

Switches and Receptacles

- Switches will be 20 ampere A.C. quiet type and receptacles will be 3 wire grounded type. Plates will be stainless steel. Special configuration receptacles shall be provided for kitchen equipment as required.

Motors and Equipment

- The electrical work will include all starters, controls, disconnects, connections and wiring for motors and equipment furnished under the contract or provided by Owner.

UNIT B/C PHASE III PROJECT SCHEDULE

APPROVED 31 AUG 78

1978 | 1979

AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN

A/E TAC & HSAE

14 SD/DP 6 (25) | 23 C.D. PHASE 4 (20, 24) | 26 8 FINAL

F.S.C. VAN HEMERT

31 DESIGN 25 | 9 REV. 20 | 30 EQUIP. 17 | 4 REV. 15 | 26 FINAL 8 | 16 BID EQ. 8 | 16 PROCUREMENT OF F.S. EQUIPMENT 15 (14)

USER U/M FOOD SERV.

9 R 18 | 4 REV. | 8 R 16

U/M INT. DESIGN

9 R 18 | 30 FUR DES. 24 | 4 REV. | 26 FUR. C.D. 12 | 23 BID. . 15 | 23 PROCUREMENT OF FURNISHINGS → 4 SEP 78

U/M HSPO & ENG.

9 REV. 18 20 | 4 REVIEW 15 26 | 8 AWARD 16 23

CONTRACT CONSTRUCTION

9 BIDDING 8 | 23 CONSTRUCTION - 6 MO. 24 AUG 79 →

PROBABLE COST SUMMARY

A.	CONTRACTORS DIRECT AND INDIRECT EXPENSES	$85,000.00
B.	DEMOLITION AND REMOVAL	$8,700.00
C.	CUT AND PATCH	$3,200.00
D.	NEW WORK	$100,920.00
E.	MECHANICAL	$52,360.00
F.	ELECTRICAL	$33,050.00
	SUBTOTAL	$283,230.00
	DESIGN CONTINGENCY (5%)	$14,160.00
	ESTIMATING CONTINGENCY (5%)	$14,870.00
	TOTAL COST	$312,260.00