Ralph J. Stephenson P.E. P.C.
Consulting Engineer

May 6, 1992

Subject: Monitoring Report #01
C. S. Mott Community College
South Lakes Campus
Fenton, Michigan

Project #: 92:15

Disk: rjs #270 and #302

Date of Monitoring: May 1, 1992 (wd 342)

The working day calendar being used is the 1991/92 calendar - copy attached.

Those attending:

- Junior Paul - Consultant - THA
- Jerry Harburn - Principal - THA
- Michael E. St. Germain, R. A. - Project Manager - MKK Ghafari
- Bert Forsmark - Project Manager - Erickson and Lindstrom
- Martin L. Corcoran - President - Wolverine Fire Protection
- Roger Simmonds - President - Central Interiors, Inc.
- Dale Oskey - President - Dale Oskey Construction
- Ralph J. Stephenson - Consultant

Actions taken:

- Made general review of work with project team
- Discussed scope of contract work
- Discussed scope of pending bulletin work
- Prepared laundry list of project activities
- Prepared preliminary logic plan for unit B renovation work
- Briefly discussed interrelation of work for unit B and unit A
- Printed and distributed network logic plan for unit B to Mr. Forsmark
- Distributed unedited meeting notes as required

General summary:

This was the first project construction planning and scheduling meeting for the project. Note that the facility has been renamed the South Lakes Campus .

On April 27, 1992 (wd 338) the MCC Board approved Erickson and Lindstrom as the general contractor for the project. A letter of intent was issued on April 29, 1992 (wd 340). Mobilization & move on site is expected to begin May 1, 1992 (wd 342), with actual field layout to begin May 11, 1992 (wd 348).

Teaching staff is due to return the am of August 17, 1992 (wd 417). The general contractor completion date for work is the pm of August 28, 1992 (426). MCC fixture, furniture and equipment installation is to begin the am of August 31, 1992 (wd 426). Fall classes are scheduled to begin the am of September 8, 1992 (wd 431).

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Our basic activities at this planning and monitoring session were to set the planning work scope, to review the activities, and to prepare preliminary network plans for as much of the project as possible. We also discussed contractor and MCC procurement items. The end product of the day's efforts was a laundry list of activities for items to be resolved, procurement, site work, unit A and unit B. From this material we prepared a set of meeting notes and a preliminary network model for construction of unit B.

Unedited meeting notes were distributed as needed at the meeting. An edited and corrected copy is enclosed with this report. Since our next planning session is to be held on Friday, May 8, 1992 (wd 347) copies of the issue #1 preliminary network produced during this session are not included with the report. However a rough copy was provided to Mr. Bert Forsmark at our meeting for his comments and revisions. These will be discussed with him on Friday, May 8, 1992.

Our preliminary planning indicates that careful early attention must be paid to starting work promptly and insuring that early delivery items needed for the work are brought to the job in a timely fashion. Some of the items needing early attention by all members of the project team include:

- Design and approval of revised water tank size
- Abatement activities required
- Submittals, approval, fabrication & delivery of
  - hollow metal frames
  - hardware templates for frames
  - aluminum windows
  - exterior entry framing
  - new water tank & piping
  - exterior window and entry glass
  - preformed metal siding including color selection
  - entry doors
  - glazed block
  - special masonry units
  - hardware
  - plastic laminate doors
  - roof mounted equipment
  - toilet room partitions
  - signage
  - air tempering HVAC interior units
  - plumbing fixtures
  - bulletins and chalk boards
  - folding partitions
  - carpeting
  - quarry tile
  - ceramic tile
  - security system design and materials
  - other mechanical and electrical equipment - must be identified

- MCC furnished items
  - fume hood in prep room
  - biology equipment
  - paint equipment

- library shelving
- island tub
- identifying devices
- number of power poles in computer room

As of May 1, 1992 (wd 342) the work scope at unit C is unresolved. Our current planning is proceeding on the site, and for unit A and B only. If unit C is to be delivered before the opening of the fall class session it will be critical to begin this work soon. I shall review the status of unit C with the project team at our next planning and monitoring session.

The mechanical and electrical contractors, Fisher & Wright and Markee Electrical, were not represented at the meeting. Therefore Mr. Forsmark established the preliminary logic and durations for their activities. This data should be checked with the appropriate contractors before our next work session.

General:

An edited copy of the meeting notes for our session on May 1, 1992 (wd 342) is attached to this report. If there are any suggested changes it would be appreciated if you would call them to my attention so corrections can be made.

Our next meeting is set for Friday, May 8, 1992, 11:00 am at the MCC facilities offices. At this conference we shall attempt to complete our planning and scheduling discussions and the network models for the project.

This monitoring report is being sent to Mr. Jerry Harburn at THA. Further distribution to the project team will be by him.

Ralph J. Stephenson, P. E., P. C.

Ralph J. Stephenson P.E. P.C.
Consulting Engineer

May 12, 1992

Subject:	Monitoring Report #02 C. S. Mott Community College South Lakes Campus Fenton, Michigan
Project #:	92:15
Disk:	rjs #270 and #302
Date of Monitoring:	May 8, 1992 (wd 347)
Monitored from:	Issue #1, sheet #01, dated May 8, 1992 (wd 347)

Those attending:

- Junior Paul - Consultant - THA
- Jerry Harburn - Principal - THA
- Bert Forsmark - Project Manager - Erickson and Lindstrom
- Donald Sinclair - Project Superintendent - Erickson and Lindstrom
- Ralph J. Stephenson - Consultant

Actions taken:

- Reviewed current status of project
- Reviewed issue #01, sheet #01 network model for unit B
- Prepared issue #02, sheets #01 and #02, dated May 8, 1992 and gave to Mr. Forsmark and Mr. Sinclair
- Discussed scope of work currently planned

General summary:

The contractor has moved on site and is currently engaged in demolition and layout work. Present work is mainly concentrated in unit B.

Our major efforts at this planning and monitoring session were aimed at getting the unit A and unit B network models completed to where all felt that the plan of work was adequate. Mr. Forsmark and Mr. Sinclair had reviewed the sequences prior to the meeting and the updating was relatively simple. Some changes to the logic and durations were made to the base network for unit B and then revised slightly for unit A.

A decision on whether or not to proceed with unit C apparently is still pending. Therefore we will hold further work on the network for C until the matter is resolved.

Enclosed with this report is the network model issued to the contractor at the conclusion of our meeting on Friday, May 8, 1992 (wd 347). Some minor corrections have been made to allow ease of use. Activity numbers have been added and the locational identifications have been corrected. It has been left unassembled to allow for ease of copying.

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Consulting Engineer

May 12, 1992

Please note that there are several ***detail, approve, fabricate and deliver*** items yet to be quantified with delivery dates. These have been left on the network model sheets to permit ties to the activities they affect to be made when the data is available. Mr. Forsmark will obtain this information in the very near future and we will incorporate the data into the network model at that time.

I have also translated sheets A1 and B2 into a data listing showing the activities in the network model arrayed by early start and early finish. Copies of this listing are enclosed. This list is most easily read by referring to the current date in the early start column. All activities above this date that have not begun have missed their early start dates. However where activities have float time the late starts should also be checked on those activities not yet started.

No bar charts have been issued as yet and I suggest we hold off preparing further translations until the networks have had the delivery information added.

Those delivery items of importance that need early attention by the project team were listed in monitoring #01, dated May 6, 1992 (wd 345). The list is duplicated below for ease of reference.

- Design and approval of revised water tank size
- Abatement activities required
- Submittals, approval, fabrication & delivery of
    - hollow metal frames
    - hardware templates for frames
    - aluminum windows
    - exterior entry framing
    - new water tank & piping
    - exterior window and entry glass
    - preformed metal siding including color selection
    - entry doors
    - glazed block
    - special masonry units
    - hardware
    - plastic laminate doors
    - roof mounted equipment
    - toilet room partitions
    - signage
    - air tempering HVAC interior units
    - plumbing fixtures
    - bulletins and chalk boards
    - folding partitions
    - carpeting
    - quarry tile
    - ceramic tile
    - security system design and materials
    - other mechanical and electrical equipment - must be identified

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May 12, 1992

- MCC furnished items
  - fume hood in prep room
  - biology equipment
  - paint equipment
  - library shelving
  - island tub
  - identifying devices
  - number of power poles in computer room

General:

This monitoring report is being sent to Mr. Jerry Harburn at THA. Further distribution to the project team will be by him. I shall set the next planning and monitoring meeting through Mr. Harburn and will call him soon to select a mutually satisfactory date.

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	activity	sub title	early start	early finish	late start	late finish	days
1	DETAIL, APPRV, FAB & DELIVER NEW ENTRY DOORS	unit A	1/2/92	1/2/92	1/2/92	1/2/92	0
2	DETAIL, APPRV, FAB & DELIVER NEW EXT ALUM WINDOWS	unit A	1/2/92	1/2/92	1/2/92	1/2/92	0
3	DETAIL, APPRV, FAB & DELIVER HOLLOW METAL FRAMES	unit A	1/2/92	1/2/92	1/2/92	1/2/92	0
4	DETAIL, APPRV, FAB & DELIVER NEW EXT ENTRY FRAMING	unit A	1/2/92	1/2/92	1/2/92	1/2/92	0
5	DETAIL, APPRV, FAB & DELIVER EXT WINDOW & ENTRY GLASS	unit A	1/2/92	1/2/92	1/2/92	1/2/92	0
6	DETAIL, APPRV, FAB & DELIVER HARDWARE	unit A	1/2/92	1/2/92	1/2/92	1/2/92	0
7	DETAIL, APPRV, FAB & DELIVER NEW ENTRY DOORS	unit A	1/2/92	1/2/92	1/2/92	1/2/92	0
8	DETAIL, APPRV, FAB & DELIVER PREFORMED METAL SIDING	unit A	1/2/92	1/2/92	1/2/92	1/2/92	0
9	DETAIL, APPRV, FAB & DELIVER PLASTIC LAMINATE DOORS	unit A	1/2/92	1/2/92	1/2/92	1/2/92	0
10	SUBMIT SAMPLE, APPRV, MFR & DELIVER GLAZED BLOCK	unit A	1/2/92	1/2/92	1/2/92	1/2/92	0
11	DETAIL, APPRV, FAB & DELIVER HOLLOW METAL DOORS	unit A	1/2/92	1/2/92	1/2/92	1/2/92	0
12	DETAIL, APPRV, FAB & DELIVER NEW ENTRY DOORS	unit B	1/2/92	1/2/92	1/2/92	1/2/92	0
13	DETAIL, APPRV, FAB & DELIVER NEW EXT ALUM WINDOWS	unit B	1/2/92	1/2/92	1/2/92	1/2/92	0
14	DETAIL, APPRV, FAB & DELIVER NEW ENTRY DOORS	unit B	1/2/92	1/2/92	1/2/92	1/2/92	0
15	SUBMIT SAMPLE, APPRV, MFR & DELIVER GLAZED BLOCK	unit B	1/2/92	1/2/92	1/2/92	1/2/92	0
16	DETAIL, APPRV, FAB & DELIVER NEW EXT ENTRY FRAMING	unit B	1/2/92	1/2/92	1/2/92	1/2/92	0
17	DETAIL, APPRV, FAB & DELIVER EXT WINDOW & ENTRY GLASS	unit B	1/2/92	1/2/92	1/2/92	1/2/92	0
18	DETAIL, APPRV, FAB & DELIVER HOLLOW METAL DOORS	unit B	1/2/92	1/2/92	1/2/92	1/2/92	0
19	DETAIL, APPRV, FAB & DELIVER HOLLOW METAL FRAMES	unit B	1/2/92	1/2/92	1/2/92	1/2/92	0
20	DETAIL, APPRV, FAB & DELIVER PREFORMED METAL SIDING	unit B	1/2/92	1/2/92	1/2/92	1/2/92	0
21	DETAIL, APPRV, FAB & DELIVER HARDWARE	unit B	1/2/92	1/2/92	1/2/92	1/2/92	0
22	DETAIL, APPRV, FAB & DELIVER PLASTIC LAMINATE DOORS	unit B	1/2/92	1/2/92	1/2/92	1/2/92	0
23	001-T/R TO MAY 1, 1992	unit A	5/1/92	5/1/92	5/1/92	5/1/92	0
24	117-PREPARE & SUBMIT BULLETIN #01 ESTIMATE	unit B	5/1/92	5/1/92	5/1/92	5/1/92	0

	activity	sub title	early start	early finish	late start	late finish	days
25	125-REVIEW & APPROVE BULLETIN #01 REVISIONS	unit B	5/1/92	5/1/92	5/1/92	5/1/92	0
26	105-RESOLVE NEW WATER STORAGE TANK SIZE -	unit B	5/1/92	5/1/92	5/1/92	5/1/92	0
27	106-RESOLVE PUMP PIT LIGHTING	unit B	5/1/92	5/1/92	5/1/92	5/1/92	0
28	112-PREPARE & ISSUE BULLETIN #01	unit B	5/1/92	5/1/92	5/1/92	5/1/92	0
29	129-ISSUE CHANGE ORDER COVERING BULLETIN #01	unit B	5/1/92	5/1/92	5/1/92	5/1/92	0
30	102-MOBILIZE & MOVE ON JOB SITE - 2	unit B	5/1/92	5/4/92	5/1/92	5/4/92	2
31	002-MOBILIZE & MOVE INTO UNIT A - 6	unit A	5/1/92	5/8/92	5/1/92	5/8/92	6
32	155-T/R TO AM 05/04/92	unit B	5/4/92	5/4/92	5/4/92	5/4/92	0
33	160-T/R TO START OF SITE INSTALLATION	unit B	5/4/92	5/4/92	6/16/92	6/16/92	0
34	167-MASS EXCAVATE FOR NEW WATER STORAGE TANK - 5	unit B	5/4/92	5/8/92	6/16/92	6/22/92	5
35	168-EXCAVATE, INSTL, TEST & BACKFILL WATER LINES FROM NEW TANK TO C, TO TANK & TO B - 5	unit B	5/4/92	5/8/92	6/23/92	6/29/92	5
36	159-DETAIL, APPRV, FAB & DELIVER UG WATER STORAGE TANK - 40	unit B	5/4/92	6/29/92	5/4/92	6/29/92	40
37	103-REMOVE SCALE IN AREA B & TURN OVER TO MCC - 1	unit B	5/5/92	5/5/92	5/5/92	5/5/92	1
38	104-LAY OUT INT WORK & PART DEMOLISH EXISTING MECH, ELECT & ARCH WORK AS REQD IN UNIT B - 3	unit B	5/5/92	5/7/92	5/5/92	5/7/92	3
39	111-SUBSTANT COMP DEMOLISH EXISTING MECH, ELECT & ARCH WORK AS REQD IN UNIT B - 2	unit B	5/8/92	5/11/92	5/11/92	5/12/92	2
40	107-PART DEMOLISH EXISTING WALL ELEMENTS AS REQD AT UNIT B NORTH, SOUTH & EAST ELEV - 3	unit B	5/8/92	5/12/92	5/8/92	5/12/92	3
41	110-PART GRIND & PREPARE UNIT B FLOOR SLABS FOR START OF PARTITION WORK - 3	unit B	5/8/92	5/12/92	5/8/92	5/12/92	3
42	109-INSTALL MISC IRON ABOVE CEILING HANGERS IN UNIT B - 4	unit B	5/8/92	5/13/92	7/10/92	7/15/92	4
43	003-LAY OUT INT WORK & PART DEMOLISH EXISTING MECH, ELECT & ARCH WORK AS REQD IN UNIT A - 5	unit A	5/11/92	5/15/92	5/11/92	5/15/92	5
44	174-EXCAVATE, FORM, REINF & POUR CONCRETE FOOTING FOR NEW WATER STORAGE TANK - 5	unit B	5/11/92	5/15/92	6/23/92	6/29/92	5
45	113-PART RECONSTRUCT MASONRY & INSTALL METAL SIDING AT UNIT B EXTERIOR - 3	unit B	5/13/92	5/15/92	5/13/92	5/15/92	3
46	114-COMP DEMOLISH EXISTING WALL ELEMENTS AS REQD AT UNIT B NORTH, SOUTH & EAST ELEVATION - 3	unit B	5/13/92	5/15/92	5/13/92	5/15/92	3
47	115-COMP GRIND & PREPARE UNIT B FLOOR SLABS FOR START OF PARTITION WORK - 3	unit B	5/13/92	5/15/92	5/19/92	5/21/92	3
48	122-PART INSTALL UNIT B ABOVE CEILING ROUGH FIRE PROTECTION PIPING WORK - 5	unit B	5/13/92	5/19/92	5/27/92	6/2/92	5

	activity	sub title	early start	early finish	late start	late finish	days
49	116-PART ERECT UNIT B INTERIOR MASONRY PARTITIONS - 7	unit B	5/13/92	5/21/92	5/13/92	5/21/92	7
50	121-PART INSTALL UNIT B ABOVE CEILING ROUGH MECHANICAL PIPING WORK - 7	unit B	5/13/92	5/21/92	5/22/92	6/2/92	7
51	120-PART INSTALL UNIT B ABOVE CEILING ROUGH SHEET METAL DUCT WORK & AIR HANDLING UNITS - 8	unit B	5/13/92	5/22/92	5/21/92	6/2/92	8
52	123-PART INSTALL UNIT B ABOVE CEILING ROUGH ELECT CONDUIT & FEEDERS - 8	unit B	5/13/92	5/22/92	5/21/92	6/2/92	8
53	124-PART INSTL UNIT B ABV CLG SECURITY, LIFE SAFETY & COMMUNICATIONS CONDUIT & WIRE - 8	unit B	5/13/92	5/22/92	5/21/92	6/2/92	8
54	118-PART INSTALL & GLAZE ENTRIES & WINDOWS ON NORTH, SOUTH & EAST ELEVATIONS - 3	unit B	5/18/92	5/20/92	5/18/92	5/20/92	3
55	119-COMP RECONSTRUCT MASONRY & INSTALL METAL SIDING AT UNIT B EXTERIOR - 3	unit B	5/18/92	5/20/92	5/18/92	5/20/92	3
56	008-PART INSTALL UNIT A ABOVE CEILING ROUGH FIRE PROTECTION PIPING WORK - 5	unit A	5/18/92	5/22/92	5/21/92	5/28/92	5
57	004-SUBSTANT COMP DEMOLISH EXISTING MECH, ELECT & ARCH WORK AS REQD IN UNIT A - 5	unit A	5/18/92	5/22/92	6/8/92	6/12/92	5
58	007-PART INSTALL UNIT A ABOVE CEILING ROUGH MECHANICAL PIPING WORK - 7	unit A	5/18/92	5/27/92	5/19/92	5/28/92	7
59	009-PART INSTALL UNIT A ABOVE CEILING ROUGH ELECT CONDUIT & FEEDERS - 8	unit A	5/18/92	5/28/92	5/18/92	5/28/92	8
60	010-PART INSTL UNIT A ABV CLG SECURITY, LIFE SAFETY & COMMUNICATIONS CONDUIT & WIRE - 8	unit A	5/18/92	5/28/92	5/18/92	5/28/92	8
61	006-PART INSTALL UNIT A ABOVE CEILING ROUGH SHEET METAL DUCT WORK & AIR HANDLING UNITS - 8	unit A	5/18/92	5/28/92	5/18/92	5/28/92	8
62	132-COMP INSTALL UNIT B ABOVE CEILING ROUGH FIRE PROTECTION PIPING WORK - 5	unit B	5/20/92	5/27/92	6/8/92	6/12/92	5
63	126-COMP INSTALL & GLAZE ENTRIES & WINDOWS ON NORTH, SOUTH & EAST ELEVATIONS - 3	unit B	5/21/92	5/26/92	5/21/92	5/26/92	3
64	131-COMP INSTALL UNIT B ABOVE CEILING ROUGH MECHANICAL PIPING WORK - 6	unit B	5/22/92	6/1/92	6/5/92	6/12/92	6
65	127-CONT(1) ERECT UNIT B INTERIOR MASONRY PARTITIONS - 7	unit B	5/22/92	6/2/92	5/22/92	6/2/92	7
66	128-CUT EXISTING UNIT B FLOOR SLAB, INSTL UG UTIL & PATCH SLAB - 7	unit B	5/22/92	6/2/92	6/24/92	7/2/92	7
67	014-COMP INSTALL UNIT A ABOVE CEILING ROUGH FIRE PROTECTION PIPING WORK - 5	unit A	5/26/92	6/1/92	6/3/92	6/9/92	5
68	005-PART ERECT UNIT A INTERIOR MASONRY PARTITIONS - 5	unit A	5/26/92	6/1/92	6/15/92	6/19/92	5
69	138-PART INSTALL UNIT B METAL STUDS, FRAMING & IN WALL WORK - 6	unit B	5/26/92	6/2/92	6/3/92	6/10/92	6
70	133-COMP INSTALL UNIT B ABOVE CEILING ROUGH ELECT CONDUIT & FEEDERS - 7	unit B	5/26/92	6/3/92	6/4/92	6/12/92	7
71	134-COMP INSTL UNIT B ABV CLG SECURITY, LIFE SAFETY & COMMUNICATIONS CONDUIT & WIRE - 7	unit B	5/26/92	6/3/92	6/4/92	6/12/92	7
72	130-COMP INSTALL UNIT B ABOVE CEILING ROUGH SHEET METAL DUCT WORK & AIR HANDLING UNITS - 8	unit B	5/26/92	6/4/92	6/3/92	6/12/92	8

	activity	sub title	early start	early finish	late start	late finish	days
73	013-COMP INSTALL UNIT A ABOVE CEILING ROUGH MECHANICAL PIPING WORK - 6	unit A	5/28/92	6/4/92	6/2/92	6/9/92	6
74	019-PART INSTALL UNIT A METAL STUDS, FRAMING & IN WALL WORK - 7	unit A	5/29/92	6/8/92	5/29/92	6/8/92	7
75	015-COMP INSTALL UNIT A ABOVE CEILING ROUGH ELECT CONDUIT & FEEDERS - 7	unit A	5/29/92	6/8/92	6/1/92	6/9/92	7
76	016-COMP INSTL UNIT A ABV CLG SECURITY, LIFE SAFETY & COMMUNICATIONS CONDUIT & WIRE - 7	unit A	5/29/92	6/8/92	6/1/92	6/9/92	7
77	012-COMP INSTALL UNIT A ABOVE CEILING ROUGH SHEET METAL DUCT WORK & AIR HANDLING UNITS - 8	unit A	5/29/92	6/9/92	5/29/92	6/9/92	8
78	011-COMP ERECT UNIT A INTERIOR MASONRY PARTITIONS - 5	unit A	6/2/92	6/8/92	6/22/92	6/26/92	5
79	136-CONSTRUCT SLAB ON GRADE RAMPS IN UNIT B AT ELEVATION CHANGES - 3	unit B	6/3/92	6/5/92	7/6/92	7/8/92	3
80	137-CONSTRUCT RAISED WOOD FLOOR IN UNIT B - 5	unit B	6/3/92	6/9/92	7/1/92	7/8/92	5
81	135-COMP ERECT UNIT B INTERIOR MASONRY PARTITIONS - 7	unit B	6/3/92	6/12/92	6/3/92	6/12/92	8
82	139-PART HANG UNIT B DRY WALL AT GYP BOARD WALLS & CEILINGS - 8	unit B	6/3/92	6/12/92	6/11/92	6/22/92	8
83	018-INSTL UNIT A ABOVE CEILING MISC IRON HANGERS - 2	unit A	6/9/92	6/10/92	7/2/92	7/6/92	2
84	017-CONSTRUCT EXTERIOR RAMPS & STAIRS IN UNIT A AT MAIN ENTRANCE - 5	unit A	6/9/92	6/15/92	6/29/92	7/6/92	5
85	020-PART HANG UNIT A DRY WALL AT GYP BOARD WALLS & CEILINGS - 8	unit A	6/9/92	6/18/92	6/9/92	6/18/92	8
86	021-COMP INSTALL UNIT A METAL STUDS, FRAMING & IN WALL WORK - 7	unit A	6/10/92	6/18/92	6/10/92	6/18/92	7
87	140-COMP INSTALL UNIT B METAL STUDS, FRAMING & IN WALL WORK - 6	unit B	6/15/92	6/22/92	6/15/92	6/22/92	6
88	151-PART TAPE & SAND DRY WALL AT GYP BOARD WALLS & CEILINGS - 8	unit B	6/15/92	6/24/92	6/23/92	7/2/92	8
89	022-INSTALL & GLAZE MAIN ENTRY IN UNIT A - 5	unit A	6/16/92	6/22/92	7/7/92	7/13/92	5
90	023-PART TAPE & SAND UNIT A DRY WALL AT GYP BOARD WALLS & CEILINGS - 8	unit A	6/19/92	6/30/92	6/19/92	6/30/92	8
91	024-COMP HANG UNIT A DRY WALL AT GYP BOARD WALLS & CEILINGS - 8	unit A	6/19/92	6/30/92	6/19/92	6/30/92	8
92	152-COMP HANG UNIT B DRY WALL AT GYP BOARD WALLS & CEILINGS - 8	unit B	6/23/92	7/2/92	6/23/92	7/2/92	8
93	153-PART PAINT UNIT B INT SURFACES AS REQD - 5	unit B	6/25/92	7/1/92	7/9/92	7/15/92	5
94	177-SET & CONNECT NEW WATER STORAGE TANK - 5	unit B	6/30/92	7/7/92	6/30/92	7/7/92	5
95	025-PART PAINT UNIT A INT SURFACES AS REQD - 5	unit A	7/1/92	7/8/92	7/7/92	7/13/92	5
96	026-COMP TAPE & SAND UNIT A DRY WALL AT GYP BOARD WALLS & CEILINGS - 8	unit A	7/1/92	7/13/92	7/1/92	7/13/92	8

	activity	sub title	early start	early finish	late start	late finish	days
97	156-PART INSTL UNIT B ACOUSTIC CEILING SUSP & GRID - 6	unit B	7/2/92	7/10/92	7/16/92	7/23/92	6
98	154-COMP TAPE & SAND DRY WALL AT GYP BOARD WALLS & CEILINGS - 8	unit B	7/6/92	7/15/92	7/6/92	7/15/92	8
99	182-CONSTRUCT PUMP PIT & SUMP AT WATER STORAGE TANK - 8	unit B	7/8/92	7/17/92	7/8/92	7/17/92	8
100	027-PART INSTL UNIT A ACOUSTIC CEILING SUSP & GRID - 6	unit A	7/9/92	7/16/92	7/14/92	7/21/92	6
101	163-PART INSTALL UNIT B CEILING LIGHT FIXTURES - 3	unit B	7/13/92	7/15/92	7/29/92	7/31/92	3
102	161-PART INSTALL UNIT B SPRINKLER HEADS & RELATED ACOUSTIC PANELS - 3	unit B	7/13/92	7/15/92	7/30/92	8/3/92	3
103	162-PART INSTALL UNIT B CEILING GRILLS & DIFFUSERS - 5	unit B	7/13/92	7/17/92	7/27/92	7/31/92	5
104	028-CONT(1) PAINT UNIT A INT SURFACES AS REQD - 3	unit A	7/14/92	7/16/92	7/17/92	7/21/92	3
105	029-LAY QUARRY & CERAMIC TILE AT TO/R FLOORS & ENTRY IN UNIT A - 10	unit A	7/14/92	7/27/92	7/14/92	7/27/92	10
106	157-CONT(1) PAINT UNIT B INT SURFACES AS REQD - 3	unit B	7/16/92	7/20/92	7/21/92	7/23/92	3
107	158-LAY QUARRY & CERAMIC TILE AT TO/R FLOORS & WALLS IN UNIT B - 10	unit B	7/16/92	7/29/92	7/16/92	7/29/92	10
108	184-BACKFILL & COMPACT AT NEW WATER STORAGE TANK - 3	unit B	7/17/92	7/17/92	7/17/92	7/17/92	0
109	034-COMP PAINT UNIT A INT SURFACES AS REQD - 2	unit A	7/17/92	7/20/92	7/29/92	7/30/92	2
110	032-PART INSTALL UNIT A CEILING LIGHT FIXTURES - 3	unit A	7/17/92	7/21/92	7/27/92	7/29/92	3
111	030-PART INSTALL UNIT A SPRINKLER HEADS & RELATED ACOUSTIC PANELS - 3	unit A	7/17/92	7/21/92	7/28/92	7/30/92	3
112	031-PART INSTALL UNIT A CEILING GRILLS & DIFFUSERS - 5	unit A	7/17/92	7/23/92	7/23/92	7/29/92	5
113	033-COMP INSTL UNIT A ACOUSTIC CEILING SUSP & GRID - 6	unit A	7/17/92	7/24/92	7/22/92	7/29/92	6
114	165-COMP PAINT UNIT B INT SURFACES AS REQD - 2	unit B	7/21/92	7/22/92	7/31/92	8/3/92	2
115	052-INSTL UNIT A LIFE SAFETY, SECURITY & COMMUNICATIONS DEVICES & TRIM - 5	unit A	7/21/92	7/27/92	7/31/92	8/6/92	5
116	164-COMP INSTL UNIT B ACOUSTIC CEILING SUSP & GRID - 6	unit B	7/21/92	7/28/92	7/24/92	7/31/92	6
117	176-INSTL UNIT B LIFE SAFETY, SECURITY & COMMUNICATIONS DEVICES & TRIM - 5	unit B	7/23/92	7/29/92	8/4/92	8/10/92	5
118	036-COMP INSTALL UNIT A SPRINKLER HEADS & RELATED ACOUSTIC PANELS - 2	unit A	7/27/92	7/28/92	7/31/92	8/3/92	2
119	039-INSTALL UNIT A CEILING TRACK & FOLDING PARTITION - 2	unit A	7/27/92	7/28/92	8/5/92	8/6/92	2
120	038-COMP INSTALL UNIT A CEILING LIGHT FIXTURES - 3	unit A	7/27/92	7/29/92	7/30/92	8/3/92	3

	activity	sub title	early start	early finish	late start	late finish	days
121	037-COMP INSTALL UNIT A CEILING GRILLS & DIFFUSERS - 3	unit A	7/27/92	7/29/92	7/30/92	8/3/92	3
122	035-INSTALL UNIT A TO/R VANITIES & PLUMBING FIXTURES - 5	unit A	7/28/92	8/3/92	7/28/92	8/3/92	5
123	169-COMP INSTALL UNIT B SPRINKLER HEADS & RELATED ACOUSTIC PANELS - 2	unit B	7/29/92	7/30/92	8/4/92	8/5/92	2
124	172-INSTALL UNIT B CEILING TRACK & FOLDING PARTITION - 2	unit B	7/29/92	7/30/92	8/7/92	8/10/92	2
125	170-COMP INSTALL UNIT B CEILING GRILLS & DIFFUSERS - 3	unit B	7/29/92	7/31/92	8/3/92	8/5/92	3
126	171-COMP INSTALL UNIT B CEILING LIGHT FIXTURES - 3	unit B	7/29/92	7/31/92	8/3/92	8/5/92	3
127	166-INSTALL UNIT B TO/R VANITIES & PLUMBING FIXTURES - 5	unit B	7/30/92	8/5/92	7/30/92	8/5/92	5
128	051-INSTALL ACOUSTIC CEILING PANELS AT UNIT A - 8	unit A	7/30/92	8/10/92	8/4/92	8/13/92	8
129	175-INSTALL ACOUSTIC CEILING PANELS AT UNIT B - 8	unit B	8/3/92	8/12/92	8/6/92	8/17/92	8
130	040-INSTALL UNIT A TOILET PARTITIONS & ACCESSORIES - 3	unit A	8/4/92	8/6/92	8/4/92	8/6/92	3
131	173-INSTALL UNIT B TOILET PARTITIONS & ACCESSORIES - 3	unit B	8/6/92	8/10/92	8/6/92	8/10/92	3
132	055-INSTALL UNIT A CARPETING - 3	unit A	8/7/92	8/11/92	8/14/92	8/18/92	3
133	052-INSTALL UNIT A INTERIOR DOORS, TRIM, HARDWARE & MILLWORK - 5	unit A	8/7/92	8/13/92	8/12/92	8/18/92	5
134	054-LAY UNIT A RESILIENT FLOOR TILE - 8	unit A	8/7/92	8/18/92	8/7/92	8/18/92	8
135	053-INSTALL UNIT A CEILING CUBICLE TRACK - 3	unit A	8/11/92	8/13/92	8/14/92	8/18/92	3
136	180-INSTALL UNIT B CARPETING - 3	unit B	8/11/92	8/13/92	8/18/92	8/20/92	3
137	181-INSTALL UNIT B INTERIOR DOORS, TRIM, HARDWARE & MILLWORK - 5	unit B	8/11/92	8/17/92	8/14/92	8/20/92	5
138	179-LAY UNIT B RESILIENT FLOOR TILE - 8	unit B	8/11/92	8/20/92	8/11/92	8/20/92	8
139	178-INSTALL UNIT B CEILING CUBICLE TRACK - 3	unit B	8/13/92	8/17/92	8/18/92	8/20/92	3
140	057-CLEAN UP & MOVE OUT OF UNIT A - 3	unit A	8/19/92	8/21/92	8/19/92	8/21/92	3
141	183-CLEAN UP & MOVE OUT OF UNIT B - 3	unit B	8/21/92	8/25/92	8/21/92	8/25/92	3

Ralph J. Stephenson P.E. P.C.
Consulting Engineer

June 26, 1992

Subject: Monitoring Report #04
C. S. Mott Community College
South Lakes Campus
Fenton, Michigan

Project #: 92:15

Disks: rjs #270, #302, and #313

Date of Monitoring: June 15, 1992 (wd 372)

Monitored from:

Issue #03, sheets #A1 and B2, dated May 12, 1992 (wd 349), and sheet C3, dated June 1, 1992 (wd 362).

Note: Issue #04 was for reference only, and was not formally issued.

Those participating in monitoring:

- Jerry Harburn - Principal - THA
- Junior Paul - Consultant - THA
- Bert Forsmark - Project Manager - Erickson and Lindstrom
- Ralph J. Stephenson - Consultant

Actions taken:

- Briefly reviewed current status of project
- Updated network models to issue #5, dated June 15, 1992 (wd 372), sheets A-1, B-2, and C-3.

Summary:

Unit A

Currently work is starting or in progress on rough overhead mechanical and electrical installation, interior masonry, and entry ramps and stairs. Taking the current status of the work into account, Mr. Forsmark had reviewed the entire Unit A network model prior to our planning session. We updated to issue #5 from the status of the project as of June 9, 1992 (wd 368).

The updated network model shows an early completion of unit A on the pm of August 7, 1992 (wd 411).

Unit B

Work in unit B is currently concentrated on reconstruction of the exterior skin of the building, completion of rough above floor, and above floor installation, installation of

interior masonry partitions and other early rough interior work.

The issue #5 updated network model for unit B work shows a completion date of the pm of August 27, 1992 (wd 425).

Mr. Forsmark pointed out as we were updating the building B network model that currently bulletin #4 is being processed. Meanwhile E & L has been instructed to proceed on the basis of the base bid, so as to not delay the work.

Other bulletin revisions are anticipated in the near future. However it appears that all parties to the project are cooperating to process these changes as quickly as possible.

Also shown on sheet B-2 is the network model for installation of a new underground water tank. Tank delivery is set for June 29, 1992 (wd 383). Excavation and installation of the concrete footing will proceed in the near future and is expected to be complete by the time the tank is delivered. Completion of work on the new tank is currently set for an early finish of the pm of July 17, 1992 (wd 396).

Unit C

Work in progress at unit C as of the updating date of June 9, 1992 (wd 368) included layout, demolition and early procurement. The issue #5 early completion date shown in the updated network model is the pm of August 6, 1992 (wd 410). This date like others in the issue #5 updating is subject to a review and check by the project team.

General

Copies of the issue #5 updated network model were prepared and given to Mr. Forsmark at the meeting for his review and comments. I have asked Mr. Forsmark to provide copies of this network issue to Mr. Harburn as soon as possible for THA and Mr. Paul's review.

We will consider any revisions needed and update the plan of action at our next planning and monitoring session. I shall contact Mr. Harburn shortly to set a mutually satisfactory date for the next meeting.

This monitoring report is being sent only to Mr. Jerry Harburn at THA. Further distribution will be by him.

Ralph J. Stephenson, P. E., P. C

Ralph J. Stephenson P.E. P.C.
Consulting Engineer

June 8, 1992

Subject: Monitoring Report #03
C. S. Mott Community College
South Lakes Campus
Fenton, Michigan

Project #: 92:15

Disk: rjs #270 and #302

Date of Monitoring: May 8, 1992 (wd 347)

Monitored from: Issue #03, sheets #A1 and B2, dated May 12, 1992 (wd 349), and sheet C3, dated June 1, 1992 (wd 362)

Those participating in monitoring:

- Jerry Harburn - Principal - THA
- Dave Anthony - President - Erickson & Lindstrom
- Bert Forsmark - Project Manager - Erickson and Lindstrom
- Donald Sinclair - Project Superintendent - Erickson and Lindstrom
- Ralph J. Stephenson - Consultant

Actions taken:

- Inspected project
- Attended project progress meeting
- Reviewed current status of project
- Reviewed sheet C3, issue #03 with Mr. Forsmark
- Began updating network models as required

Summary:

Unit A

The contractor began work at unit A on May 11, 1992 (wd 348). However work was stopped on May 13, 1992 (wd 350) to allow building asbestos abatement. Demolition work was resumed on June 1, 1992 (wd 362) and is currently in work. No major new overhead work has yet been started. This work was scheduled to begin on May 18, 1992 (wd 353), and as of June 2, 1992 (wd 363), currently lags about 11 working days.

Unit B

As of June 2, 1992 (wd 363) demolition is in work at the interior of the building along with erection of masonry and installation of above floor rough mechanical piping, fire protection piping, and rough electrical conduit and feeders. Installation of underground utilities is also in work. Above floor sheet metal work has not yet begun in a production mode.

Above floor rough work currently lag late starts and finishes in the issue #3 network

model by from 3 to 7 working days. This is a sizable lag, particularly this early in the project.

Work on exterior demolition was suspended about May 21, 1992 when the contractor encountered siding materials that may have to be abated.

There has been some difficulty in maintaining masonry progress on the project. It was mentioned at the construction meeting that the mason contractor did not work on the project on June 1 or 2, 1992 (wd 362 and 363). Masonry was due to have been complete by the pm of June 12, 1992 (wd 372). It appears currently to lag late dates by from 9 to 11 working days.

Unit C

Demolition was begun in unit C on June 1, 1992 (wd 362). Mr Forsmark provided me a preliminary network model which I converted to a full network model labeled issue #03, and gave to Mr. Forsmark for his comments and changes as required.

The current plan of work anticipates a completion of unit C by the pm of July 31, 1992 (wd 406). Mr. Forsmark will check the logic and durations on the network and make needed corrections.

General

Overall the project lags desired target dates by from 3 to 11 working days. Therefore, Mr. Forsmark, Mr. Anthony, Mr. Harburn and I began to update the current network models from the issue 3 diagrams. However due to the need for additional information and decisions on a variety of owner and contractor matters, I printed out the partially updated issue #4 networks for Mr. Forsmark, and he will add the necessary information and send me copies. When I get these marked up copies I shall continue the updating from them.

At our next planning and monitoring session we then complete a full update of the work plan for all units. At this meeting we should also tabulate and monitor all procurement activities. I shall contact Mr. Harburn shortly to set a mutually satisfactory date for our meeting.

This monitoring report is being sent to Mr. Jerry Harburn at THA. Further distribution will be by him.

Ralph J. Stephenson, P. E., P. C.

Ralph J. Stephenson P.E. P.C.
Consulting Engineer

July 25, 1992

Subject: Monitoring Report #05
C. S. Mott Community College
South Lakes Campus
Fenton, Michigan

Project #: 92:15

Disks: rjs #270, #302, #313, and #324

Date of Monitoring: July 24, 1992

Contract completion: pm August 28, 1992 (wd 426)

Monitored from:

Issue #05, sheets #A1, B2, and C3, dated June 9 and 15, 1992 (wd 368 and 372)

Those participating in monitoring:

- Jerry Harburn - Principal - THA
- Junior Paul - Consultant - THA
- Bert Forsmark - Project Manager - Erickson and Lindstrom
- Donald Sinclair - Project Superintendent - Erickson and Lindstrom
- Ralph J. Stephenson - Consultant

Some subcontractor representatives were present during monitoring. These are not listed above.

Actions taken:

- Inspected project
- Reviewed current status of project with project team
- Updated network models with Mr. Forsmark to issue #6, dated July 24, 1992 (wd 400), sheets A-1, B-2, and C-3.
- Printed updated networks and left with Mr. Forsmark for review and comments.

Summary:

Unit A

As of July 24, 1992 (wd 400) most of rough above ceiling work has been completed except for installation of mechanical coil units. These are currently expected on the job by the pm of July 31, 1992 (wd 406) and installation will start on August 3, 1992.

Some rough masonry and concrete work is still in progress along with interior dry wall work. Completion of this work will be followed by installation of hard tile floors, and of remaining toilet room work. Painting and other miscellaneous finish work will proceed concurrently.

Delivery of hollow metal, and other doors is set for the pm of August 10, 1992 (wd 412). Hardware is available and door installation will begin as soon as they arrive on the job.

The completion date of unit A as shown in the updated network issue #6, dated July 24, 1992 (wd 400) is the evening of August 28, 1992 (wd 426). This lags the projected issue #5 end date of the pm of August 7, 1992 (wd 411) by 15 working days. However the area completion under this plan of work does meet the contract end date of the pm of August 31, 1992 (wd 426).

Unit B

Work in unit B was shown in the issue #5 network model, dated June 15, 1992 (wd 372), as being completed by the evening of August 27, 1992 (wd 425). In the issue #6 network update of July 24, 1992 (wd 400) the completion date was extended out to the pm of September 2, 1992 (wd 429). This is three working days past the contract completion date.

One major difficulty in unit B is the August 21, 1992 (wd 420) pm delivery of the air handling units. Subsequent to their arrival on the site they must be installed, the affected ceiling work completed and the project then cleaned and turned over. I suggest this sequence be given careful attention in the analysis of work remaining to do.

The other long sequence is through toilet room work and following interior finish work. Here too there appears some potential for reducing the length of the remaining work sequences.

Mr. Forsmark is currently reviewing all the updated networks and will convey his thoughts to me in the near future.

Unit C

The unit C completion as shown in the tentative issue #6 network model, dated July 26, 1992 (wd 400) is the pm of August 27, 1992 (wd 425). This is about 15 working days later than the completion date shown in the issue #5 network model.

The main path of activities yet to be completed is along painting, hard tile work, toilet room work and other miscellaneous finish items. It appears that there is some potential for an earlier finish if it is deemed desirable. However Mr. Forsmark will evaluate this matter in his review.

Our monitoring and analysis did not take into account the possible future need for accommodating special equipment to be installed in the facility by the owner and user. No authentic information on the major of these items was available at our meeting. Therefore the issue #6 work plan is based on proceeding with what is now included in the scope of work authorized to be done.

Water Storage Tank

No updating of this network was possible at our meeting since accurate information on

deliveries and installation procedures was apparently not available. This system is critical to the completion and use of the facility. I suggest a high immediate priority be given its completion.

General:

Copies of the updated unit A, B, and C networks along with the current model of the water tank installation were left in the conference room for Mr. Forsmark to review. I shall check with him on Monday July 27, 1992 to obtain his comments for incorporation into the networks to be issued.

Of major concern on the project as of this updating date, is the need to bring much of the work requiring similar trades in different areas to completion concurrently for turn over by the pm of August 28, 1992 (wd 426).

Part of this problem is the need in a facility of this nature to satisfy the regulatory requirements of the various local and state agencies having jurisdiction over the project. One item of strong concern is completion of the fire suppression system. I suggest a detailed review of the necessary actions to be taken for completion and approval of this system be made now.

Another item of concern is delivery of mechanical equipment needed to have the mechanical systems operational by the occupancy of the building. As noted above, this matter is especially critical in unit B.

There has been some consideration and discussion of the possibility of an earlier occupancy for various purposes in early and mid August, 1992. At the present time I suggest the building be kept fully available for construction work only, until the contract end date, to allow the contractors full operating room and freedom of action. Premature occupancy causes jurisdictional problems, confusion, problems of liability and the possibility of damage to finish work that could cause serious delays to turning over the facility.

I shall issue the revised network model for distribution to the project team as soon as I have comments and revisions from Mr. Forsmark. I have recommended to Mr. Harburn and Mr. Paul that we again monitor the project in early August, 1992. I shall be in touch with Mr. Harburn shortly to set the date for the next project evaluation.

This monitoring report is being sent only to Mr. Jerry Harburn at THA. Further distribution will be by him.

Ralph J. Stephenson, P. E., P. C

Ralph J. Stephenson P.E. P.C.
Consulting Engineer
August 12, 1992

Subject: Monitoring Report #06
C. S. Mott Community College
South Lakes Campus
Fenton, Michigan

Project #: 92:15

Disks: rjs #270, #302, #313, and #324

Date of Monitoring: August 11, 1992 (wd 412)

Contract completion: pm August 28, 1992 (wd 426)

Working days remaining : 14

Monitored from:

Issue #06, sheets #A1, B2, and C3, dated July 24, 1992 (wd 400)

Those participating in monitoring:

- Jerry Harburn - Principal - THA
- Junior Paul - Consultant - THA
- Michael St. Germain - Project manager - Ghafari/MKK
- David Anthony - President - Erickson and Lindstrom
- Ralph J. Stephenson - Consultant

Some contractor and subcontractor representatives present during the construction meeting are not listed above.

Actions taken:

- Inspected project
- Reviewed current status of project with project team
- Discussed project in detail with Mr. Harburn and Mr. Paul

Summary:

Unit A

As of August 11, 1992 (wd 412), most rough above ceiling work has been completed except for installation of overhead mechanical units. These units are now expected to be on site by the pm of August 20, 1992 (wd 420). Installation will start immediately after.

Hard tile installation, toilet room vanities, and installation of plumbing fixtures is in work and generally meeting late start dates. At this point in the project it is critical to complete all trade work possible as areas open up. This is so as to lessen the amount of finishing work to be done during the punching out and turn over period.

A limited amount of overtime work has been authorized to be used at the discretion of the project team. I suggest the use of this resource be considered early enough to permit the time to be allocated effectively.

An area of concern at Unit A is completion of the main entry. Some storefront work is in place and ceiling work is in progress. Some glass has been partially installed. This entry is in a critical location, and all delays to installation of the entry must be cleared now.

Delivery of toilet partitions was reviewed at the construction meeting since they are critical to occupying the facility. According to Mr. Sinclair, they are available as needed, and hanging the partitions will begin shortly.

Installation of doors, painting , laying resilient tile and completing interior finish trim items is ongoing and will continue on to clean up and move out of Unit A. The move out date is currently set for the pm of August 28, 1992 (wd 426).

Unit B

The status of Unit B is similar to that of Unit A. One of the most critical items is delivery and installation of the above ceiling mechanical units. These units, are expected on the job the pm of August 21, 1992 (wd 421), and will be installed immediately. After installation, the remaining ceiling work, primarily at corridors, will proceed.

Exterior sash and entry installation in unit B is posing close in problems. Full close in is very important for protection against weather and for security reasons. All project staff members must continue to work together closely to complete this exterior building work by the pm of August 28, 1992 (446).

Unit C

Unit C work currently lags late starts and late finishes shown in the monitoring work plan by from four to eight working days.

Of particular concern is completing finish work in the portion of the facility between the old auto service area and the garage portion of the building. This area currently shows the greatest lag in floor finishes, ceiling work and miscellaneous finishes.

Another lagging item is installation of light fixtures in the exposed framing areas to the the north. Considerable painting of structural members is required there, and these probably will have to be painted concurrently with the light fixture work. The area is fairly small and only a few trades can work in the Unit C north area at a time.

Tank Installation

The service pit for the tank is formed and was to be poured out on Tuesday, August 11, 1992 (wd 412). The tank is on the job, and will be installed as foundations are made available. This system is critical to the use of the facility and must be given ongoing close attention if it is to be completed by the turnover date.

General

The network models used to monitor the project at this inspection were those resulting from our previous monitoring and updating meeting. Mr. Forsmark provided me the updating information which was then incorporated into the Issue #6 network, dated July 24, 1992 (wd 400) used for this monitoring analysis.

There are several overall points about the project that should be emphasized or reemphasized. These include:

01.) Alarm system components are apparently available or nearly ready for shipping from a relatively near source. Mr. Anthony suggested they be picked up at the supplier's plant if delivery is not made soon.

02.) There is an overtime reserve source that should be considered for use in bringing key elements that can be worked on into alignment with the desired target dates.

03.) It is assumed currently that the buildings will be finished on the basis of the design information available and authorized. In light of this, all parties involved should give high priority attention to formally clearing all pending bulletins, change orders and other changes that have been approved.

Additional changes to the work will only tend to delay progress toward a timely occupancy of the facility.

04.) According to Mr. St. Germain the state fire marshal will make a preliminary walk through on Thursday, August 13, 1992 (wd 414). The final inspection by the fire marshal will be made on August 28, 1992 (wd 425).

05.) Completion of close in is now very critical to maintaining protection from weather and providing a secure interior.

06.) Operating life safety systems are critical to being able to occupy the full facility. All items that are part of these systems, including the fire suppression system must be completed before occupancy by the owner and user.

I have recommended to Mr. Harburn and Mr. Paul that we again monitor the project on Tuesday, August 18, 1992 (wd 417). In addition I shall plan to inspect and report on the status of the project as of August 27, 1992 (wd 424).

This report is being sent to Mr. Jerry Harburn at THA. Further distribution will be by him.

Ralph J. Stephenson, P. E., P. C

Ralph J. Stephenson P.E. P.C.
Consulting Engineer
August 18, 1992

Subject:	Monitoring Report #07 C. S. Mott Community College South Lakes Campus Fenton, Michigan
Project #:	92:15
Disks:	rjs #270, #302, #313, and #324
Date of Monitoring:	August 18, 1992 (wd 417)
Contract completion:	pm August 28, 1992 (wd 426)
Working days remaining :	9

Monitored from:

Issue #06, sheets #A1, B2, and C3, dated July 24, 1992 (wd 400)

Those participating in monitoring:

- Jerry Harburn - Principal - THA
- Junior Paul - Consultant - THA
- Michael St. Germain - Project manager - Ghafari/MKK
- Bernie Darrenkemp - Mechanical engineer - THA
- Del Hull - Electrical engineer - THA
- Bert Forsmark - Project manager - Erickson and Lindstrom
- Don Sinclair - Field Superintendent - Erickson and Lindstorm
- Ralph J. Stephenson - Consultant

Some contractor and subcontractor representatives present during the construction meeting are not listed above.

Actions taken:

- Inspected project
- Attended construction meeting
- Reviewed current status of project with project team
- Discussed project in detail with Mr. Harburn and Mr. Paul

Summary:

After the regular construction meeting those listed above stayed on to discuss the requirements to obtain a state fire marshall occupancy permit. This fire marshall final walk through and inspection is presently set for 1:00 pm, Friday, August 28, 1992 (wd 425).

Also, approvals before occupancy must be obtained from the state electrical inspector, and the state plumbing and mechanical inspector. It is desirable to have the electrical, plumbing, and mechanical approvals prior to the inspection of the state fire marshall.

In our later meeting this morning we covered the requirements of the regulatory agencies in some detail. The material addressed first dealt with those needs to be met by the fire

marshall inspector meeting date on August 28, 1992 (wd 425).

A preliminary list of these needs is summarized below. Additional items should be identified and reviewed on an ongoing basis:

• Building A and B work needed by the fire marshall inspection on August 28, 1992 (wd 425) includes:

- Fire suppression system must be tested and operative
- All alarm system devices must be installed and operative.
- Exit signs must be operative.
- Emergency lighting system must be operative.
- Smoke detectors must be operative.
- Ceiling tile must be installed as required for smoke barrier.
- All corridor doors and hardware must be installed.
- Water storage system must be operative.- Emergency generator must be operative.
- All interior plumbing systems must be operative.
- Building keying system must be in place for security purposes.
- HVAC units must be installed and operative.
- Toilet partitions must be installed.
- HVAC distribution systems must be fully operative.
- Smoke detectors must be operative.
- Fire dampers must be properly installed.
- All interior signage must be installed per ADA requirements.
- All corridor doors and hardware must be installed.

• At unit C to obtain an occupancy permit the items to be satisfied include:

- All shop equipment furnished by the owner and intended to serve the initial use functions must be installed and operable.
- Fire suppression system must be tested and operative
- All alarm system devices must be installed and operative.
- Exit signs must be operative.
- Emergency lighting system must be operative.
- Smoke detectors must be operative.
- Ceiling tile must be installed as required for smoke barrier.
- All corridor doors and hardware must be installed.
- Water storage system must be operative.
- Emergency generator must be operative.
- All interior plumbing systems must be operative.
- Building keying system must be in place for security purposes.
- HVAC units must be installed and operative.
- Toilet partitions must be installed.
- HVAC distribution systems must be fully operative.
- Smoke detectors must be operative.
- Fire dampers must be properly installed.
- All interior signage must be installed per ADA requirements.
- All corridor doors and hardware must be installed.

• Site work to be completed before school opening on the am of September 8, 1992 (wd 431) includes:

- Handicapped parking signage and striping must be installed
- Clarification of areas to be occupied by Consumers Power until December, 1992.
- Site clean up as required under this contract.

A brief review of the status of each area of the facility is given below:

Unit A

As of August 18, 1992 (wd 417) work is being concentrated on finishing ceilings, toilet rooms, the entries and installing floor finishes including resilient tile and carpeting. Above ceiling mechanical unit coils are expected on the job August 18, 1992 (wd 417) and will be installed immediately.

Entry glazing is in work, and as soon as above ceiling work is completed there the entry finish work can be completed.

According to Mr. Sinclair toilet partitions will be on the job August 19, 1992 (wd 418), and installation will begin on August 20, 1992 (wd 419). Toilet room fixtures and vanities are in work and moving fairly well.

Alarm system components are not yet on the job, and some discussions were held about picking up the material at the plant. I highly recommend that this course of action be followed and that a plant visit be made immediately.

The state fire marshall made a preliminary walk through on August 13, 1992 (wd 414). A list of his observations has been made and is being used to correct deficiencies now. These corrections must be made before the next inspection on August 28, 1992 (wd 425) for an occupancy permit to be obtained.

Unit B

Generally unit B interior work is paralleling that at unit A. Exterior doors and window work at B is in progress and moving relatively well. A large opening has been left in the north wall east corner for access to bring in mechanical equipment. It will have to be closed soon to make the building secure and ready for the fire marshall's walk through on August 28, 1992 (wd 425).

At the physical therapy area, the owner has not yet ordered the equipment and the area will be finished and turned over per base contract. At the biology area owner's equipment will be delivered on August 20, 1992 (wd 419). It will be set by the owner and hooked up by the general contractor and his subcontractors.

The library area base contract work will be completed and the room turned over to the owner for interim use as desired. The day care center will also be completed per base contract and turned over to the owner for later occupancy.

Above ceiling mechanical units are to be on the job August 18, 1992 (wd 417) and are to be installed immediately. Acoustic ceiling work will follow immediately.

Interior doors for units A and B are to arrive on August 18, 1992 (wd 417). Mr. Sinclair will

begin installing these as soon as they arrive.

Unit C

Measuring unit C work against the current network, it does appear that the area can be completed by the evening of August 28, 1992 (wd 426). There is considerable finish work yet to be done, particularly in the area between the old auto service area and the new garage area.

Also a determination must yet be made about the disposition of the existing hoist pits at the old auto service area. This is currently being considered by the owner's staff.

Most cleaning and painting in the garage has been completed and light fixtures are being installed.

It was again stressed in the meeting that the paint spray booth installation should be considered separately from the base contract work. The installation procedures to be used for equipment at the garage has not been thoroughly established.

Projecting from the current project network model, it appears there remain 8 to 12 working days of base contract installation if the work can proceed without disruption. Therefore I suggest that this building be considered as probably being completed in early September, 1992, probably close to September 8, 1992.

Tank Work

The pit has been installed and the tank set. Backfill is currently being placed around the tank, getting ready for filling the tank with water. There remains considerable work yet to be done to make the system operative. It is essential to complete the water storage system before the fire marshall's inspection on August 28, 1992 (wd 425).

Summary

There remains considerable work on the project and I suggest a master check list of must items be prepared by the project team. This list should be reviewed at and between construction meetings to insure actions can be taken to meet target end dates and to help insure contract compliance.

I shall plan to again inspect and report on the status of the project as of August 27, 1992 (wd 424).

This report is being given to Mr. Jerry Harburn and Mr. Junior Paul at THA. Further distribution will be by both as required.

Ralph J. Stephenson, P. E., P. C

Subject: Monitoring Report #08
C. S. Mott Community College
South Lakes Campus
Fenton, Michigan

Project #: 92:15

Disks: rjs #270, #302, #313, and #324

Date of Monitoring: August 27, 1992 (wd 424)

Contract completion: pm August 28, 1992 (wd 426)

Working days remaining : 2

Monitored from:

Issue #06, sheets #A1, B2, and C3, dated July 24, 1992 (wd 400)

Those participating in monitoring:

- Gerald Harburn - Principal - THA
- Junior Paul - Consultant - THA
- Don Sinclair - Field Superintendent - E & L
- Ralph J. Stephenson - Consultant

Actions taken:

- Inspected project
- Reviewed current project status with Mr. Sinclair at site
- Discussed project in detail with Mr. Harburn and Mr. Paul

General Review:

This monitoring was primarily to report on the status of the project as of August 27, 1992 (wd 424), and to review the general readiness for final inspections needed before occupancy.

Generally unit A is is good condition, unit B is being moved rapidly toward completion and is in fair condition. Unit C still has considerable work to be done to achieve full acceptance and reach substantial completion.

The fire marshal final walk through and inspection is presently set for 1:00 pm, Friday, August 28, 1992 (wd 425). Recent and current work on the project has been focussed on preparing the buildings for this critical regulatory inspection.

At our previous monitoring meeting we listed several of the major items that should be completed before the inspection. I discussed each of these with Mr. Sinclair after inspecting the facility.

A brief summary of the monitoring review, and our discussion is given below for units A and B. Those items ready for the fire marshal inspection, according to Mr. Sinclair are indicated with an ok.

Units A and B
- Fire suppression system tested and operative - ok
- Alarm system devices installed and operative - ok
- Exit signs operative - ok
- Emergency lighting system operative - ok
- Smoke detectors operative - ok
- Ceiling tile installed as required for smoke barrier - nearly complete
- Corridor doors and hardware installed - being installed
- Water storage system operative - ok
- Emergency generator operative - ok
- All interior plumbing systems operative - ok
- Building keying system in place for security purposes - not complete
- HVAC units installed and operative - not totally under controls
- Toilet partitions installed - ok
- HVAC distribution systems fully operative - not complete
- Smoke detectors operative - ok
- Fire dampers properly installed - in work - fire marshal needs have been met
- Interior signage installed per ADA requirements - owner work
- Corridor doors and hardware installed - being installed - need 2 more

It appears that Units A and B will be in fair condition to receive fire marshal approval. This is not totally certain because of the nature of the inspection and of those involved in the inspection. However, strong efforts have been made by Mr. Sinclair and the other members of the project team to bring Units A and B to the point where approval can be given.

Also there are some areas where the area use details have not been fully decided. These matters that can be decided upon should be resolved just as soon as possible so the project can be closed out cleanly and completely.

Unit C
At unit C interior work has moved well over the past few days. Much of the work in the new shop area has been completed and interior work at the core between the old service area and the shop has progressed well. It is questionable however that the unit can be totally completed, including regulatory approval by the evening of August 28, 1992 (wd 426).

Tank Work
The water tank has been backfilled and filled, and according to Mr. Sinclair is ready for the fire marshal's inspection. There is some additional structural concrete work to be done at the pit. This was in work on August 27, 1992 (wd 424).

Summary

Overall the project has moved well despite the difficulties that usually characterize an extensive remodeling, particularly from one use to another.

I would like to thank the project team for their help in my planning and monitoring work. This report is being sent to Mr. Jerry Harburn at THA. Further distribution will be by him as required.

Ralph J. Stephenson, P. E., P. C

MCC South Lakes Campus - Thompson Road notes

I. General notes - to be updated as project proceed

A. Key dates

1. *03/25/92 (315) - Issue construction documents*
2. *03/31/92 (319) - Tentative design & document approval by State Fire Marshall*
3. *04/02/92 (321) - Mandatory contractor project walk through - 9:30 pm*
4. *04/14/92 (329) - Proposals due from contractors - 2:00 pm*
5. *04/15/92 (330) - rme make contractor recommendations to mcc*
6. *04/24/92 (337) - rme submarine launched*
7. *04/27/92 (296) - Regular Board meeting - Board approves contractor*
8. *04/28/92 (339) - Area B vacant & available (vacant as of 02/11/92)*
9. *04/23/92 (339) - North 1/2 of unit C available (vacant as of 02/11/92)*
10. *05/01/92 (342) - School recesses for summer*
11. *05/01/92 (342) - mcc vacate unit A and south 1/2 of unit C*
12. *05/04/92 (343) - Contractor mobilize & start field work*
13. *08/16/92 (416) - High school teacher staff move in*
14. *08/28/92 (425) - Completion of total project - units A, B & C*
15. *08/31/92 (426) - mcc begins ffe work in units A, B, & C*
16. *09/08/92 (431) - School starts*

B. Those involved

1. *MCC*
   John Whitehead - Acting Director - Physical Plant
   Ray Thornton - Director of Community Education
   Junior Paul - Physical plant - retired 03/27/92
2. *THA*
   Jerry Harburn - Principal
   Junior Paul - Consultant on MCC work
3. *MKK*
   Bob Mengel - retired 04/23/92
   Michael E. St. Germain, R. A. - Project Manager
4. *E & L*
   Bert Forsmark - Project Manager
5. *Automatic Fire Protection Co.*
   Martin L. Corcoran - President
6. *Central Interiors, Inc.*
   Roger Simmonds - President
7. *High schools*
   Fenton
   Lake Fenton
   Linden
8. *Dale Oskey Construction*
   Dale Oskey - President
9. *Fisher & Wright - Mechanical contractor*
   Ray Delbridge - Project Manager
10. *Markee - Electrical contractor*
    Rick Markee - Project Manager

C. Abbreviations

1. *ada - American Disabilities Act*
2. *dafd - Detail, approve, fabricate & deliver*
3. *e & l - Erickson & Lindstrom*
4. *ffe - Fixtures, furniture & equipment*

5. *mcc - Mott Community College*
6. *tha - Tomblinson Harburn & Associates*
7. *to/r - Toilet rooms*

D. *Project physical characteristics*

Thompson Road facility will train & educate for vocational improvement, adult education and to help students prepare for an ongoing college education. Will have high school level classes.

1. *ada - American Disabilities Act*

Portions of the project that may be affected

- Toilet rooms
- Signage
- Door hardware
- Plumbing fixtures

2. *Procurement*

MCC

- Hood in prep room
- Biology equipment
  - gc will need cuts of equipment
  - Tables & lab furniture
- Automotive equipment
  - Paint equipment
- Library shelves
- Physical therapy equipment
  - Island tub
- Number of power poles in computer room
- Identifying devices
  - Room numbers
  - Etc.

Contractor

- Roof mounted equipment
- Air tempering HVAC interior units
- Toilet room partitions
- Plumbing fixtures
- New aluminum and glass entries
- In wall unit heaters
- Cabinet convector covers on perimeter fin tube
  - May reuse existing
    - Reuse all except in south vesitbule
- Bulletin & chalk boards
- Folding partition in unit B nurse's lab
- Physical therapy wet area plumbing fixtures
- Signage

3. *Outline of construction systems*

Unit A

- Demolish and reinstall toilet rooms
- Will use air handling units now serving area at mezzanine
- Demolition
  - Unit A permanent corridor partitions to remain substantially as now

Unit B

Unit C

Site
- Installing new underground water tank for fire protection

All units
- Abatement - at all units
  - Pipe covering
  - Exterior cemestos panels
  - Site abatement currently in work - being done by Consumers
- Entire facility to receive new wet sprinkler system
- New electronic alarm system
- All units to be reroofed - single ply rubber
  - Mechanically attached?
  - Ballasted?
- Interior partitions
  - Metal studs & dry wall to concrete floor
  - Acoustic ceilings
- Flooring
  - Resilient tile
  - Roll carpeting

4. General description

Unit A - 18,600 sq ft
- Existing use
  - Classroom & office area
  - Being used as is through June, 1992
- New use
  - Classroom & office areas

Unit B - 25,700 sq ft
- Existing use
  - Warehouse
- New use
  - Child care
  - Generic classrooms
  - Nursing lab
  - Lecture area
  - Physical therapy
  - Library
  - Biology lab

Unit C - 16,000 sq ft
- Exisiting use
  - North 1/2 unheated - not in use
  - South 1/2
    - Auto body repair
- New use
  - Auto body shop
  - Auto mechanic area
  - Welding shop

II. 8:37:49 AM - Friday, May 1, 1992

A. MCC South Lakes Campus Facility - Thompson Road

B. Friday, May 1, 1992 - at MCC facilities office

C. Those attending

1. Jerry Harburn - Principal - THA

2. *Junior Paul - Consultant - THA*
3. *Michael E. St. Germain R. A. - Project Manager - MKK Ghafari*
4. *Bert Forsmark - Project Manager - E & L*
5. *Martin L. Corcoran - President - Wolverine Fire Protection*
6. *Roger Simmonds - President - Central Interiors, Inc.*
7. *Dale Oskey - President - Dale Oskey Construction*
8. *Ralph J. Stephenson - Consultant*

D. General notes

1. *Miscellaneous review material discussions*

Key dates as of 05/01/92 (wd 342)
- 04/29/92 pm (342) - Letter of intent issued
- 04/30/92 am (340) - Unit B available for work
- 05/04/92 pm (344) - School recesses for summer
- 05/08/92 pm (348) - mcc complete vacate unit A
- 05/04/92 am (343) - Contractor mobilize & start field work
- 08/17/92 am (416) - High school teacher staff move in
- 08/28/92 pm (426) - Completion of total project - units A, B & C
- 08/31/92 am (426) - mcc begins ffe work in units A, B, & C
- 09/08/92 am (431) - School starts

Junior Paul observations
- No work to be done on C
- High School staff has 2 week from 04/30/92 window to decide re their participation
- Reroofing may be eliminated
- May remove chiller & base from contract - ne corner of B
- May remove north fencing near C from contract

Procurement
- MCC items - to be procured by Dean Johnson
  - Fume hood in prep room
  - Biology equipment
  - Paint equipment
  - Library shelving
  - Island tub

Abatement
- Not started as yet

Classes in progress
- Unit A - no classes after Monday, 05/04/92
- Unit B - currently unoccupied

E. Laundry lists

1. *To be resolved*

CHANGE PROCESSING
- PREPARE & ISSUE BULLETIN #01
- PRICE BULLETIN #01
- REVIEW & APPROVE BULLETIN #01
- ISSUE CHANGE ORDER #01

RESOLVE NEW WATER STORAGE TANK SIZE
RESOLVE PUMP PIT LIGHTING

2. *Procurement items*

DAFD NEW UG WATER STORAGE TANK - 40 (FROM RELEASE)
DAFD NEW EXTERIOR PREGLAZED ALUM WINDOWS

DAFD NEW EXTERIOR ENTRY FRAMING
DAFD NEW EXTERIOR ENTRY DOORS
DAFD NEW EXTERIOR ENTRY GLASS
DAFD PREFORMED METAL SIDING
MASONRY
SUBMIT GLAZED BLOCK COLOR SAMPLES
REVIEW & APPROVE GLAZED BLOCK COLOR
MFG & DELIVER NEW GLAZED BLOCK
DAFD HOLLOW METAL FRAMES
DAFD HARDWARE
DAFD HOLLOW METAL DOORS
INTERIOR FINISHES
DAFD WOOD LAMINATE DOORS

3. *Site work*

EXCAVATE FOR NEW UG WATER STORAGE TANK - 5
CONSTRUCT FOUNDATION FOR NEW UG STORAGE TANK - 4
SET & PIPE NEW UG STORAGE TANK - 5
INSTALL NEW FIRE PROTECTION LINE FROM C TO TANK TO C & B - 5

4. *Unit A*

MOBILIZE & MOVE ON SITE - 05/11/92
EXTERIOR SKIN
INSTALL NEW EXTERIOR WINDOWS
INSTALL & GLAZE NEW ENTRIES
INSTALL NORTH ELEVATION PREFORMED METAL SIDING
INTERIOR WORK
LAY OUT AS REQUIRED
DEMOLISH EXISTING ARCH, MECH & ELECT WORK AS REQUIRED
REMOVE EXISTING SCALE & TURN OVER TO OWNER
INSTALL FOLDING PARTITION SUPPORT & BLOCKING
GRIND & PREPARE EXISTING FLOOR SLABS FOR START OF PARTITION WORK
CUT EXISTING FLOOR SLAB & TRENCH FOR UG UTIL
INSTALL UNDERGROUND UTILITY WORK
PATCH FLOOR SLABS
ERECT MASONRY & IN WALL WORK - 20
CONSTRUCT SLAB ON GRADE RAMPS AT ELEVATION CHANGEW
INSTALL ABOVE FLOOR SHEET METAL DUCTWORK & AIR HANDLING UNITS
INSTALL ABOVE FLOOR MECHANICAL PIPING WORK
INSTALL ABOVE FLOOR FIRE PROTECTION PIPING WORK - 15
INSTALL ABOVE FLOOR ROUGH ELECT CONDUIT & FEEDERS
INSTALL ABOVE FLOOR SECURITY, LIFE SAFETY & COMMUNICATIONS CONDUIT & WIRE
INSTALL METAL STUDS, FRAMING & IN WALL WORK - 10 + IN WALL WORK
HANG DRY WALL AT GYP BOARD WALLS & CEILINGS - LAG 5 - 15
TAPE & SAND DRY WALL AT GYP BOARD WALLS & CEILINGS - LAG 5 - 15
PAINT REQD INTERIOR SURFACES
INSTALL ACOUSTIC CEILING SUSP & GRID - 10
INSTALL CEILING LIGHT FIXTURES - LAG 5

INSTALL CEILING GRILLS & DIFFUSERS - LAG 5
INSTALL CEILING SPRINKLER HEADS & RELATED TILE - LAG 5
INSTALL ACOUSTIC CEILING PANELS - 5
INSTALL CEILING CUBICAL TRACK
INSTALL LIFE SAFETY, SECURITY & COMMUNICATIONS DEVICES & TRIM
INSTALL RAISED WOOD STAGE
LAY RESILIENT FLOOR TILE
INSTALL CARPETING
LAY QUARRY TILE AT TO/R FLOORS
INSTALL CERAMIC TILE AT TO/R WALLS
INSTALL TO/R VANITIES & PLUMBING FIXTURES
INSTALL TO/R PARTITIONS
INSTALL FOLDING PARTITION
INSTALL TO/R ACCESSORIES & MIRRORS
INSTALL INTERIOR DOORS, MILLWORK & TRIM

5. *Unit B*

MOBILIZE & MOVE ON SITE - 05/04/92
EXTERIOR SKIN
INSTALL NEW EXTERIOR WINDOWS
INSTALL & GLAZE NEW ENTRIES
INSTALL NORTH ELEVATION PREFORMED METAL SIDING
INTERIOR WORK
LAY OUT UNIT B AS REQUIRED
DEMOLISH UNIT B EXISTING ARCH, MECH & ELECT WORK AS REQUIRED
REMOVE EXISTING SCALE & TURN OVER TO OWNER
INSTALL FOLDING PARTITION SUPPORT & BLOCKING
GRIND & PREPARE EXISTING FLOOR SLABS FOR START OF PARTITION WORK
CUT EXISTING FLOOR SLAB & TRENCH FOR UG UTIL
INSTALL UNDERGROUND UTILITY WORK
PATCH FLOOR SLABS
ERECT MASONRY & IN WALL WORK - 25
CONSTRUCT SLAB ON GRADE RAMPS AT ELEVATION CHANGEW
INSTALL ABOVE FLOOR SHEET METAL DUCTWORK & AIR HANDLING UNITS
INSTALL ABOVE FLOOR MECHANICAL PIPING WORK
INSTALL ABOVE FLOOR FIRE PROTECTION PIPING WORK - 10
INSTALL ABOVE FLOOR ROUGH ELECT CONDUIT & FEEDERS
INSTALL ABOVE FLOOR SECURITY, LIFE SAFETY & COMMUNICATIONS CONDUIT & WIRE
INSTALL METAL STUDS, FRAMING & IN WALL WORK - 15
HANG DRY WALL AT GYP BOARD WALLS & CEILINGS - 20
TAPE & SAND DRY WALL AT GYP BOARD WALLS & CEILINGS - 20
PAINT REQD INTERIOR SURFACES
INSTALL ACOUSTIC CEILING SUSP & GRID - 15
INSTALL CEILING LIGHT FIXTURES
INSTALL CEILING GRILLS & DIFFUSERS
INSTALL CEILING SPRINKLER HEADS & RELATED TILE - 5
INSTALL ACOUSTIC CEILING PANELS - 8
INSTALL CEILING CUBICAL TRACK

INSTALL LIFE SAFETY, SECURITY & COMMUNICATIONS DEVICES & TRIM
INSTALL RAISED WOOD STAGE
LAY RESILIENT FLOOR TILE
INSTALL CARPETING
LAY QUARRY TILE AT TO/R FLOORS
INSTALL CERAMIC TILE AT TO/R WALLS
INSTALL TO/R VANITIES & PLUMBING FIXTURES
INSTALL TO/R PARTITIONS
INSTALL FOLDING PARTITION
INSTALL TO/R ACCESSORIES & MIRRORS
INSTALL INTERIOR DOORS, MILLWORK & TRIM

I. **9:03:25 AM - Tuesday, February 11, 1992**
II. **MCC/Thompson Road**
III. **Those attending**
   A. **Junior Paul - MCC**
   B. **Jerry Harburn - THA**
   C. **Bob Mengel - MKK**
   D. **Mike**
   E. **Ralph J. Stephenson - consultant**
IV. **Those involved**
   A. **THA**
      1. Jerry Harburn
   B. **MKK**
      1. Bob Mengel
      2. Mike
   C. **MCC**
      1. Junior Paul - Physical plant
      2. Ray Thornton - Director of Community Education
   D. **High schools**
      1. Fenton
      2. Lake Fenton
      3. Linden
V. **Project physical characteristics**

Thompson Road facility will train & educate for vocational improvement, adult education and to help students prepare for an ongoing college education. Will have high school level classes.

   A. **ada - American Disabilities Act**
      1. Portions of the project will be affected
         Toilet rooms
         Signage
         Door hardware
         Plumbing fixtures

   B. **Procurement**
      1. MCC
         Hood in prep room
         Biology equipment

Supplied by mcc
gc will need cuts of equipment
Automotive equipment
Paint equipment
Library shelves

2. Contractor
Roof mounted equipment
Toilet room partitions
Plumbing fixtures
New aluminum and glass entries
In wall unit heaters
Cabinet convector covers on perimeter fin tube
May reuse existing
Bulletin & chalk boards
Folding partition in unit B nurse's lab
Physical therapy wet area plumbing fixtures
Signage

C. Construction systems

1. Unit A
Demolish and reinstall toilet rooms
Will use air handling units now serving area at mezzanine
Demolition
Unit A permanent corridor partitions to remain substantially as now
2. Unit B
3. Unit C
4. Site
Installing new underground water tank for fire protection
5. All units
Abatement - at all units
Pipe covering
Exterior cemestos panels
Site abatement currently in work - being done by Consumers
Entire facility to receive new wet sprinkler system
New electronic alarm system
All units to be reroofed - single ply rubber

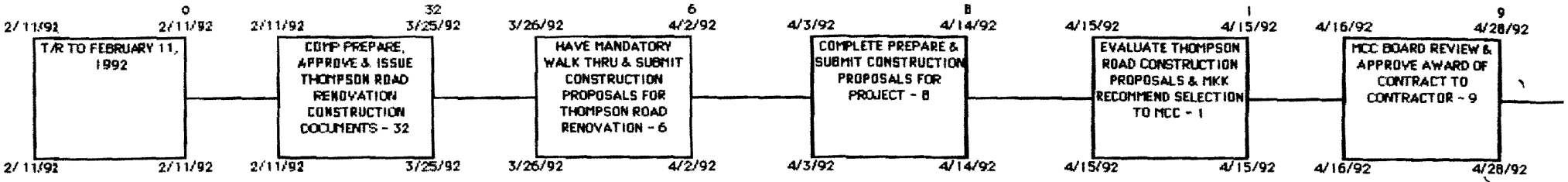
Mechanically attached?
Ballasted?
Interior partitions
Metal studs & dry wall to concrete floor
Acoustic ceilings
Flooring
Resilient tile
Roll carpeting

D. General description

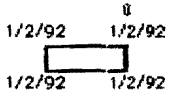
1. Unit A (19,500 ± gross)
   Existing use
   Classroom & office area
   Being used as is through June, 1992
   New use
   Classroom & office areas
2. Unit B (~~25,000~~ 25,500 ± gross)
   Existing use
   Warehouse
   New use
   Child care
   Generic classrooms
   Nursing lab
   Lecture area
   Physical therapy
   Library
   Biology lab
3. Unit C (16,500 ± gross)
   Exisiting use
   North 1/2 unheated - not in use
   South 1/2
   Auto body repair
   New use
   Auto body shop
   Auto mechanic area
   Welding shop

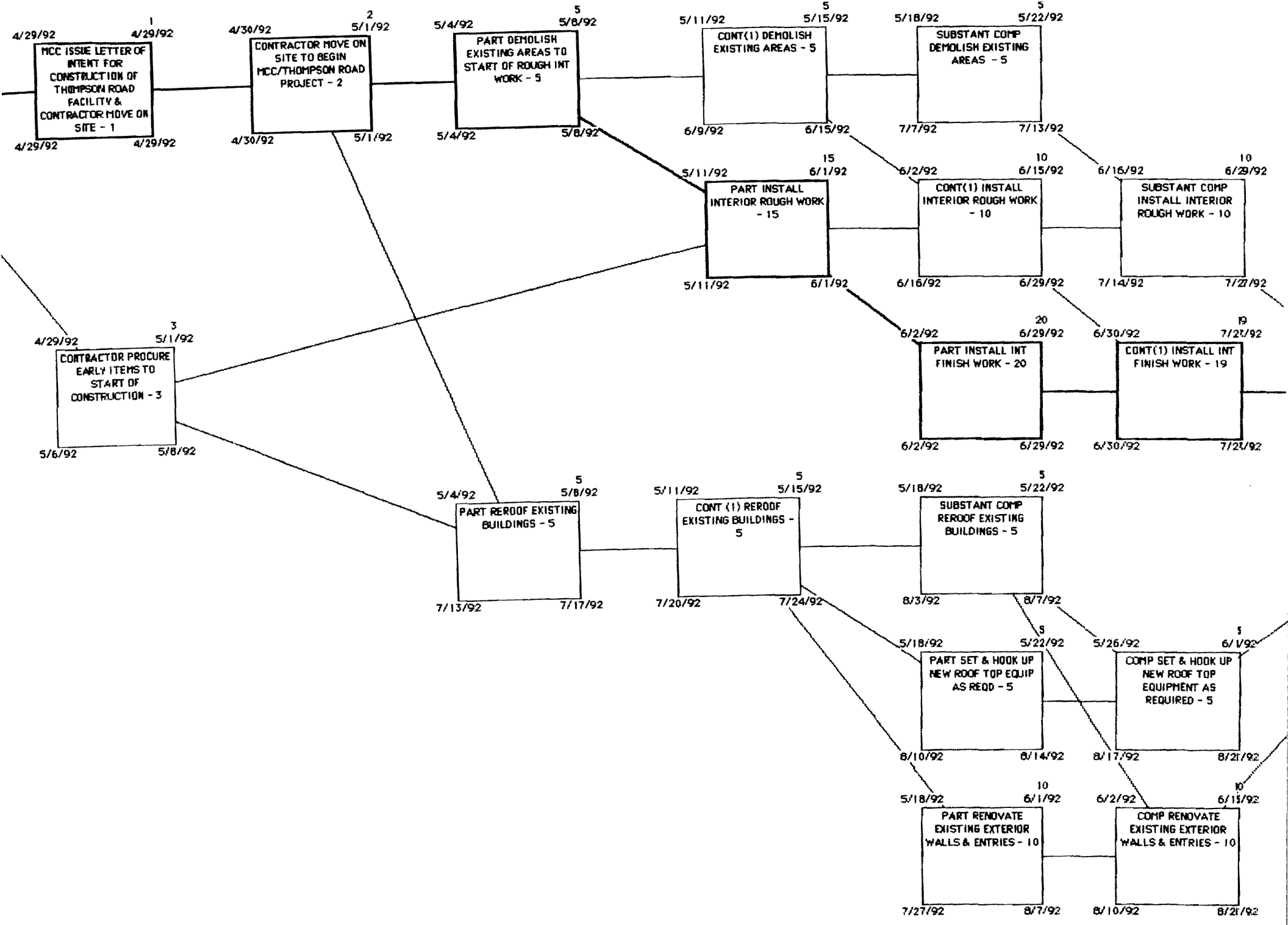
VI. Key dates

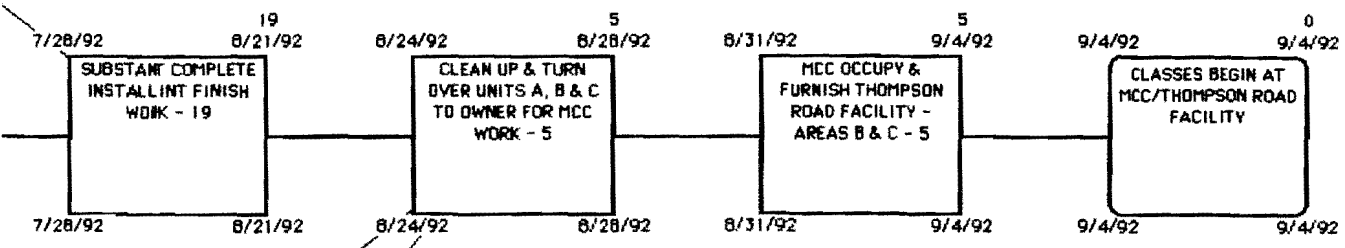
A. 03/25/92 (315) - Issue construction documents
B. 03/31/92 (319) - Tentative design & document approval by State Fire Marshall
C. 04/02/92 (321) - Mandatory contractor project walk through - 9:30 pm
D. 04/14/92 (329) - Proposals due from contractors - 2:00 pm
E. 04/15/92 (330) - rme make contractor recommendations to mcc
F. 04/24/92 (337) - rme submarine launched
G. 04/27/92 (296) 339 - Regular Board meeting - Board approves contractor
H. 04/28/92 (339) - Area B vacant & available (vacant as of 02/11/92)
I. 04/23/92 (339) - North 1/2 of unit C available (vacant as of 02/11/92)
J. 05/01/92 (342) - School recesses for summer
K. 05/01/92 (342) - mcc vacate unit A and south 1/2 of unit C
L. 05/04/92 (343) - Contractor mobilize & start field work
M. 08/16/92 (416) - High school teacher staff move in
N. 08/28/92 (425) - Completion of total project - units A, B & C
O. 08/31/92 (426) - mcc begins ffe work in units A, B, & C
P. 09/08/92 (431) - School starts

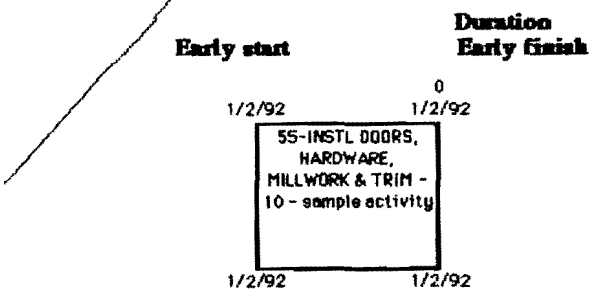


NOTE: The construction logic and durations shown on this diagram are for evaluation and comment only. The actual construction planning will be done in conjunction with and directed by the selected contractors.




1
4/29/92
4/29/92
MCC ISSUE LETTER OF INTENT FOR CONSTRUCTION OF THOMPSON ROAD FACILITY & CONTRACTOR MOVE ON SITE - 1
4/29/92
4/29/92
2
4/30/92
5/1/92
CONTRACTOR MOVE ON SITE TO BEGIN MCC/THOMPSON ROAD PROJECT - 2
4/30/92
5/1/92
5
5/4/92
5/8/92
PART DEMOLISH EXISTING AREAS TO START OF ROUGH INT WORK - 5
5/4/92
5/8/92
5
5/11/92
5/15/92
CONT(1) DEMOLISH EXISTING AREAS - 5
6/9/92
6/15/92
5
5/18/92
5/22/92
SUBSTANT COMP DEMOLISH EXISTING AREAS - 5
7/7/92
7/13/92
15
5/11/92
6/1/92
PART INSTALL INTERIOR ROUGH WORK - 15
5/11/92
6/1/92
10
6/2/92
6/15/92
CONT(1) INSTALL INTERIOR ROUGH WORK - 10
6/16/92
6/29/92
10
6/16/92
6/29/92
SUBSTANT COMP INSTALL INTERIOR ROUGH WORK - 10
7/14/92
7/27/92
3
4/29/92
5/1/92
CONTRACTOR PROCURE EARLY ITEMS TO START OF CONSTRUCTION - 3
5/6/92
5/8/92
20
6/2/92
6/29/92
PART INSTALL INT FINISH WORK - 20
6/2/92
6/29/92
19
6/30/92
7/21/92
CONT(1) INSTALL INT FINISH WORK - 19
6/30/92
7/21/92
5
5/4/92
5/8/92
PART REROOF EXISTING BUILDINGS - 5
7/13/92
7/17/92
5
5/11/92
5/15/92
CONT (1) REROOF EXISTING BUILDINGS - 5
7/20/92
7/24/92
5
5/18/92
5/22/92
SUBSTANT COMP REROOF EXISTING BUILDINGS - 5
8/3/92
8/7/92
5
5/18/92
5/22/92
PART SET & HOOK UP NEW ROOF TOP EQUIP AS REQD - 5
8/10/92
8/14/92
5
5/26/92
6/1/92
COMP SET & HOOK UP NEW ROOF TOP EQUIPMENT AS REQUIRED - 5
8/17/92
8/21/92
10
5/18/92
6/1/92
PART RENOVATE EXISTING EXTERIOR WALLS & ENTRIES - 10
7/27/92
8/7/92
10
6/2/92
6/15/92
COMP RENOVATE EXISTING EXTERIOR WALLS & ENTRIES - 10
8/10/92
8/21/92





Activity

Reserved Activity Numbers

041	046
042	047
043	048
044	049
045	050

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Issue #1 - January 21, 1992
Issue #2 - February 11,

NETWORK MODEL FOR MOTT COMMUNITY COLLEGE
MCC/Thompson Road Project
Fenton, Michigan

MacKenzie, Kauth and Klein
A Division of Ghafari Associates, Inc.
Architect of Record

THA Associates
Coordinating Architect

Ralph J. Stephenson PE PE
Consulting Engineer
323 Hiawatha Drive
Mt. Pleasant, Michigan 48858
ph 517 772 2537

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t

MCC/Thompson Road notes - disk 302

I. *General notes - to be updated as project proceed*

A. *Key dates*

1. *03/25/92 (315) - Issue construction documents*
2. *03/31/92 (319) - Tentative design & document approval by State Fire Marshall*
3. *04/02/92 (321) - Mandatory contractor project walk through - 9:30 pm*
4. *04/14/92 (329) - Proposals due from contractors - 2:00 pm*
5. *04/15/92 (330) - rme make contractor recommendations to mcc*
6. *04/24/92 (337) - rme submarine launched*
7. *04/27/92 (296) - Regular Board meeting - Board approves contractor*
8. *04/28/92 (339) - Area B vacant & available (vacant as of 02/11/92)*
9. *04/23/92 (339) - North 1/2 of unit C available (vacant as of 02/11/92)*
10. *05/01/92 (342) - School recesses for summer*
11. *05/01/92 (342) - mcc vacate unit A and south 1/2 of unit C*
12. *05/04/92 (343) - Contractor mobilize & start field work*
13. *08/16/92 (416) - High school teacher staff move in*
14. *08/28/92 (425) - Completion of total project - units A, B & C*
15. *08/31/92 (426) - mcc begins ffe work in units A, B, & C*
16. *09/08/92 (431) - School starts*

B. *Those involved*

1. *MCC*
   John Whitehead - Acting Director - Physical Plant
   Ray Thornton - Director of Community Education
   Junior Paul - Physical plant - retired 03/27/92
2. *THA*
   Jerry Harburn - Principal
   Junior Paul - Consultant on MCC work
3. *MKK*
   Bob Mengel - retired 04/23/92
   Michael E. St. Germain, R. A. - Project Manager
4. *E & L*
   Bert Forsmark - Project Manager
5. *Automatic Fire Protection Co.*
   Martin L. Corcoran - President
6. *Central Interiors, Inc.*
   Roger Simmonds - President
7. *High schools*
   Fenton
   Lake Fenton
   Linden
8. *Dale Oskey Construction*
   Dale Oskey - President
9. *Fisher & Wright - Mechanical contractor*
   Ray Delbridge - Project Manager
10. *Markee - Electrical contractor*
    Rick Markee - Project Manager

C. *Project physical characteristics*

Thompson Road facility will train & educate for vocational improvement, adult education and to help students prepare for an ongoing college education. Will have high school level classes.

1. *ada - American Disabilities Act*

Portions of the project will be affected
- Toilet rooms
- Signage
- Door hardware
- Plumbing fixtures

2. ***Procurement***
   - MCC
     - Hood in prep room
     - Biology equipment
       - gc will need cuts of equipment
       - Tables & lab furniture
     - Automotive equipment
       - Paint equipment
     - Library shelves
     - Physical therapy equipment
       - Island tub
     - Number of power poles in computer room
     - Identifying devices
       - Room numbers
       - Etc.
   - Contractor
     - Roof mounted equipment
     - Air tempering HVAC interior units
     - Toilet room partitions
     - Plumbing fixtures
     - New aluminum and glass entries
     - In wall unit heaters
     - Cabinet convector covers on perimeter fin tube
       - May reuse existing
         - Reuse all except in south vesitbule
     - Bulletin & chalk boards
     - Folding partition in unit B nurse's lab
     - Physical therapy wet area plumbing fixtures
     - Signage

3. ***Construction systems***
   - Unit A
     - Demolish and reinstall toilet rooms
     - Will use air handling units now serving area at mezzanine
     - Demolition
       - Unit A permanent corridor partitions to remain substantially as now
   - Unit B
   - Unit C
   - Site
     - Installing new underground water tank for fire protection
   - All units
     - Abatement - at all units
       - Pipe covering
       - Exterior cemestos panels
       - Site abatement currently in work - being done by Consumers
     - Entire facility to receive new wet sprinkler system

New electronic alarm system
All units to be reroofed - single ply rubber
Mechanically attached?
Ballasted?
Interior partitions
Metal studs & dry wall to concrete floor
Acoustic ceilings
Flooring
Resilient tile
Roll carpeting

4. *General description*

Unit A - 18,600 sq ft
Existing use
Classroom & office area
Being used as is through June, 1992
New use
Classroom & office areas
Unit B - 25,700 sq ft
Existing use
Warehouse
New use
Child care
Generic classrooms
Nursing lab
Lecture area
Physical therapy
Library
Biology lab
Unit C - 16,000 sq ft
Exisiting use
North 1/2 unheated - not in use
South 1/2
Auto body repair
New use
Auto body shop
Auto mechanic area
Welding shop

II. 9:03:25 AM - Tuesday, February 11, 1992

A. MCC/Thompson Road

B. Tuesday, February 11, 1992 - at facilities office

C. Those involved - updated May 1, 1992

1. *MCC*

John Whitehead - Acting Director - Physical Plant
Ray Thornton - Director of Community Education
Junior Paul - Physical plant - retired 03/27/92

2. *THA*

Jerry Harburn - Principal
Junior Paul - Consultant on MCC work

3. *MKK*

Bob Mengel - retired 04/23/92

Michael E. St. Germain, R. A. - Project Manager

4. *E & L*
   Bert Forsmark - Project Manager
5. ***Automatic Fire Protection Co.***
   Martin L. Corcoran - President
6. ***Central Interiors, Inc.***
   Roger Simmonds - President
7. ***High schools***
   Fenton
   Lake Fenton
   Linden

D. ***Those attending***
   1. ***Junior Paul - MCC***
   2. ***Jerry Harburn - THA***
   3. ***Bob Mengel - MKK***
   4. ***Mike***
   5. ***Ralph J. Stephenson - consultant***

E. ***Project physical characteristics***
   Thompson Road facility will train & educate for vocational improvement, adult education and to help students prepare for an ongoing college education. Will have high school level classes.

   1. ***ada - American Disabilities Act***
      Portions of the project will be affected
      - Toilet rooms
      - Signage
      - Door hardware
      - Plumbing fixtures

   2. ***Procurement***
      MCC
      - Hood in prep room
      - Biology equipment
        - Supplied by mcc
        - gc will need cuts of equipment
      - Automotive equipment
        - Paint equipment
      - Library shelves

      Contractor
      - Roof mounted equipment
      - Toilet room partitions
      - Plumbing fixtures
      - New aluminum and glass entries
      - In wall unit heaters
      - Cabinet convector covers on perimeter fin tube
        - May reuse existing
      - Bulletin & chalk boards
      - Folding partition in unit B nurse's lab
      - Physical therapy wet area plumbing fixtures
      - Signage

   3. ***Construction systems***

- Unit A
  - Demolish and reinstall toilet rooms
  - Will use air handling units now serving area at mezzanine
  - Demolition
    - Unit A permanent corridor partitions to remain substantially as now
- Unit B
- Unit C
- Site
  - Installing new underground water tank for fire protection
- All units
  - Abatement - at all units
    - Pipe covering
    - Exterior cemestos panels
    - Site abatement currently in work - being done by Consumers
  - Entire facility to receive new wet sprinkler system
  - New electronic alarm system
  - All units to be reroofed - single ply rubber
    - Mechanically attached?
    - Ballasted?
  - Interior partitions
    - Metal studs & dry wall to concrete floor
    - Acoustic ceilings
  - Flooring
    - Resilient tile
    - Roll carpeting

4. ***General description***
   - Unit A
     - Existing use
       - Classroom & office area
       - Being used as is through June, 1992
     - New use
       - Classroom & office areas
   - Unit B
     - Existing use
       - Warehouse
     - New use
       - Child care
       - Generic classrooms
       - Nursing lab
       - Lecture area
       - Physical therapy
       - Library
       - Biology lab
   - Unit C
     - Exisiting use
       - North 1/2 unheated - not in use
       - South 1/2
         - Auto body repair
     - New use
       - Auto body shop

Auto mechanic area
Welding shop

F. Key dates

1. *03/25/92 (315) - Issue construction documents*
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16. *09/08/92 (431) - School starts*

III. 8:37:49 AM - Friday, May 1, 1992

A. MCC/Thompson Road

B. Friday, May 1, 1992 - at MCC facilities office

C. Those involved

D. Those attending

1. *Jerry Harburn - Principal - THA*
2. *Junior Paul - Consultant - THA*
3. *Michael E. St. Germain R. A. - Project Manager - MKK Ghafari*
4. *Bert Forsmark - Project Manager - E & L*
5. *Martin L. Corcoran - President - Wolverine Fire Protection*
6. *Roger Simmonds - President - Central Interiors, Inc.*
7. *Dale Oskey - President - Dale Oskey Construction*
8. *Ralph J. Stephenson - Consultant*

E. General notes

1. *Miscellaneous discussions*

Junior Paul
No work to be done on C
High School staff has 2 week from 04/30/92 window to decide re their participation
Reroofing may be eliminated
May remove chiller & base from contract - ne corner of B
May remove north fencing near C from contract

Procurement
MCC - to be procured by Dean Johnson
Fume hood in prep room
Biology equipment
Paint equipment
Library shelving
Island tub

Change orders
Abatement

Not started as yet
Classes in progress
Unit A - no classes after Monday, 05/04/92
Unit B - unoccupied
Key dates
04/29/92 pm (342) - Letter of intent issued
04/30/92 am (340) - Unit B available for work
05/04/92 pm (344) - School recesses for summer
05/08/92 pm (348) - mcc complete vacate unit A
05/04/92 am (343) - Contractor mobilize & start field work
08/17/92 am (416) - High school teacher staff move in
08/28/92 pm (426) - Completion of total project - units A, B & C
08/31/92 am (426) - mcc begins ffe work in units A, B, & C
09/08/92 am (431) - School starts

F. Laundry lists

1. To be resolved

RESOLVE NEW WATER STORAGE TANK SIZE
RESOLVE PUMP PIT LIGHTING
CHANGE PROCESSING
PREPARE & ISSUE BULLETIN #01
PRICE BULLETIN #01
REVIEW & APPROVE BULLETIN #01
ISSUE CHANGE ORDER #01

2. Procurement items

DAFD NEW UG WATER STORAGE TANK - 40 (FROM RELEASE)
DAFD NEW EXTERIOR ~~PREGLAZED~~ ALUM WINDOWS
DAFD NEW EXTERIOR ENTRY FRAMING
DAFD NEW EXTERIOR ENTRY DOORS
DAFD NEW EXTERIOR ENTRY GLASS
DAFD PREFORMED METAL SIDING
MASONRY
SUBMIT GLAZED BLOCK COLOR SAMPLES
REVIEW & APPROVE GLAZED BLOCK COLOR
MFG & DELIVER NEW GLAZED BLOCK
DAFD HOLLOW METAL FRAMES
DAFD HARDWARE
DAFD HOLLOW METAL DOORS
INTERIOR FINISHES
DAFD WOOD LAMINATE DOORS

3. Site work

EXCAVATE FOR NEW UG WATER STORAGE TANK - 5
CONSTRUCT FOUNDATION FOR NEW UG STORAGE TANK - 4
SET & PIPE NEW UG STORAGE TANK - 5
INSTALL NEW FIRE PROTECTION LINE FROM C TO TANK TO C & B - 5

4. Unit A

MOBILIZE & MOVE ON SITE - 05/11/92
EXTERIOR SKIN
~~INSTALL NEW EXTERIOR WINDOWS~~
INSTALL & GLAZE NEW ENTRIES
~~INSTALL NORTH ELEVATION PREFORMED METAL SIDING~~

INTERIOR WORK
- LAY OUT AS REQUIRED
- DEMOLISH EXISTING ARCH, MECH & ELECT WORK AS REQUIRED
- REMOVE EXISTING SCALE & TURN OVER TO OWNER
- INSTALL FOLDING PARTITION SUPPORT & BLOCKING
- ~~GRIND & PREPARE EXISTING FLOOR SLABS FOR START OF PARTITION WORK~~
- CUT EXISTING FLOOR SLAB & TRENCH FOR UG UTIL
- INSTALL UNDERGROUND UTILITY WORK
- PATCH FLOOR SLABS
- ERECT MASONRY & IN WALL WORK - 20
- CONSTRUCT SLAB ON GRADE RAMPS AT ELEVATION CHANGES
- INSTALL ABOVE FLOOR SHEET METAL DUCTWORK & AIR HANDLING UNITS
- INSTALL ABOVE FLOOR MECHANICAL PIPING WORK
- INSTALL ABOVE FLOOR FIRE PROTECTION PIPING WORK - 15
- INSTALL ABOVE FLOOR ROUGH ELECT CONDUIT & FEEDERS
- INSTALL ABOVE FLOOR SECURITY, LIFE SAFETY & COMMUNICATIONS CONDUIT & WIRE
- INSTALL METAL STUDS, FRAMING & IN WALL WORK - 10 + IN WALL WORK
- HANG DRY WALL AT GYP BOARD WALLS & CEILINGS - LAG 5 - 15
- TAPE & SAND DRY WALL AT GYP BOARD WALLS & CEILINGS - LAG 5 - 15
- PAINT REQD INTERIOR SURFACES
- INSTALL ACOUSTIC CEILING SUSP & GRID - 10
- INSTALL CEILING LIGHT FIXTURES - LAG 5
- INSTALL CEILING GRILLS & DIFFUSERS - LAG 5
- INSTALL CEILING SPRINKLER HEADS & RELATED TILE - LAG 5
- INSTALL ACOUSTIC CEILING PANELS - 5
- ~~INSTALL CEILING CUBICAL TRACK~~
- INSTALL LIFE SAFETY, SECURITY & COMMUNICATIONS DEVICES & TRIM
- ~~INSTALL RAISED WOOD STAGE~~
- LAY RESILIENT FLOOR TILE
- INSTALL CARPETING
- LAY QUARRY TILE AT TO/R FLOORS
- ~~INSTALL CERAMIC TILE AT TO/R WALLS~~
- INSTALL TO/R VANITIES & PLUMBING FIXTURES
- INSTALL TO/R PARTITIONS
- ~~INSTALL FOLDING PARTITION~~
- INSTALL TO/R ACCESSORIES & MIRRORS
- INSTALL INTERIOR DOORS, MILLWORK & TRIM

5. ***Unit B***

MOBILIZE & MOVE ON SITE - 05/04/92

EXTERIOR SKIN
- INSTALL NEW EXTERIOR WINDOWS
- INSTALL & GLAZE NEW ENTRIES
- INSTALL NORTH ELEVATION PREFORMED METAL SIDING

INTERIOR WORK
- LAY OUT UNIT B AS REQUIRED

DEMOLISH UNIT B EXISTING ARCH, MECH & ELECT WORK AS REQUIRED
REMOVE EXISTING SCALE & TURN OVER TO OWNER
INSTALL FOLDING PARTITION SUPPORT & BLOCKING
GRIND & PREPARE EXISTING FLOOR SLABS FOR START OF PARTITION WORK
CUT EXISTING FLOOR SLAB & TRENCH FOR UG UTIL
INSTALL UNDERGROUND UTILITY WORK
PATCH FLOOR SLABS
ERECT MASONRY & IN WALL WORK - 25
CONSTRUCT SLAB ON GRADE RAMPS AT ELEVATION CHANGES
INSTALL ABOVE FLOOR SHEET METAL DUCTWORK & AIR HANDLING UNITS
INSTALL ABOVE FLOOR MECHANICAL PIPING WORK
INSTALL ABOVE FLOOR FIRE PROTECTION PIPING WORK - 10
INSTALL ABOVE FLOOR ROUGH ELECT CONDUIT & FEEDERS
INSTALL ABOVE FLOOR SECURITY, LIFE SAFETY & COMMUNICATIONS CONDUIT & WIRE
INSTALL METAL STUDS, FRAMING & IN WALL WORK - 15
HANG DRY WALL AT GYP BOARD WALLS & CEILINGS - 20
TAPE & SAND DRY WALL AT GYP BOARD WALLS & CEILINGS - 20
PAINT REQD INTERIOR SURFACES
INSTALL ACOUSTIC CEILING SUSP & GRID - 15
INSTALL CEILING LIGHT FIXTURES
INSTALL CEILING GRILLS & DIFFUSERS
INSTALL CEILING SPRINKLER HEADS & RELATED TILE - 5
INSTALL ACOUSTIC CEILING PANELS - 8
INSTALL CEILING CUBICAL TRACK
INSTALL LIFE SAFETY, SECURITY & COMMUNICATIONS DEVICES & TRIM
INSTALL RAISED WOOD STAGE
LAY RESILIENT FLOOR TILE
INSTALL CARPETING
LAY QUARRY TILE AT TO/R FLOORS
INSTALL CERAMIC TILE AT TO/R WALLS
INSTALL TO/R VANITIES & PLUMBING FIXTURES
INSTALL TO/R PARTITIONS
INSTALL FOLDING PARTITION
INSTALL TO/R ACCESSORIES & MIRRORS
INSTALL INTERIOR DOORS, MILLWORK & TRIM

	activity	sub title	early start	early finish	late start	late finish	days
1	DETAIL, APPRV, FAB & DELIVER NEW ENTRY DOORS		1/2/92	1/2/92	1/2/92	1/2/92	0
2	DETAIL, APPRV, FAB & DELIVER NEW EXT ALUM WINDOWS		1/2/92	1/2/92	1/2/92	1/2/92	0
3	DETAIL, APPRV, FAB & DELIVER NEW EXT ENTRY FRAMING		1/2/92	1/2/92	1/2/92	1/2/92	0
4	DETAIL, APPRV, FAB & DELIVER EXT WINDOW & ENTRY GLASS		1/2/92	1/2/92	1/2/92	1/2/92	0
5	DETAIL, APPRV, FAB & DELIVER PREFORMED METAL SIDING		1/2/92	1/2/92	1/2/92	1/2/92	0
6	DETAIL, APPRV, FAB & DELIVER NEW ENTRY DOORS		1/2/92	1/2/92	1/2/92	1/2/92	0
7	DETAIL, APPRV, FAB & DELIVER HOLLOW METAL FRAMES		1/2/92	1/2/92	1/2/92	1/2/92	0
8	SUBMIT SAMPLE, APPRV, MFR & DELIVER GLAZED BLOCK		1/2/92	1/2/92	1/2/92	1/2/92	0
9	DETAIL, APPRV, FAB & DELIVER HARDWARE		1/2/92	1/2/92	1/2/92	1/2/92	0
10	DETAIL, APPRV, FAB & DELIVER HOLLOW METAL DOORS		1/2/92	1/2/92	1/2/92	1/2/92	0
11	DETAIL, APPRV, FAB & DELIVER PLASTIC LAMINATE DOORS		1/2/92	1/2/92	1/2/92	1/2/92	0
12	T/R TO MAY 1, 1992		5/1/92	5/1/92	5/1/92	5/1/92	0
13	MOBILIZE & MOVE INTO UNIT A - 6		5/1/92	5/8/92	5/1/92	5/8/92	6
14	LAY OUT INT WORK & PART DEMOLISH EXISTING MECH, ELECT & ARCH WORK AS REQD IN UNIT A - 5		5/11/92	5/15/92	5/11/92	5/15/92	5
15	PART INSTALL UNIT A ABOVE CEILING ROUGH FIRE PROTECTION PIPING WORK - 5		5/18/92	5/22/92	5/21/92	5/28/92	5
16	SUBSTANT COMP DEMOLISH EXISTING MECH, ELECT & ARCH WORK AS REQD IN UNIT A - 5		5/18/92	5/22/92	6/8/92	6/12/92	5
17	PART INSTALL UNIT A ABOVE CEILING ROUGH MECHANICAL PIPING WORK - 7		5/18/92	5/27/92	5/19/92	5/28/92	7
18	PART INSTALL UNIT A ABOVE CEILING ROUGH SHEET METAL DUCT WORK & AIR HANDLING UNITS - 8		5/18/92	5/28/92	5/18/92	5/28/92	8
19	PART INSTALL UNIT A ABOVE CEILING ROUGH ELECT CONDUIT & FEEDERS - 8		5/18/92	5/28/92	5/18/92	5/28/92	8
20	PART INSTL UNIT A ABV CLG SECURITY, LIFE SAFETY & COMMUNICATIONS CONDUIT & WIRE - 8		5/18/92	5/28/92	5/18/92	5/28/92	8
21	COMP INSTALL UNIT A ABOVE CEILING ROUGH FIRE PROTECTION PIPING WORK - 5		5/26/92	6/1/92	6/3/92	6/9/92	5
22	PART ERECT UNIT A INTERIOR MASONRY PARTITIONS - 5		5/26/92	6/1/92	6/15/92	6/19/92	5

	activity	sub title	early start	early finish	late start	late finish	days
23	COMP INSTALL UNIT A ABOVE CEILING ROUGH MECHANICAL PIPING WORK - 6		5/28/92	6/4/92	6/2/92	6/9/92	6
24	PART INSTALL UNIT A METAL STUDS, FRAMING & IN WALL WORK - 7		5/29/92	6/8/92	5/29/92	6/8/92	7
25	COMP INSTALL UNIT A ABOVE CEILING ROUGH ELECT CONDUIT & FEEDERS - 7		5/29/92	6/8/92	6/1/92	6/9/92	7
26	COMP INSTL UNIT A ABV CLG SECURITY, LIFE SAFETY & COMMUNICATIONS CONDUIT & WIRE - 7		5/29/92	6/8/92	6/1/92	6/9/92	7
27	COMP INSTALL UNIT A ABOVE CEILING ROUGH SHEET METAL DUCT WORK & AIR HANDLING UNITS - 8		5/29/92	6/9/92	5/29/92	6/9/92	8
28	COMP ERECT UNIT A INTERIOR MASONRY PARTITIONS - 5		6/2/92	6/8/92	6/22/92	6/26/92	5
29	INSTL UNIT A ABOVE CEILING MISC IRON HANGERS - 2		6/9/92	6/10/92	7/2/92	7/6/92	2
30	CONSTRUCT EXTERIOR RAMPS & STAIRS IN UNIT A AT MAIN ENTRANCE - 5		6/9/92	6/15/92	6/29/92	7/6/92	5
31	PART HANG UNIT A DRY WALL AT GYP BOARD WALLS & CEILINGS - 8		6/9/92	6/18/92	6/9/92	6/18/92	8
32	COMP INSTALL UNIT A METAL STUDS, FRAMING & IN WALL WORK - 7		6/10/92	6/18/92	6/10/92	6/18/92	7
33	INSTALL & GLAZE MAIN ENTRY IN UNIT A - 5		6/16/92	6/22/92	7/7/92	7/13/92	5
34	COMP HANG UNIT A DRY WALL AT GYP BOARD WALLS & CEILINGS - 8		6/19/92	6/30/92	6/19/92	6/30/92	8
35	PART TAPE & SAND UNIT A DRY WALL AT GYP BOARD WALLS & CEILINGS - 8		6/19/92	6/30/92	6/19/92	6/30/92	8
36	PART PAINT UNIT A INT SURFACES AS REQD - 5		7/1/92	7/8/92	7/7/92	7/13/92	5
37	COMP TAPE & SAND UNIT A DRY WALL AT GYP BOARD WALLS & CEILINGS - 8		7/1/92	7/13/92	7/1/92	7/13/92	8
38	PART INSTL UNIT A ACOUSTIC CEILING SUSP & GRID - 6		7/9/92	7/16/92	7/14/92	7/21/92	6
39	CONT(1) PAINT UNIT A INT SURFACES AS REQD - 3		7/14/92	7/16/92	7/17/92	7/21/92	3
40	LAY QUARRY & CERAMIC TILE AT TO/R FLOORS & ENTRY IN UNIT A - 10		7/14/92	7/27/92	7/14/92	7/27/92	10
41	COMP PAINT UNIT A INT SURFACES AS REQD - 2		7/17/92	7/20/92	7/29/92	7/30/92	2
42	PART INSTALL UNIT A CEILING LIGHT FIXTURES - 3		7/17/92	7/21/92	7/27/92	7/29/92	3
43	PART INSTALL UNIT A SPRINKLER HEADS & RELATED ACOUSTIC PANELS - 3		7/17/92	7/21/92	7/28/92	7/30/92	3
44	PART INSTALL UNIT A CEILING GRILLS & DIFFUSERS - 5		7/17/92	7/23/92	7/23/92	7/29/92	5

	activity	sub title	early start	early finish	late start	late finish	days
45	COMP INSTL UNIT A ACOUSTIC CEILING SUSP & GRID - 6		7/17/92	7/24/92	7/22/92	7/29/92	6
46	INSTL UNIT B LIFE SAFETY, SECURITY & COMMUNICATIONS DEVICES & TRIM - 5		7/21/92	7/27/92	7/31/92	8/6/92	5
47	COMP INSTALL UNIT A SPRINKLER HEADS & RELATED ACOUSTIC PANELS - 2		7/27/92	7/28/92	7/31/92	8/3/92	2
48	INSTALL UNIT B CEILING TRACK & FOLDING PARTITION - 2		7/27/92	7/28/92	8/5/92	8/6/92	2
49	COMP INSTALL UNIT A CEILING GRILLS & DIFFUSERS - 3		7/27/92	7/29/92	7/30/92	8/3/92	3
50	COMP INSTALL UNIT AA CEILING LIGHT FIXTURES - 3		7/27/92	7/29/92	7/30/92	8/3/92	3
51	INSTALL UNIT A TO/R VANITIES & PLUMBING FIXTURES - 5		7/28/92	8/3/92	7/28/92	8/3/92	5
52	INSTALL ACOUSTIC CEILING PANELS AT UNIT B - 8		7/30/92	8/10/92	8/4/92	8/13/92	8
53	INSTALL UNIT B TOILET PARTITIONS & ACCESSORIES - 3		8/4/92	8/6/92	8/4/92	8/6/92	3
54	INSTALL UNIT B CARPETING - 3		8/7/92	8/11/92	8/14/92	8/18/92	3
55	INSTALL UNIT B INTERIOR DOORS, TRIM, HARDWARE & MILLWORK - 5		8/7/92	8/13/92	8/12/92	8/18/92	5
56	LAY UNIT B RESILIENT FLOOR TILE - 8		8/7/92	8/18/92	8/7/92	8/18/92	8
57	INSTALL UNIT B CEILING CUBICLE TRACK - 3		8/11/92	8/13/92	8/14/92	8/18/92	3
58	CLEAN UP & MOVE OUT OF UNIT B - 3		8/19/92	8/21/92	8/19/92	8/21/92	3

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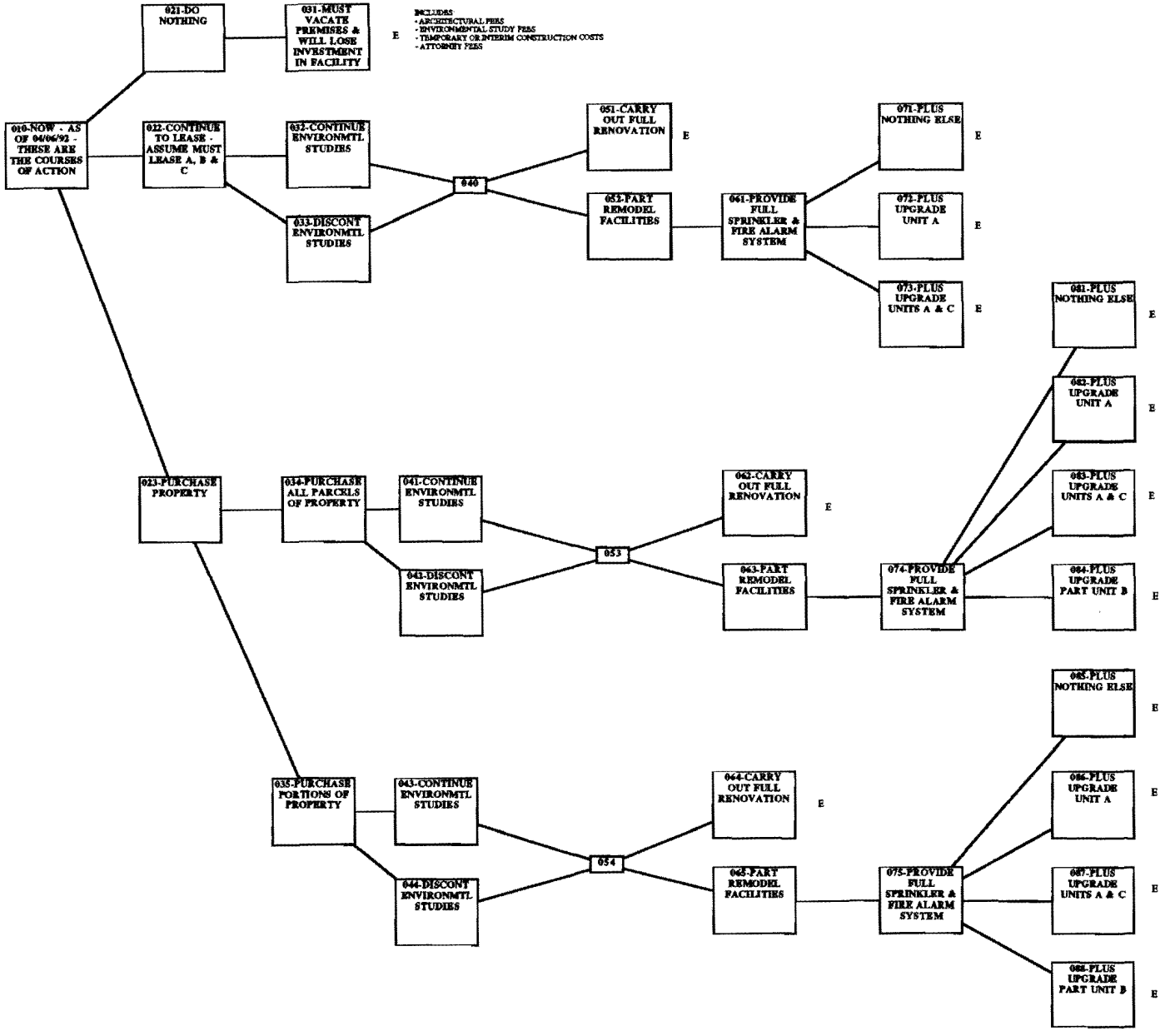
$20,159 - TEMP ELECTRICAL
$ 3,937 - INTERIM TEMP CONSTRUCTION IMROVEMENTS
TEMPORARY FIRE SAFETY IMPROVEMENTS
INTERIM CHALK BOARD IMPROVEMENTS ?
REMOVE TEMPORARY PARTITIONS
±$? - ATTORNEY FEES
±$? - DESIGN FEES
±$? - ENVIRONMENTAL STUDY FEES
±$ 60,000 - AUTO BODY REPAIR EQUIPMENT
±$? - CLASSROOM FURNISHINGS

INCLUDES
- ARCHITECTURAL FEES
- ENVIRONMENTAL STUDY FEES
- TEMPORARY OR INTERIM CONSTRUCTION COSTS
- ATTORNEY FEES



DECISION TREE FOR MOTT COMMUNITY COLLEGE THOMPSON ROAD RENOVATION
Fenton, Michigan

Issue #1 - April 6, 1992
thompson rd decision tree
disk 307

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MISPRINTED COPY (NO LF 0-6) DATA OK

5/12/92 issue #3, dated 05/12/92 - MCC Southern Lakes Campus Renovat

	activity	sub title	early start	early finish	late start
1	DETAIL, APPRV, FAB & DELIVER NEW ENTRY DOORS	unit B	1/2/92	1/2/92	1/2/92
2	DETAIL, APPRV, FAB & DELIVER NEW EXT ALUM WINDOWS	unit B	1/2/92	1/2/92	1/2/92
3	DETAIL, APPRV, FAB & DELIVER NEW ENTRY DOORS	unit B	1/2/92	1/2/92	1/2/92
4	SUBMIT SAMPLE, APPRV, MFR & DELIVER GLAZED BLOCK	unit B	1/2/92	1/2/92	1/2/92
5	DETAIL, APPRV, FAB & DELIVER NEW EXT ENTRY FRAMING	unit B	1/2/92	1/2/92	1/2/92
6	DETAIL, APPRV, FAB & DELIVER EXT WINDOW & ENTRY GLASS	unit B	1/2/92	1/2/92	1/2/92
7	DETAIL, APPRV, FAB & DELIVER NEW ENTRY DOORS	unit A	1/2/92	1/2/92	1/2/92
8	DETAIL, APPRV, FAB & DELIVER NEW EXT ALUM WINDOWS	unit A	1/2/92	1/2/92	1/2/92
9	DETAIL, APPRV, FAB & DELIVER HOLLOW METAL FRAMES	unit A	1/2/92	1/2/92	1/2/92
10	DETAIL, APPRV, FAB & DELIVER NEW EXT ENTRY FRAMING	unit A	1/2/92	1/2/92	1/2/92
11	DETAIL, APPRV, FAB & DELIVER EXT WINDOW & ENTRY GLASS	unit A	1/2/92	1/2/92	1/2/92
12	DETAIL, APPRV, FAB & DELIVER HARDWARE	unit A	1/2/92	1/2/92	1/2/92
13	DETAIL, APPRV, FAB & DELIVER NEW ENTRY DOORS	unit A	1/2/92	1/2/92	1/2/92
14	DETAIL, APPRV, FAB & DELIVER PREFORMED METAL SIDING	unit A	1/2/92	1/2/92	1/2/92
15	DETAIL, APPRV, FAB & DELIVER PLASTIC LAMINATE DOORS	unit A	1/2/92	1/2/92	1/2/92
16	SUBMIT SAMPLE, APPRV, MFR & DELIVER GLAZED BLOCK	unit A	1/2/92	1/2/92	1/2/92
17	DETAIL, APPRV, FAB & DELIVER HOLLOW METAL DOORS	unit A	1/2/92	1/2/92	1/2/92
18	DETAIL, APPRV, FAB & DELIVER HOLLOW METAL DOORS	unit B	1/2/92	1/2/92	1/2/92
19	DETAIL, APPRV, FAB & DELIVER HOLLOW METAL FRAMES	unit B	1/2/92	1/2/92	1/2/92

sheets A-1 B-2 info listed in early start, early finish sequence

	activity	sub title	early start	early finish	late start
20	DETAIL, APPRV, FAB & DELIVER PREFORMED METAL SIDING	unit B	1/2/92	1/2/92	1/2/92
21	DETAIL, APPRV, FAB & DELIVER HARDWARE	unit B	1/2/92	1/2/92	1/2/92
22	DETAIL, APPRV, FAB & DELIVER PLASTIC LAMINATE DOORS	unit B	1/2/92	1/2/92	1/2/92
23	117-PREPARE & SUBMIT BULLETIN #01 ESTIMATE	unit B	5/1/92	5/1/92	5/1/92
24	125-REVIEW & APPROVE BULLETIN #01 REVISIONS	unit B	5/1/92	5/1/92	5/1/92
25	001-T/R TO MAY 1, 1992	unit A	5/1/92	5/1/92	5/1/92
26	105-RESOLVE NEW WATER STORAGE TANK SIZE -	unit B	5/1/92	5/1/92	5/1/92
27	106-RESOLVE PUMP PIT LIGHTING	unit B	5/1/92	5/1/92	5/1/92
28	112-PREPARE & ISSUE BULLETIN #01	unit B	5/1/92	5/1/92	5/1/92
29	129-ISSUE CHANGE ORDER COVERING BULLETIN #01	unit B	5/1/92	5/1/92	5/1/92
30	102-MOBILIZE & MOVE ON JOB SITE - 2	unit B	5/1/92	5/4/92	5/1/92
31	002-MOBILIZE & MOVE INTO UNIT A - 6	unit A	5/1/92	5/8/92	5/1/92
32	155-T/R TO AM 05/04/92	unit B	5/4/92	5/4/92	5/4/92
33	160-T/R TO START OF SITE INSTALLATION	unit B	5/4/92	5/4/92	6/16/92
34	167-MASS EXCAVATE FOR NEW WATER STORAGE TANK - 5	unit B	5/4/92	5/8/92	6/16/92
35	168-EXCAVATE, INSTL, TEST & BACKFILL WATER LINES FROM NEW TANK TO C, TO TANK & TO B - 5	unit B	5/4/92	5/8/92	6/23/92
36	159-DETAIL, APPRV, FAB & DELIVER UG WATER STORAGE TANK - 40	unit B	5/4/92	6/29/92	5/4/92
37	103-REMOVE SCALE IN AREA B & TURN OVER TO MCC - 1	unit B	5/5/92	5/5/92	5/5/92
38	104-LAY OUT INT WORK & PART DEMOLISH EXISTING MECH, ELECT & ARCH WORK AS REQD IN UNIT B - 3	unit B	5/5/92	5/7/92	5/5/92

sheets A-1 B-2 info listed in early start, early finish sequence

	activity	sub title	early start	early finish	late start
39	111-SUBSTANT COMP DEMOLISH EXISTING MECH, ELECT & ARCH WORK AS REQD IN UNIT B - 2	unit B	5/8/92	5/11/92	5/11/92
40	107-PART DEMOLISH EXISTING WALL ELEMENTS AS REQD AT UNIT B NORTH, SOUTH & EAST ELEV - 3	unit B	5/8/92	5/12/92	5/8/92
41	110-PART GRIND & PREPARE UNIT B FLOOR SLABS FOR START OF PARTITION WORK - 3	unit B	5/8/92	5/12/92	5/8/92
42	109-INSTALL MISC IRON ABOVE CEILING HANGERS IN UNIT B - 4	unit B	5/8/92	5/13/92	7/10/92
43	003-LAY OUT INT WORK & PART DEMOLISH EXISTING MECH, ELECT & ARCH WORK AS REQD IN UNIT A - 5	unit A	5/11/92	5/15/92	5/11/92
44	174-EXCAVATE, FORM, REINF & POUR CONCRETE FOOTING FOR NEW WATER STORAGE TANK - 5	unit B	5/11/92	5/15/92	6/23/92
45	113-PART RECONSTRUCT MASONRY & INSTALL METAL SIDING AT UNIT B EXTERIOR - 3	unit B	5/13/92	5/15/92	5/13/92
46	114-COMP DEMOLISH EXISTING WALL ELEMENTS AS REQD AT UNIT B NORTH, SOUTH & EAST ELEVATION - 3	unit B	5/13/92	5/15/92	5/13/92
47	115-COMP GRIND & PREPARE UNIT B FLOOR SLABS FOR START OF PARTITION WORK - 3	unit B	5/13/92	5/15/92	5/19/92
48	122-PART INSTALL UNIT B ABOVE CEILING ROUGH FIRE PROTECTION PIPING WORK - 5	unit B	5/13/92	5/19/92	5/27/92
49	116-PART ERECT UNIT B INTERIOR MASONRY PARTITIONS - 7	unit B	5/13/92	5/21/92	5/13/92
50	121-PART INSTALL UNIT B ABOVE CEILING ROUGH MECHANICAL PIPING WORK - 7	unit B	5/13/92	5/21/92	5/22/92
51	120-PART INSTALL UNIT B ABOVE CEILING ROUGH SHEET METAL DUCT WORK & AIR HANDLING UNITS - 8	unit B	5/13/92	5/22/92	5/21/92
52	123-PART INSTALL UNIT B ABOVE CEILING ROUGH ELECT CONDUIT & FEEDERS - 8	unit B	5/13/92	5/22/92	5/21/92
53	124-PART INSTL UNIT B ABV CLG SECURITY, LIFE SAFETY & COMMUNICATIONS CONDUIT & WIRE - 8	unit B	5/13/92	5/22/92	5/21/92
54	118-PART INSTALL & GLAZE ENTRIES & WINDOWS ON NORTH, SOUTH & EAST ELEVATIONS - 3	unit B	5/18/92	5/20/92	5/18/92
55	119-COMP RECONSTRUCT MASONRY & INSTALL METAL SIDING AT UNIT B EXTERIOR - 3	unit B	5/18/92	5/20/92	5/18/92
56	008-PART INSTALL UNIT A ABOVE CEILING ROUGH FIRE PROTECTION PIPING WORK - 5	unit A	5/18/92	5/22/92	5/21/92
57	004-SUBSTANT COMP DEMOLISH EXISTING MECH, ELECT & ARCH WORK AS REQD IN UNIT A - 5	unit A	5/18/92	5/22/92	6/8/92

	activity	sub title	early start	early finish	late start
58	007-PART INSTALL UNIT A ABOVE CEILING ROUGH MECHANICAL PIPING WORK - 7	unit A	5/18/92	5/27/92	5/19/92
59	009-PART INSTALL UNIT A ABOVE CEILING ROUGH ELECT CONDUIT & FEEDERS - 8	unit A	5/18/92	5/28/92	5/18/92
60	010-PART INSTL UNIT A ABV CLG SECURITY, LIFE SAFETY & COMMUNICATIONS CONDUIT & WIRE - 8	unit A	5/18/92	5/28/92	5/18/92
61	006-PART INSTALL UNIT A ABOVE CEILING ROUGH SHEET METAL DUCT WORK & AIR HANDLING UNITS - 8	unit A	5/18/92	5/28/92	5/18/92
62	132-COMP INSTALL UNIT B ABOVE CEILING ROUGH FIRE PROTECTION PIPING WORK - 5	unit B	5/20/92	5/27/92	6/8/92
63	126-COMP INSTALL & GLAZE ENTRIES & WINDOWS ON NORTH, SOUTH & EAST ELEVATIONS - 3	unit B	5/21/92	5/26/92	5/21/92
64	131-COMP INSTALL UNIT B ABOVE CEILING ROUGH MECHANICAL PIPING WORK - 6	unit B	5/22/92	6/1/92	6/5/92
65	127-CONT(1) ERECT UNIT B INTERIOR MASONRY PARTITIONS - 7	unit B	5/22/92	6/2/92	5/22/92
66	128-CUT EXISTING UNIT B FLOOR SLAB, INSTL UG UTIL & PATCH SLAB - 7	unit B	5/22/92	6/2/92	6/24/92
67	014-COMP INSTALL UNIT A ABOVE CEILING ROUGH FIRE PROTECTION PIPING WORK - 5	unit A	5/26/92	6/1/92	6/3/92
68	005-PART ERECT UNIT A INTERIOR MASONRY PARTITIONS - 5	unit A	5/26/92	6/1/92	6/15/92
69	138-PART INSTALL UNIT B METAL STUDS, FRAMING & IN WALL WORK - 6	unit B	5/26/92	6/2/92	6/3/92
70	133-COMP INSTALL UNIT B ABOVE CEILING ROUGH ELECT CONDUIT & FEEDERS - 7	unit B	5/26/92	6/3/92	6/4/92
71	134-COMP INSTL UNIT B ABV CLG SECURITY, LIFE SAFETY & COMMUNICATIONS CONDUIT & WIRE - 7	unit B	5/26/92	6/3/92	6/4/92
72	130-COMP INSTALL UNIT B ABOVE CEILING ROUGH SHEET METAL DUCT WORK & AIR HANDLING UNITS - 8	unit B	5/26/92	6/4/92	6/3/92
73	013-COMP INSTALL UNIT A ABOVE CEILING ROUGH MECHANICAL PIPING WORK - 6	unit A	5/28/92	6/4/92	6/2/92
74	019-PART INSTALL UNIT A METAL STUDS, FRAMING & IN WALL WORK - 7	unit A	5/29/92	6/8/92	5/29/92
75	015-COMP INSTALL UNIT A ABOVE CEILING ROUGH ELECT CONDUIT & FEEDERS - 7	unit A	5/29/92	6/8/92	6/1/92
76	016-COMP INSTL UNIT A ABV CLG SECURITY, LIFE SAFETY & COMMUNICATIONS CONDUIT & WIRE - 7	unit A	5/29/92	6/8/92	6/1/92

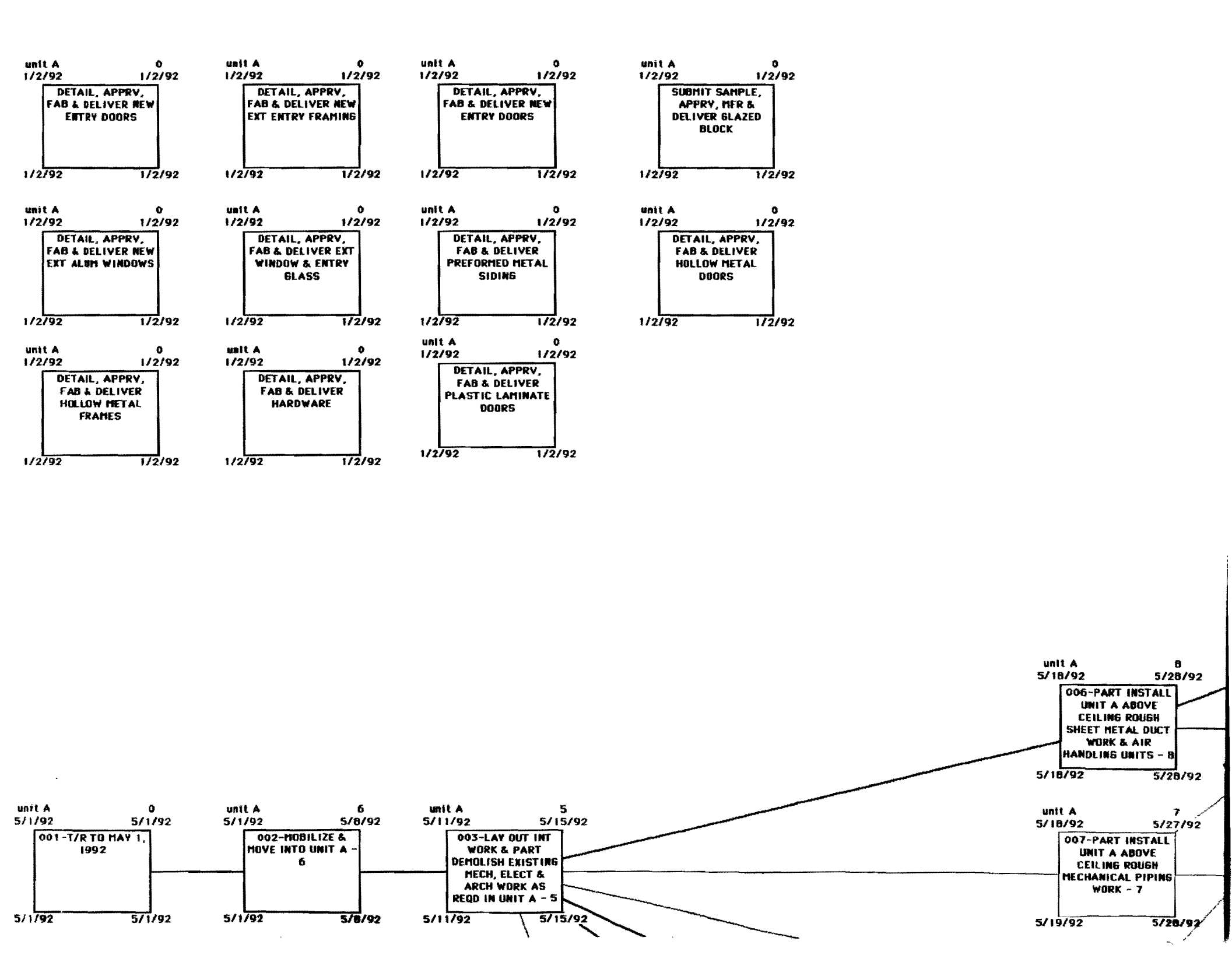
	activity	sub title	early start	early finish	late start
77	012-COMP INSTALL UNIT A ABOVE CEILING ROUGH SHEET METAL DUCT WORK & AIR HANDLING UNITS - 8	unit A	5/29/92	6/9/92	5/29/92
78	011-COMP ERECT UNIT A INTERIOR MASONRY PARTITIONS - 5	unit A	6/2/92	6/8/92	6/22/92
79	136-CONSTRUCT SLAB ON GRADE RAMPS IN UNIT B AT ELEVATION CHANGES - 3	unit B	6/3/92	6/5/92	7/6/92
80	137-CONSTRUCT RAISED WOOD FLOOR IN UNIT B - 5	unit B	6/3/92	6/9/92	7/1/92
81	135-COMP ERECT UNIT B INTERIOR MASONRY PARTITIONS - 7	unit B	6/3/92	6/12/92	6/3/92
82	139-PART HANG UNIT B DRY WALL AT GYP BOARD WALLS & CEILINGS - 8	unit B	6/3/92	6/12/92	6/11/92
83	018-INSTL UNIT A ABOVE CEILING MISC IRON HANGERS - 2	unit A	6/9/92	6/10/92	7/2/92
84	017-CONSTRUCT EXTERIOR RAMPS & STAIRS IN UNIT A AT MAIN ENTRANCE - 5	unit A	6/9/92	6/15/92	6/29/92
85	020-PART HANG UNIT A DRY WALL AT GYP BOARD WALLS & CEILINGS - 8	unit A	6/9/92	6/18/92	6/9/92
86	021-COMP INSTALL UNIT A METAL STUDS, FRAMING & IN WALL WORK - 7	unit A	6/10/92	6/18/92	6/10/92
87	140-COMP INSTALL UNIT B METAL STUDS, FRAMING & IN WALL WORK - 6	unit B	6/15/92	6/22/92	6/15/92
88	151-PART TAPE & SAND DRY WALL AT GYP BOARD WALLS & CEILINGS - 8	unit B	6/15/92	6/24/92	6/23/92
89	022-INSTALL & GLAZE MAIN ENTRY IN UNIT A - 5	unit A	6/16/92	6/22/92	7/7/92
90	023-PART TAPE & SAND UNIT A DRY WALL AT GYP BOARD WALLS & CEILINGS - 8	unit A	6/19/92	6/30/92	6/19/92
91	024-COMP HANG UNIT A DRY WALL AT GYP BOARD WALLS & CEILINGS - 8	unit A	6/19/92	6/30/92	6/19/92
92	152-COMP HANG UNIT B DRY WALL AT GYP BOARD WALLS & CEILINGS - 8	unit B	6/23/92	7/2/92	6/23/92
93	153-PART PAINT UNIT B INT SURFACES AS REQD - 5	unit B	6/25/92	7/1/92	7/9/92
94	177-SET & CONNECT NEW WATER STORAGE TANK - 5	unit B	6/30/92	7/7/92	6/30/92
95	025-PART PAINT UNIT A INT SURFACES AS REQD - 5	unit A	7/1/92	7/8/92	7/7/92

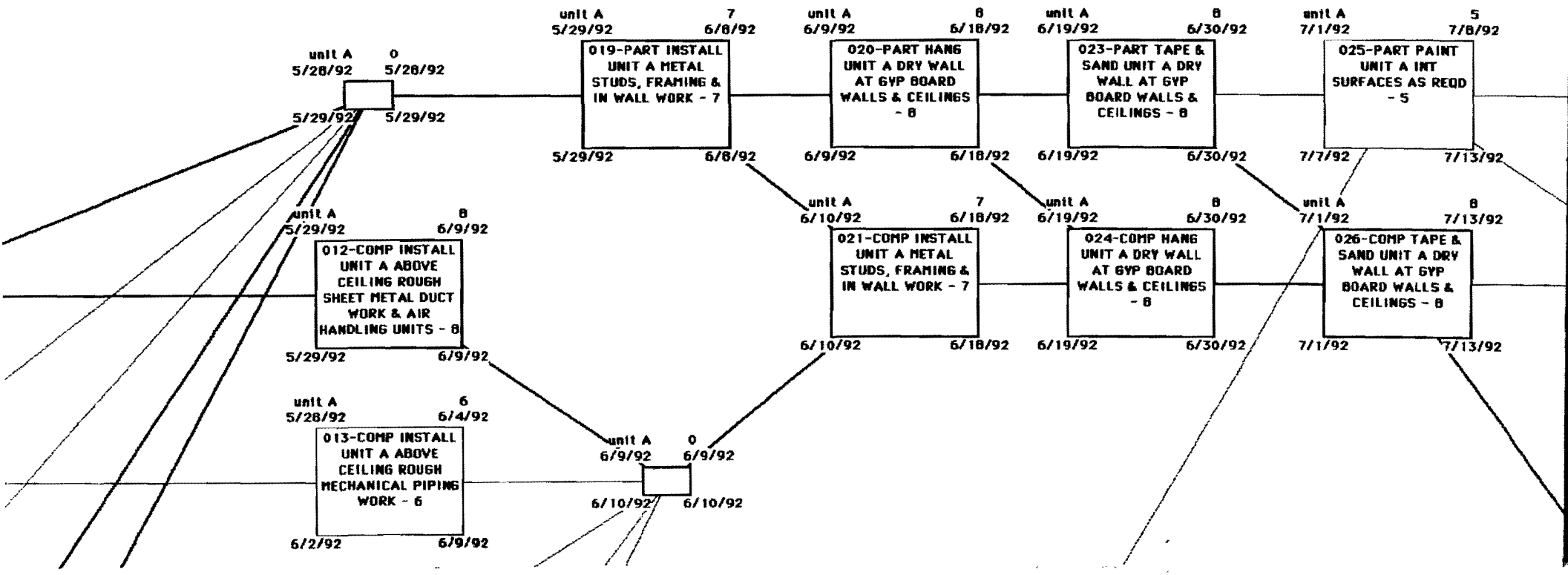
	activity	sub title	early start	early finish	late start
96	026-COMP TAPE & SAND UNIT A DRY WALL AT GYP BOARD WALLS & CEILINGS - 8	unit A	7/1/92	7/13/92	7/1/92
97	156-PART INSTL UNIT B ACOUSTIC CEILING SUSP & GRID - 6	unit B	7/2/92	7/10/92	7/16/92
98	154-COMP TAPE & SAND DRY WALL AT GYP BOARD WALLS & CEILINGS - 8	unit B	7/6/92	7/15/92	7/6/92
99	182-CONSTRUCT PUMP PIT & SUMP AT WATER STORAGE TANK - 8	unit B	7/8/92	7/17/92	7/8/92
100	027-PART INSTL UNIT A ACOUSTIC CEILING SUSP & GRID - 6	unit A	7/9/92	7/16/92	7/14/92
101	163-PART INSTALL UNIT B CEILING LIGHT FIXTURES - 3	unit B	7/13/92	7/15/92	7/29/92
102	161-PART INSTALL UNIT B SPRINKLER HEADS & RELATED ACOUSTIC PANELS - 3	unit B	7/13/92	7/15/92	7/30/92
103	162-PART INSTALL UNIT B CEILING GRILLS & DIFFUSERS - 5	unit B	7/13/92	7/17/92	7/27/92
104	028-CONT(1) PAINT UNIT A INT SURFACES AS REQD - 3	unit A	7/14/92	7/16/92	7/17/92
105	029-LAY QUARRY & CERAMIC TILE AT TO/R FLOORS & ENTRY IN UNIT A - 10	unit A	7/14/92	7/27/92	7/14/92
106	157-CONT(1) PAINT UNIT B INT SURFACES AS REQD - 3	unit B	7/16/92	7/20/92	7/21/92
107	158-LAY QUARRY & CERAMIC TILE AT TO/R FLOORS & WALLS IN UNIT B - 10	unit B	7/16/92	7/29/92	7/16/92
108	184-BACKFILL & COMPACT AT NEW WATER STORAGE TANK - 3	unit B	7/17/92	7/17/92	7/17/92
109	034-COMP PAINT UNIT A INT SURFACES AS REQD - 2	unit A	7/17/92	7/20/92	7/29/92
110	032-PART INSTALL UNIT A CEILING LIGHT FIXTURES - 3	unit A	7/17/92	7/21/92	7/27/92
111	030-PART INSTALL UNIT A SPRINKLER HEADS & RELATED ACOUSTIC PANELS - 3	unit A	7/17/92	7/21/92	7/28/92
112	031-PART INSTALL UNIT A CEILING GRILLS & DIFFUSERS - 5	unit A	7/17/92	7/23/92	7/23/92
113	033-COMP INSTL UNIT A ACOUSTIC CEILING SUSP & GRID - 6	unit A	7/17/92	7/24/92	7/22/92
114	165-COMP PAINT UNIT B INT SURFACES AS REQD - 2	unit B	7/21/92	7/22/92	7/31/92

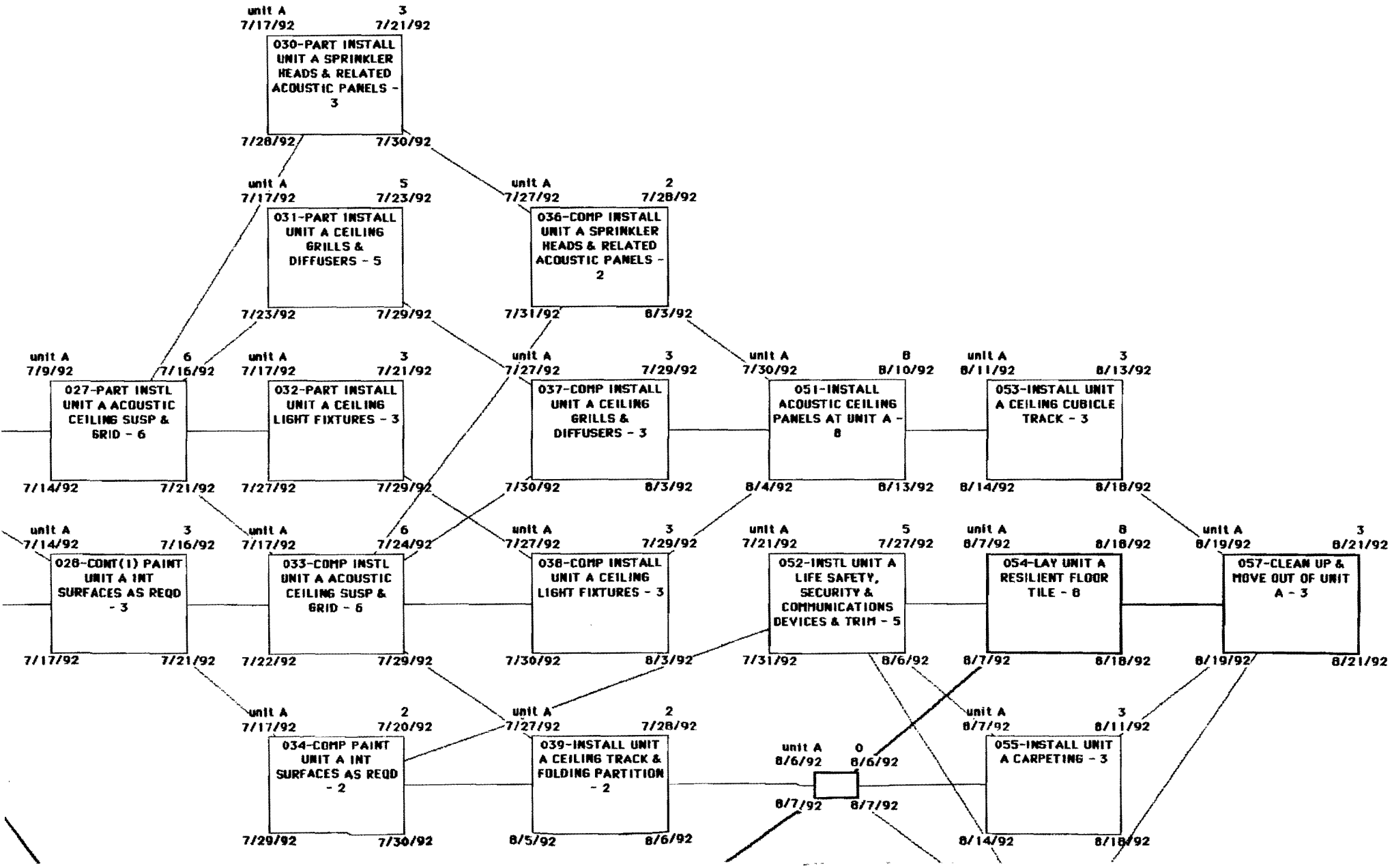
sheets A-1 B-2 info listed in early start, early finish sequence

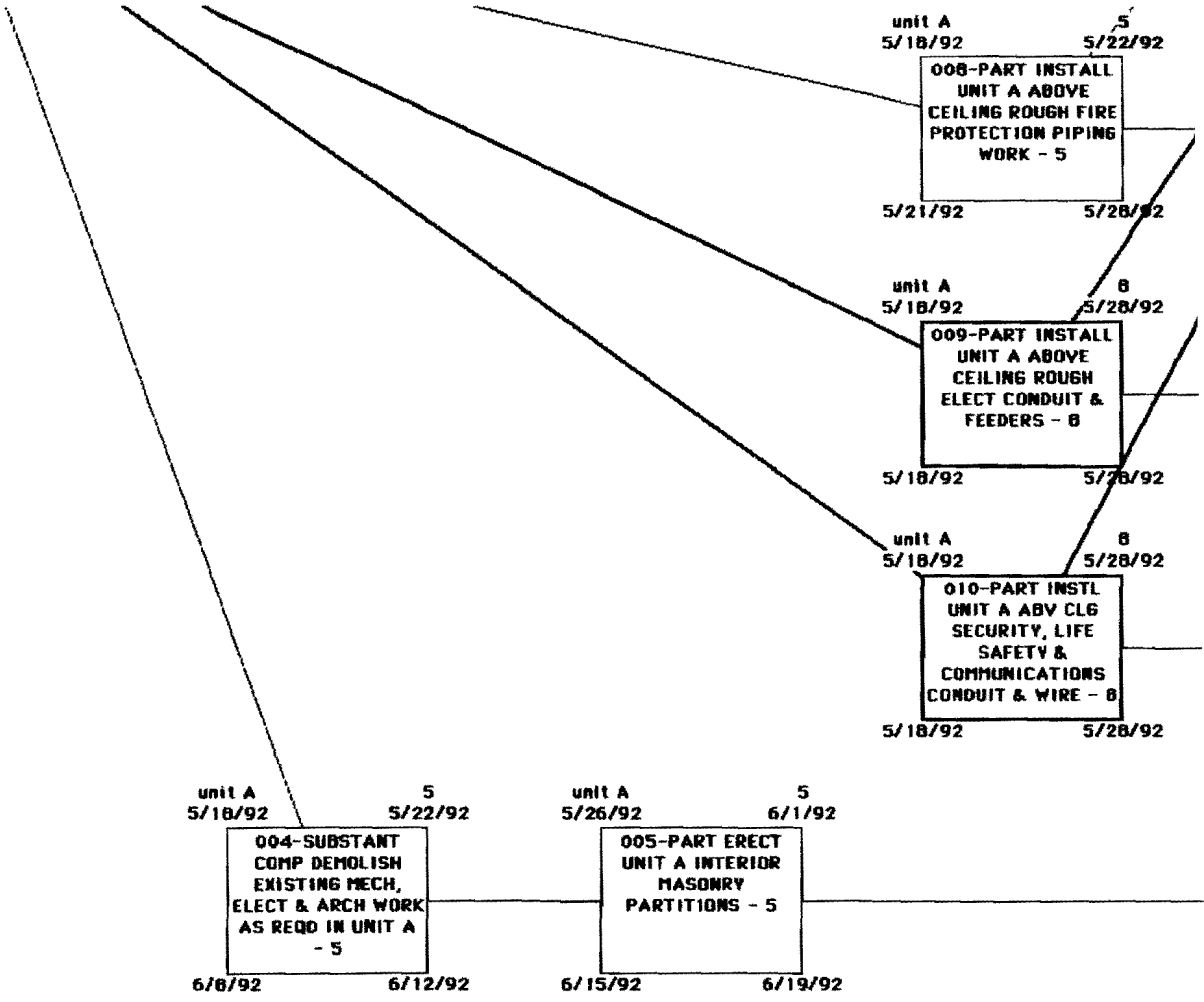
	activity	sub title	early start	early finish	late start
115	052-INSTL UNIT A LIFE SAFETY, SECURITY & COMMUNICATIONS DEVICES & TRIM - 5	unit A	7/21/92	7/27/92	7/31/92
116	164-COMP INSTL UNIT B ACOUSTIC CEILING SUSP & GRID - 6	unit B	7/21/92	7/28/92	7/24/92
117	176-INSTL UNIT B LIFE SAFETY, SECURITY & COMMUNICATIONS DEVICES & TRIM - 5	unit B	7/23/92	7/29/92	8/4/92
118	036-COMP INSTALL UNIT A SPRINKLER HEADS & RELATED ACOUSTIC PANELS - 2	unit A	7/27/92	7/28/92	7/31/92
119	039-INSTALL UNIT A CEILING TRACK & FOLDING PARTITION - 2	unit A	7/27/92	7/28/92	8/5/92
120	038-COMP INSTALL UNIT A CEILING LIGHT FIXTURES - 3	unit A	7/27/92	7/29/92	7/30/92
121	037-COMP INSTALL UNIT A CEILING GRILLS & DIFFUSERS - 3	unit A	7/27/92	7/29/92	7/30/92
122	035-INSTALL UNIT A TO/R VANITIES & PLUMBING FIXTURES - 5	unit A	7/28/92	8/3/92	7/28/92
123	169-COMP INSTALL UNIT B SPRINKLER HEADS & RELATED ACOUSTIC PANELS - 2	unit B	7/29/92	7/30/92	8/4/92
124	172-INSTALL UNIT B CEILING TRACK & FOLDING PARTITION - 2	unit B	7/29/92	7/30/92	8/7/92
125	170-COMP INSTALL UNIT B CEILING GRILLS & DIFFUSERS - 3	unit B	7/29/92	7/31/92	8/3/92
126	171-COMP INSTALL UNIT B CEILING LIGHT FIXTURES - 3	unit B	7/29/92	7/31/92	8/3/92
127	166-INSTALL UNIT B TO/R VANITIES & PLUMBING FIXTURES - 5	unit B	7/30/92	8/5/92	7/30/92
128	051-INSTALL ACOUSTIC CEILING PANELS AT UNIT A - 8	unit A	7/30/92	8/10/92	8/4/92
129	175-INSTALL ACOUSTIC CEILING PANELS AT UNIT B - 8	unit B	8/3/92	8/12/92	8/6/92
130	040-INSTALL UNIT A TOILET PARTITIONS & ACCESSORIES - 3	unit A	8/4/92	8/6/92	8/4/92
131	173-INSTALL UNIT B TOILET PARTITIONS & ACCESSORIES - 3	unit B	8/6/92	8/10/92	8/6/92
132	055-INSTALL UNIT A CARPETING - 3	unit A	8/7/92	8/11/92	8/14/92
133	052-INSTALL UNIT A INTERIOR DOORS, TRIM, HARDWARE & MILLWORK - 5	unit A	8/7/92	8/13/92	8/12/92

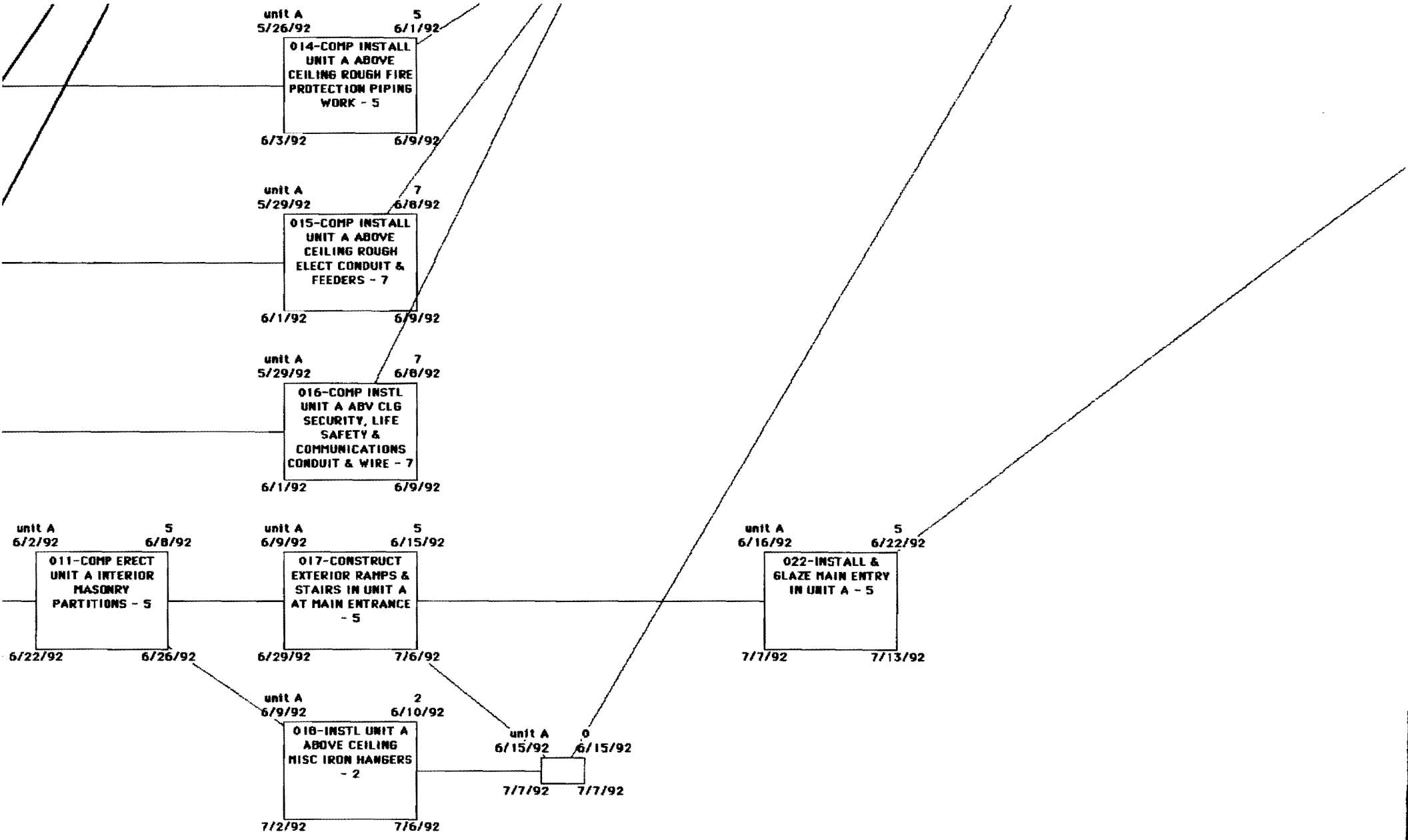
	activity	sub title	early start	early finish	late start
134	054-LAY UNIT A RESILIENT FLOOR TILE - 8	unit A	8/7/92	8/18/92	8/7/92
135	053-INSTALL UNIT A CEILING CUBICLE TRACK - 3	unit A	8/11/92	8/13/92	8/14/92
136	180-INSTALL UNIT B CARPETING - 3	unit B	8/11/92	8/13/92	8/18/92
137	181-INSTALL UNIT B INTERIOR DOORS, TRIM, HARDWARE & MILLWORK - 5	unit B	8/11/92	8/17/92	8/14/92
138	179-LAY UNIT B RESILIENT FLOOR TILE - 8	unit B	8/11/92	8/20/92	8/11/92
139	178-INSTALL UNIT B CEILING CUBICLE TRACK - 3	unit B	8/13/92	8/17/92	8/18/92
140	057-CLEAN UP & MOVE OUT OF UNIT A - 3	unit A	8/19/92	8/21/92	8/19/92
141	183-CLEAN UP & MOVE OUT OF UNIT B - 3	unit B	8/21/92	8/25/92	8/21/92

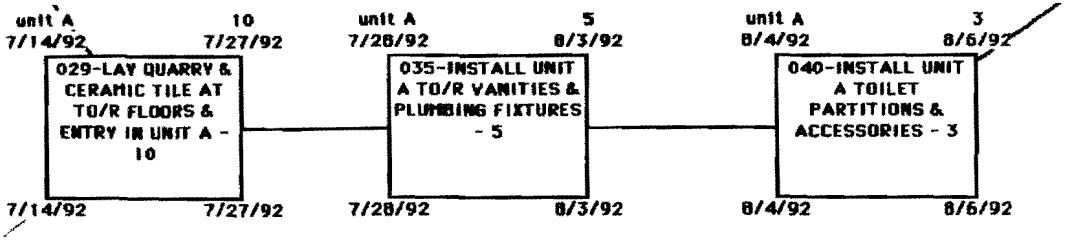

unit A
0
1/2/92
1/2/92
DETAIL, APPRV, FAB & DELIVER NEW ENTRY DOORS
1/2/92
1/2/92
unit A
0
1/2/92
1/2/92
DETAIL, APPRV, FAB & DELIVER NEW EXT ENTRY FRAMING
1/2/92
1/2/92
unit A
0
1/2/92
1/2/92
DETAIL, APPRV, FAB & DELIVER NEW ENTRY DOORS
1/2/92
1/2/92
unit A
0
1/2/92
1/2/92
SUBMIT SAMPLE, APPRV, MFR & DELIVER GLAZED BLOCK
1/2/92
1/2/92
unit A
0
1/2/92
1/2/92
DETAIL, APPRV, FAB & DELIVER NEW EXT ALUM WINDOWS
1/2/92
1/2/92
unit A
0
1/2/92
1/2/92
DETAIL, APPRV, FAB & DELIVER EXT WINDOW & ENTRY GLASS
1/2/92
1/2/92
unit A
0
1/2/92
1/2/92
DETAIL, APPRV, FAB & DELIVER PREFORMED METAL SIDING
1/2/92
1/2/92
unit A
0
1/2/92
1/2/92
DETAIL, APPRV, FAB & DELIVER HOLLOW METAL DOORS
1/2/92
1/2/92
unit A
0
1/2/92
1/2/92
DETAIL, APPRV, FAB & DELIVER HOLLOW METAL FRAMES
1/2/92
1/2/92
unit A
0
1/2/92
1/2/92
DETAIL, APPRV, FAB & DELIVER HARDWARE
1/2/92
1/2/92
unit A
0
1/2/92
1/2/92
DETAIL, APPRV, FAB & DELIVER PLASTIC LAMINATE DOORS
1/2/92
1/2/92
unit A
0
5/1/92
5/1/92
001-T/R TO MAY 1, 1992
5/1/92
5/1/92
unit A
6
5/1/92
5/8/92
002-MOBILIZE & MOVE INTO UNIT A - 6
5/1/92
5/8/92
unit A
5
5/11/92
5/15/92
003-LAY OUT INT WORK & PART DEMOLISH EXISTING MECH, ELECT & ARCH WORK AS REQD IN UNIT A - 5
5/11/92
5/15/92
unit A
8
5/18/92
5/28/92
006-PART INSTALL UNIT A ABOVE CEILING ROUGH SHEET METAL DUCT WORK & AIR HANDLING UNITS - 8
5/18/92
5/28/92
unit A
7
5/18/92
5/27/92
007-PART INSTALL UNIT A ABOVE CEILING ROUGH MECHANICAL PIPING WORK - 7
5/19/92
5/28/92

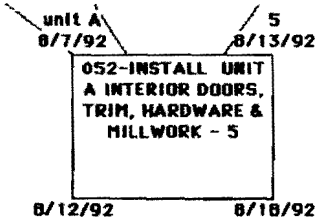

unit A
5/28/92
0
5/28/92
5/29/92
5/29/92
unit A
5/29/92
7
6/8/92
019-PART INSTALL UNIT A METAL STUDS, FRAMING & IN WALL WORK - 7
5/29/92
6/8/92
unit A
6/9/92
8
6/18/92
020-PART HANG UNIT A DRY WALL AT GYP BOARD WALLS & CEILINGS - 8
6/9/92
6/18/92
unit A
6/19/92
8
6/30/92
023-PART TAPE & SAND UNIT A DRY WALL AT GYP BOARD WALLS & CEILINGS - 8
6/19/92
6/30/92
unit A
7/1/92
5
7/8/92
025-PART PAINT UNIT A INT SURFACES AS REQD - 5
7/7/92
7/13/92
unit A
5/29/92
8
6/9/92
012-COMP INSTALL UNIT A ABOVE CEILING ROUGH SHEET METAL DUCT WORK & AIR HANDLING UNITS - 8
5/29/92
6/9/92
unit A
6/10/92
7
6/18/92
021-COMP INSTALL UNIT A METAL STUDS, FRAMING & IN WALL WORK - 7
6/10/92
6/18/92
unit A
6/19/92
8
6/30/92
024-COMP HANG UNIT A DRY WALL AT GYP BOARD WALLS & CEILINGS - 8
6/19/92
6/30/92
unit A
7/1/92
8
7/13/92
026-COMP TAPE & SAND UNIT A DRY WALL AT GYP BOARD WALLS & CEILINGS - 8
7/1/92
7/13/92
unit A
5/28/92
6
6/4/92
013-COMP INSTALL UNIT A ABOVE CEILING ROUGH MECHANICAL PIPING WORK - 6
6/2/92
6/9/92
unit A
6/9/92
0
6/9/92
6/10/92
6/10/92


unit A 7/17/92 3 7/21/92
030-PART INSTALL UNIT A SPRINKLER HEADS & RELATED ACOUSTIC PANELS - 3
7/28/92 7/30/92
unit A 7/17/92 5 7/23/92
031-PART INSTALL UNIT A CEILING GRILLS & DIFFUSERS - 5
7/23/92 7/29/92
unit A 7/27/92 2 7/28/92
036-COMP INSTALL UNIT A SPRINKLER HEADS & RELATED ACOUSTIC PANELS - 2
7/31/92 8/3/92
unit A 7/9/92 6 7/16/92
027-PART INSTL UNIT A ACOUSTIC CEILING SUSP & GRID - 6
7/14/92 7/21/92
unit A 7/17/92 3 7/21/92
032-PART INSTALL UNIT A CEILING LIGHT FIXTURES - 3
7/27/92 7/29/92
unit A 7/27/92 3 7/29/92
037-COMP INSTALL UNIT A CEILING GRILLS & DIFFUSERS - 3
7/30/92 8/3/92
unit A 7/30/92 8 8/10/92
051-INSTALL ACOUSTIC CEILING PANELS AT UNIT A - 8
8/4/92 8/13/92
unit A 8/11/92 3 8/13/92
053-INSTALL UNIT A CEILING CUBICLE TRACK - 3
8/14/92 8/18/92
unit A 7/14/92 3 7/16/92
028-CONT(1) PAINT UNIT A INT SURFACES AS REQD - 3
7/17/92 7/21/92
unit A 7/17/92 6 7/24/92
033-COMP INSTL UNIT A ACOUSTIC CEILING SUSP & GRID - 6
7/22/92 7/29/92
unit A 7/27/92 3 7/29/92
038-COMP INSTALL UNIT A CEILING LIGHT FIXTURES - 3
7/30/92 8/3/92
unit A 7/21/92 5 7/27/92
052-INSTL UNIT A LIFE SAFETY, SECURITY & COMMUNICATIONS DEVICES & TRIM - 5
7/31/92 8/6/92
unit A 8/7/92 8 8/18/92
054-LAY UNIT A RESILIENT FLOOR TILE - 8
8/7/92 8/18/92
unit A 8/19/92 3 8/21/92
057-CLEAN UP & MOVE OUT OF UNIT A - 3
8/19/92 8/21/92
unit A 7/17/92 2 7/20/92
034-COMP PAINT UNIT A INT SURFACES AS REQD - 2
7/29/92 7/30/92
unit A 7/27/92 2 7/28/92
039-INSTALL UNIT A CEILING TRACK & FOLDING PARTITION - 2
8/5/92 8/6/92
unit A 8/6/92 0 8/6/92
8/7/92 8/7/92
unit A 8/7/92 3 8/11/92
055-INSTALL UNIT A CARPETING - 3
8/14/92 8/18/92

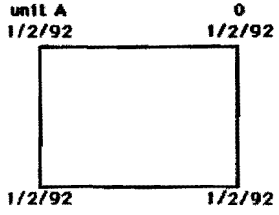

unit A
5/18/92
5
5/22/92
008-PART INSTALL UNIT A ABOVE CEILING ROUGH FIRE PROTECTION PIPING WORK - 5
5/21/92
5/28/92
unit A
5/18/92
8
5/28/92
009-PART INSTALL UNIT A ABOVE CEILING ROUGH ELECT CONDUIT & FEEDERS - 8
5/18/92
5/28/92
unit A
5/18/92
8
5/28/92
010-PART INSTL UNIT A ABV CLG SECURITY, LIFE SAFETY & COMMUNICATIONS CONDUIT & WIRE - 8
5/18/92
5/28/92
unit A
5/18/92
5
5/22/92
004-SUBSTANT COMP DEMOLISH EXISTING MECH, ELECT & ARCH WORK AS REQD IN UNIT A - 5
6/8/92
6/12/92
unit A
5/26/92
5
6/1/92
005-PART ERECT UNIT A INTERIOR MASONRY PARTITIONS - 5
6/15/92
6/19/92


unit A
5/26/92
5
6/1/92
014-COMP INSTALL UNIT A ABOVE CEILING ROUGH FIRE PROTECTION PIPING WORK - 5
6/3/92
6/9/92
unit A
5/29/92
7
6/8/92
015-COMP INSTALL UNIT A ABOVE CEILING ROUGH ELECT CONDUIT & FEEDERS - 7
6/1/92
6/9/92
unit A
5/29/92
7
6/8/92
016-COMP INSTL UNIT A ABV CLG SECURITY, LIFE SAFETY & COMMUNICATIONS CONDUIT & WIRE - 7
6/1/92
6/9/92
unit A
6/2/92
5
6/8/92
011-COMP ERECT UNIT A INTERIOR MASONRY PARTITIONS - 5
6/22/92
6/26/92
unit A
6/9/92
5
6/15/92
017-CONSTRUCT EXTERIOR RAMPS & STAIRS IN UNIT A AT MAIN ENTRANCE - 5
6/29/92
7/6/92
unit A
6/16/92
5
6/22/92
022-INSTALL & GLAZE MAIN ENTRY IN UNIT A - 5
7/7/92
7/13/92
unit A
6/9/92
2
6/10/92
018-INSTL UNIT A ABOVE CEILING MISC IRON HANGERS - 2
7/2/92
7/6/92
unit A
6/15/92
0
6/15/92
7/7/92
7/7/92





Location **Duration**
Early start **Early finish**



Late start **Late finish**

Activity Key

Reserved Activity Numbers

041 046
042 047
043 048
044 049
045 050

len 001
han

Issue #1 - May 1, 1992
Issue #2 - May 8, 1992
Issue #3 - May 12, 1992
i3 sht #A1 southern lake
disk #313

Unit A Work

NETWORK MODEL FOR MOTT COMMUNITY COLLEGE
Southern Lakes Campus Project
Thompson Road
Fenton, Michigan

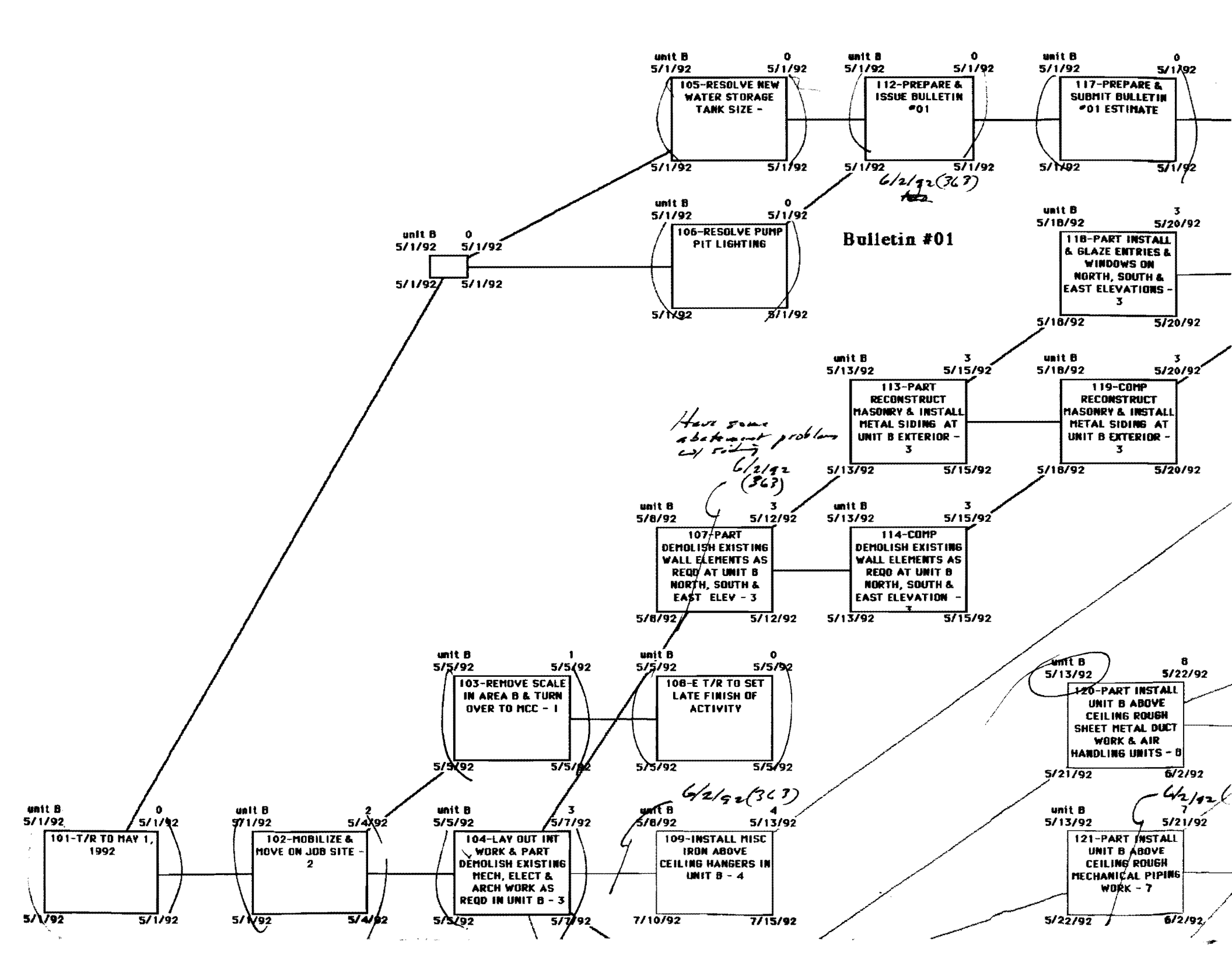
MacKenzie, Knuth and Klein
A Division of Ghafari Associates, Inc.
Architect of Record

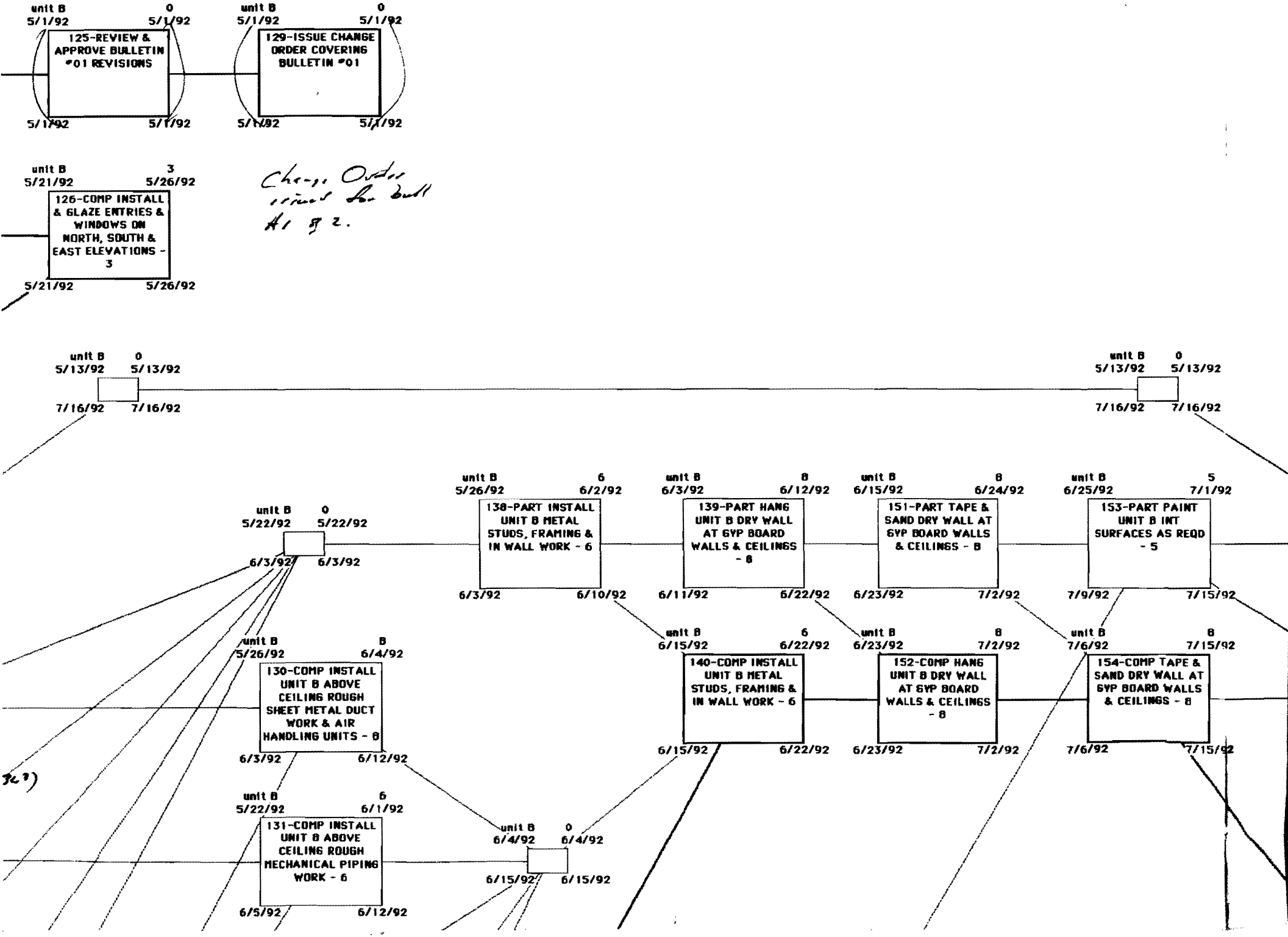
THA Associates
Coordinating Architect

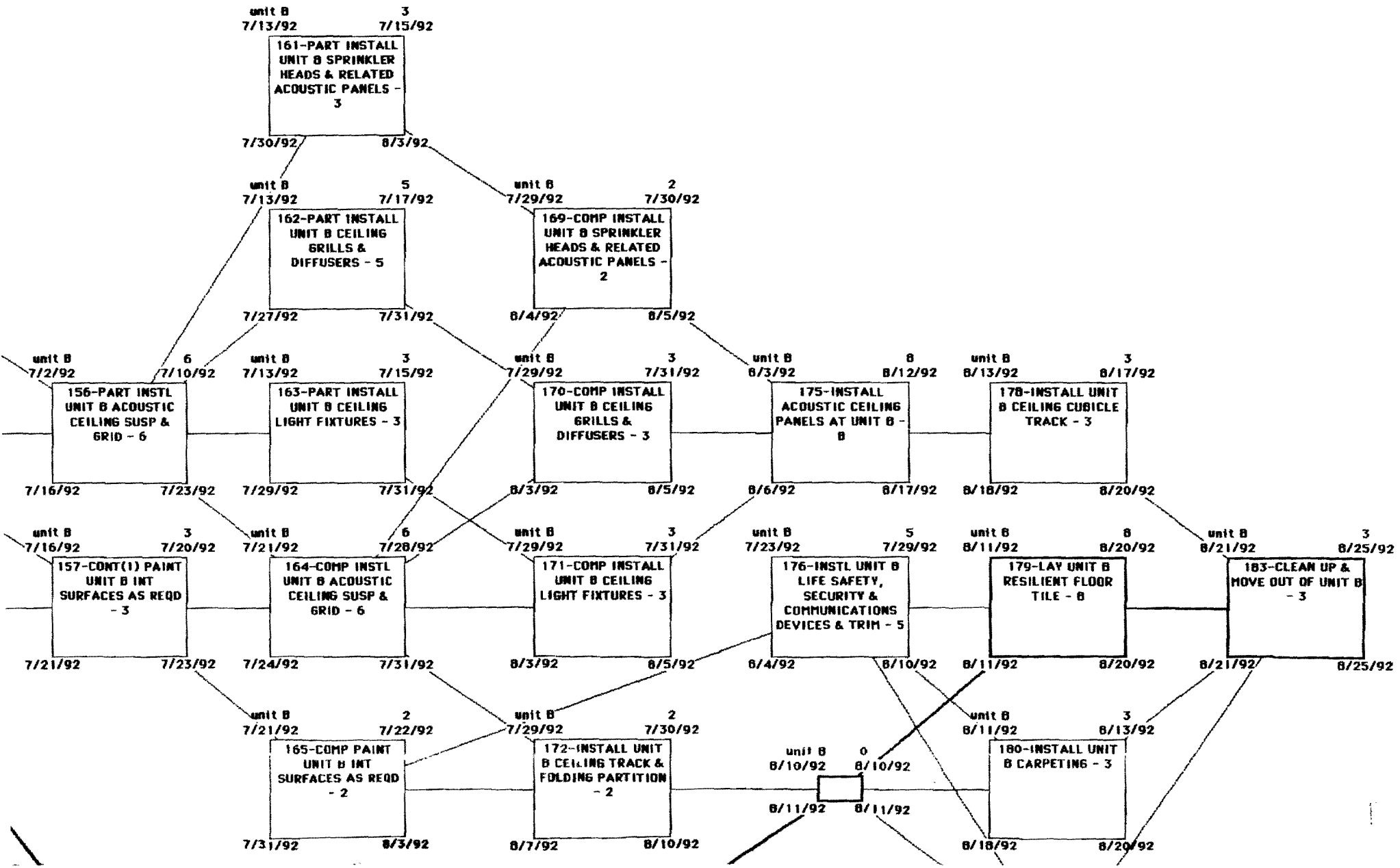
Erickson & Lindstrom
General Contractor

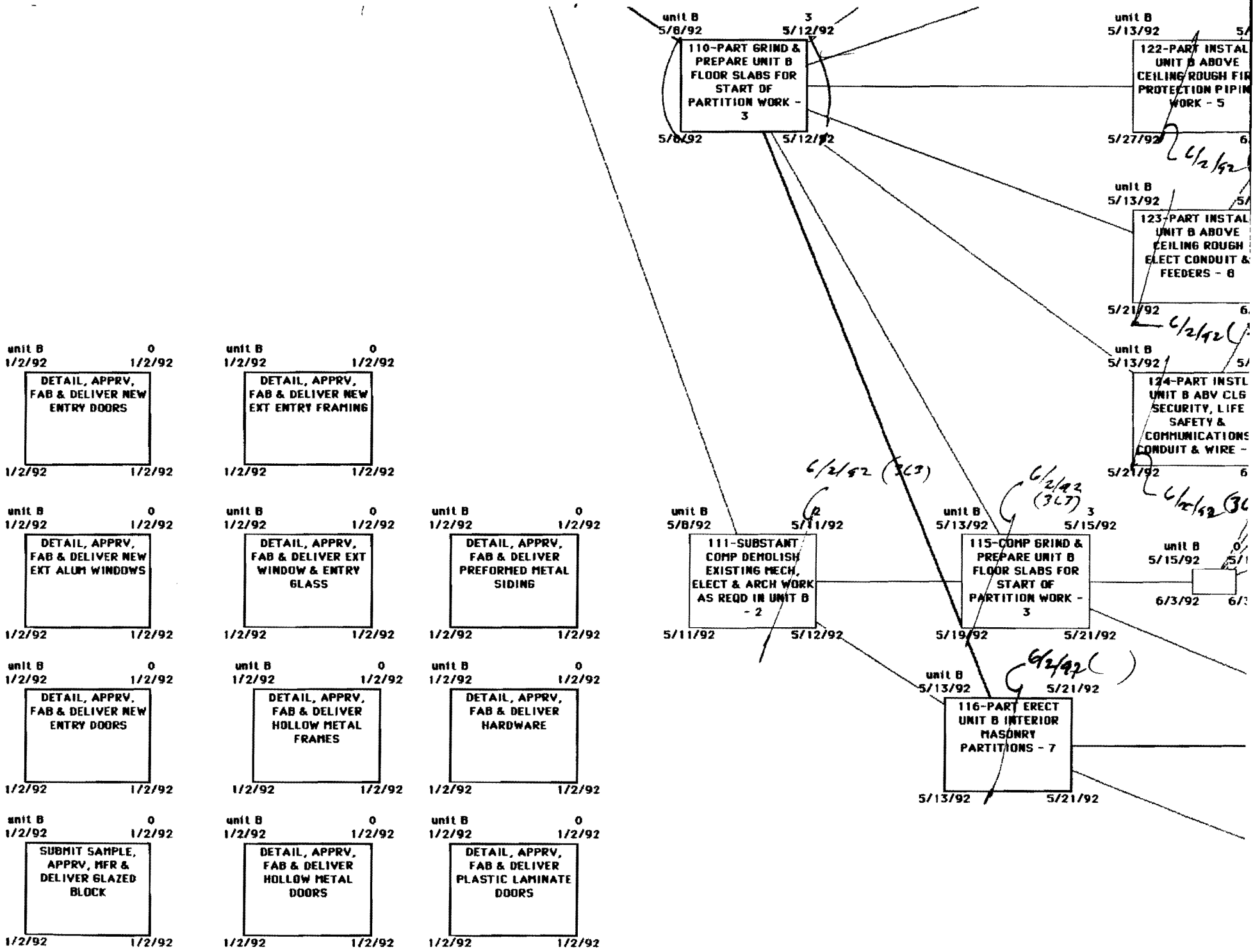
Ralph J. Stephenson PE PC
Consulting Engineer
323 Hiawatha Drive
Mt. Pleasant, Michigan 48858
ph 517 772 2537

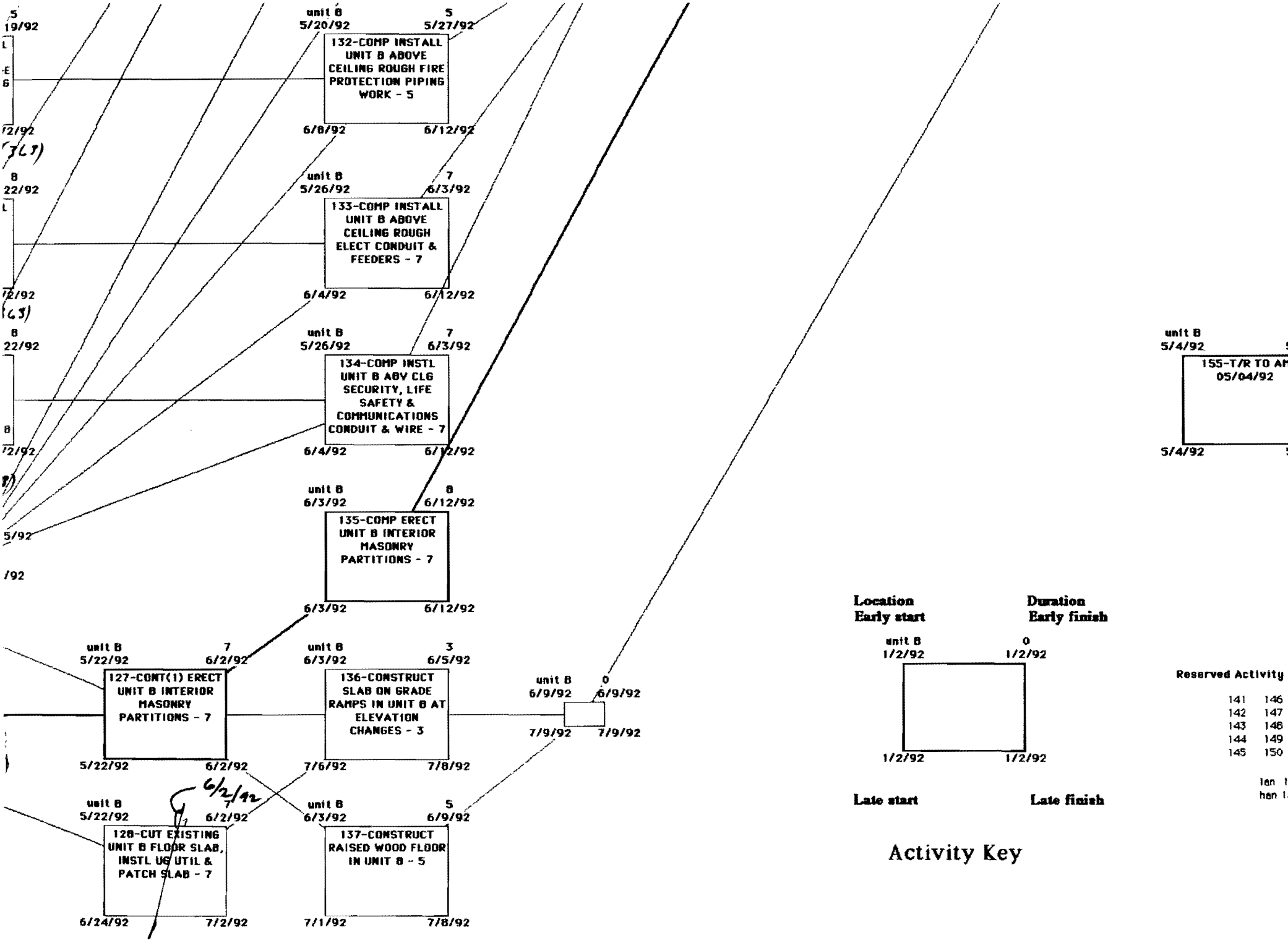
Sheet
#A1

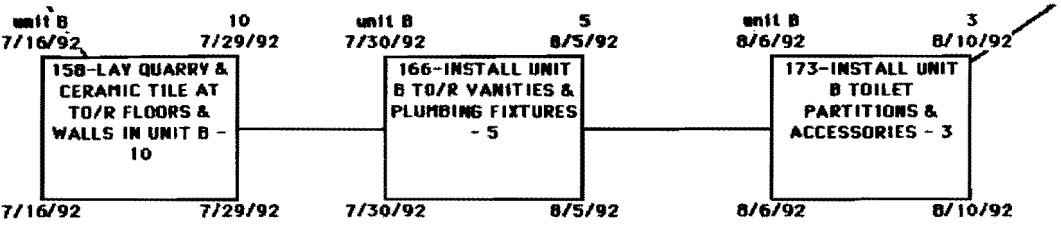

unit B 5/1/92 0 5/1/92
105-RESOLVE NEW WATER STORAGE TANK SIZE -
5/1/92 5/1/92
unit B 5/1/92 0 5/1/92
112-PREPARE & ISSUE BULLETIN #01
5/1/92 5/1/92
unit B 5/1/92 0 5/1/92
117-PREPARE & SUBMIT BULLETIN #01 ESTIMATE
5/1/92 5/1/92
6/2/92 (36?)
unit B 5/1/92 0 5/1/92
106-RESOLVE PUMP PIT LIGHTING
5/1/92 5/1/92
unit B 5/1/92 0 5/1/92
5/1/92 5/1/92
Bulletin #01
unit B 5/18/92 3 5/20/92
118-PART INSTALL & GLAZE ENTRIES & WINDOWS ON NORTH, SOUTH & EAST ELEVATIONS - 3
5/18/92 5/20/92
unit B 5/13/92 3 5/15/92
113-PART RECONSTRUCT MASONRY & INSTALL METAL SIDING AT UNIT B EXTERIOR - 3
5/13/92 5/15/92
unit B 5/18/92 3 5/20/92
119-COMP RECONSTRUCT MASONRY & INSTALL METAL SIDING AT UNIT B EXTERIOR - 3
5/18/92 5/20/92
Have some abatement problems w/ siding
6/2/92 (36?)
unit B 5/8/92 3 5/12/92
107-PART DEMOLISH EXISTING WALL ELEMENTS AS REQD AT UNIT B NORTH, SOUTH & EAST ELEV - 3
5/8/92 5/12/92
unit B 5/13/92 3 5/15/92
114-COMP DEMOLISH EXISTING WALL ELEMENTS AS REQD AT UNIT B NORTH, SOUTH & EAST ELEVATION - 3
5/13/92 5/15/92
unit B 5/5/92 1 5/5/92
103-REMOVE SCALE IN AREA B & TURN OVER TO MCC - 1
5/5/92 5/5/92
unit B 5/5/92 0 5/5/92
108-E T/R TO SET LATE FINISH OF ACTIVITY
5/5/92 5/5/92
unit B 5/13/92 8 5/22/92
120-PART INSTALL UNIT B ABOVE CEILING ROUGH SHEET METAL DUCT WORK & AIR HANDLING UNITS - 8
5/21/92 6/2/92
6/2/92 (36?)
unit B 5/1/92 0 5/1/92
101-T/R TO MAY 1, 1992
5/1/92 5/1/92
unit B 5/1/92 2 5/4/92
102-MOBILIZE & MOVE ON JOB SITE - 2
5/1/92 5/4/92
unit B 5/5/92 3 5/7/92
104-LAY OUT INT WORK & PART DEMOLISH EXISTING MECH, ELECT & ARCH WORK AS REQD IN UNIT B - 3
5/5/92 5/7/92
unit B 5/8/92 4 5/13/92
109-INSTALL MISC IRON ABOVE CEILING HANGERS IN UNIT B - 4
7/10/92 7/15/92
unit B 5/13/92 7 5/21/92
121-PART INSTALL UNIT B ABOVE CEILING ROUGH MECHANICAL PIPING WORK - 7
5/22/92 6/2/92

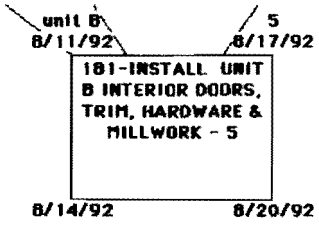

unit B 5/1/92
0 5/1/92
125-REVIEW & APPROVE BULLETIN #01 REVISIONS
5/1/92 5/1/92
unit B 5/1/92
0 5/1/92
129-ISSUE CHANGE ORDER COVERING BULLETIN #01
5/1/92 5/1/92
unit B 5/21/92
3 5/26/92
126-COMP INSTALL & GLAZE ENTRIES & WINDOWS ON NORTH, SOUTH & EAST ELEVATIONS - 3
5/21/92 5/26/92
Change Order issued for bulletin #1 & 2.
unit B 5/13/92
0 5/13/92
7/16/92 7/16/92
unit B 5/13/92
0 5/13/92
7/16/92 7/16/92
unit B 5/22/92
0 5/22/92
6/3/92 6/3/92
unit B 5/26/92
6 6/2/92
138-PART INSTALL UNIT B METAL STUDS, FRAMING & IN WALL WORK - 6
6/3/92 6/10/92
unit B 6/3/92
8 6/12/92
139-PART HANG UNIT B DRY WALL AT GYP BOARD WALLS & CEILINGS - 8
6/11/92 6/22/92
unit B 6/15/92
8 6/24/92
151-PART TAPE & SAND DRY WALL AT GYP BOARD WALLS & CEILINGS - 8
6/23/92 7/2/92
unit B 6/25/92
5 7/1/92
153-PART PAINT UNIT B INT SURFACES AS REQD - 5
7/9/92 7/15/92
unit B 5/26/92
8 6/4/92
130-COMP INSTALL UNIT B ABOVE CEILING ROUGH SHEET METAL DUCT WORK & AIR HANDLING UNITS - 8
6/3/92 6/12/92
unit B 6/15/92
6 6/22/92
140-COMP INSTALL UNIT B METAL STUDS, FRAMING & IN WALL WORK - 6
6/15/92 6/22/92
unit B 6/23/92
8 7/2/92
152-COMP HANG UNIT B DRY WALL AT GYP BOARD WALLS & CEILINGS - 8
6/23/92 7/2/92
unit B 7/6/92
8 7/15/92
154-COMP TAPE & SAND DRY WALL AT GYP BOARD WALLS & CEILINGS - 8
7/6/92 7/15/92
unit B 5/22/92
6 6/1/92
131-COMP INSTALL UNIT B ABOVE CEILING ROUGH MECHANICAL PIPING WORK - 6
6/5/92 6/12/92
unit B 6/4/92
0 6/4/92
6/15/92 6/15/92


unit B 3
7/13/92 7/15/92
161-PART INSTALL UNIT B SPRINKLER HEADS & RELATED ACOUSTIC PANELS - 3
7/30/92 8/3/92
unit B 5
7/13/92 7/17/92
162-PART INSTALL UNIT B CEILING GRILLS & DIFFUSERS - 5
7/27/92 7/31/92
unit B 2
7/29/92 7/30/92
169-COMP INSTALL UNIT B SPRINKLER HEADS & RELATED ACOUSTIC PANELS - 2
8/4/92 8/5/92
unit B 6
7/2/92 7/10/92
156-PART INSTL UNIT B ACOUSTIC CEILING SUSP & GRID - 6
7/16/92 7/23/92
unit B 3
7/13/92 7/15/92
163-PART INSTALL UNIT B CEILING LIGHT FIXTURES - 3
7/29/92 7/31/92
unit B 3
7/29/92 7/31/92
170-COMP INSTALL UNIT B CEILING GRILLS & DIFFUSERS - 3
8/3/92 8/5/92
unit B 8
8/3/92 8/12/92
175-INSTALL ACOUSTIC CEILING PANELS AT UNIT B - B
8/6/92 8/17/92
unit B 3
8/13/92 8/17/92
178-INSTALL UNIT B CEILING CUBICLE TRACK - 3
8/18/92 8/20/92
unit B 3
7/16/92 7/20/92
157-CONT(1) PAINT UNIT B INT SURFACES AS REQD - 3
7/21/92 7/23/92
unit B 6
7/21/92 7/28/92
164-COMP INSTL UNIT B ACOUSTIC CEILING SUSP & GRID - 6
7/24/92 7/31/92
unit B 3
7/29/92 7/31/92
171-COMP INSTALL UNIT B CEILING LIGHT FIXTURES - 3
8/3/92 8/5/92
unit B 5
7/23/92 7/29/92
176-INSTL UNIT B LIFE SAFETY, SECURITY & COMMUNICATIONS DEVICES & TRIM - 5
8/4/92 8/10/92
unit B 8
8/11/92 8/20/92
179-LAY UNIT B RESILIENT FLOOR TILE - B
8/11/92 8/20/92
unit B 3
8/21/92 8/25/92
183-CLEAN UP & MOVE OUT OF UNIT B - 3
8/21/92 8/25/92
unit B 2
7/21/92 7/22/92
165-COMP PAINT UNIT B INT SURFACES AS REQD - 2
7/31/92 8/3/92
unit B 2
7/29/92 7/30/92
172-INSTALL UNIT B CEILING TRACK & FOLDING PARTITION - 2
8/7/92 8/10/92
unit B 0
8/10/92 8/10/92
8/11/92 8/11/92
unit B 3
8/11/92 8/13/92
180-INSTALL UNIT B CARPETING - 3
8/18/92 8/20/92

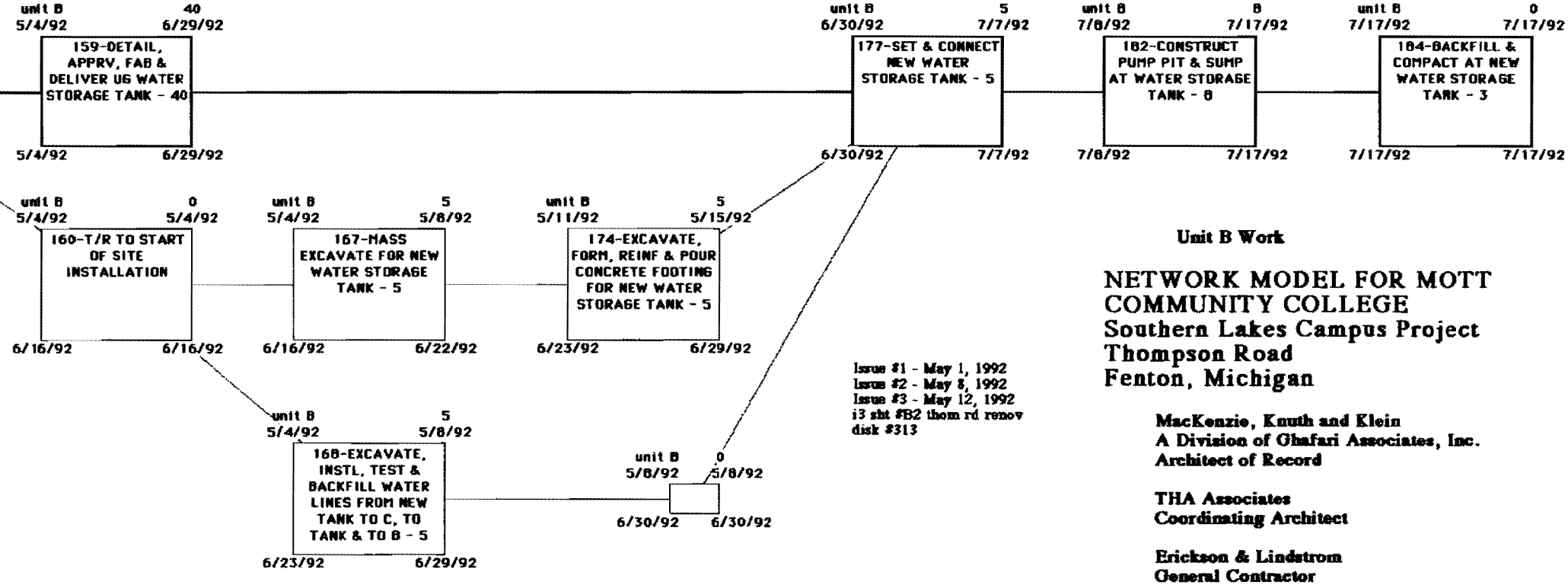

unit B 0
1/2/92 1/2/92
DETAIL, APPRV, FAB & DELIVER NEW ENTRY DOORS
1/2/92 1/2/92
unit B 0
1/2/92 1/2/92
DETAIL, APPRV, FAB & DELIVER NEW EXT ENTRY FRAMING
1/2/92 1/2/92
unit B 0
1/2/92 1/2/92
DETAIL, APPRV, FAB & DELIVER NEW EXT ALUM WINDOWS
1/2/92 1/2/92
unit B 0
1/2/92 1/2/92
DETAIL, APPRV, FAB & DELIVER EXT WINDOW & ENTRY GLASS
1/2/92 1/2/92
unit B 0
1/2/92 1/2/92
DETAIL, APPRV, FAB & DELIVER PREFORMED METAL SIDING
1/2/92 1/2/92
unit B 0
1/2/92 1/2/92
DETAIL, APPRV, FAB & DELIVER NEW ENTRY DOORS
1/2/92 1/2/92
unit B 0
1/2/92 1/2/92
DETAIL, APPRV, FAB & DELIVER HOLLOW METAL FRAMES
1/2/92 1/2/92
unit B 0
1/2/92 1/2/92
DETAIL, APPRV, FAB & DELIVER HARDWARE
1/2/92 1/2/92
unit B 0
1/2/92 1/2/92
SUBMIT SAMPLE, APPRV, MFR & DELIVER GLAZED BLOCK
1/2/92 1/2/92
unit B 0
1/2/92 1/2/92
DETAIL, APPRV, FAB & DELIVER HOLLOW METAL DOORS
1/2/92 1/2/92
unit B 0
1/2/92 1/2/92
DETAIL, APPRV, FAB & DELIVER PLASTIC LAMINATE DOORS
1/2/92 1/2/92
unit B 3
5/8/92 5/12/92
110-PART GRIND & PREPARE UNIT B FLOOR SLABS FOR START OF PARTITION WORK - 3
5/8/92 5/12/92
unit B
5/13/92 5/
122-PART INSTAL UNIT B ABOVE CEILING ROUGH FIR PROTECTION PIPIN WORK - 5
5/27/92 6/
unit B
5/13/92 5/
123-PART INSTAL UNIT B ABOVE CEILING ROUGH ELECT CONDUIT & FEEDERS - 8
5/21/92 6/
unit B
5/13/92 5/
124-PART INSTL UNIT B ABV CLG SECURITY, LIFE SAFETY & COMMUNICATIONS CONDUIT & WIRE -
5/21/92 6
6/2/92 (3C3)
unit B 2
5/8/92 5/11/92
111-SUBSTANT COMP DEMOLISH EXISTING MECH, ELECT & ARCH WORK AS REQD IN UNIT B - 2
5/11/92 5/12/92
6/2/92 (3C7)
unit B 3
5/13/92 5/15/92
115-COMP GRIND & PREPARE UNIT B FLOOR SLABS FOR START OF PARTITION WORK - 3
5/19/92 5/21/92
unit B 0
5/15/92 5/
6/3/92 6/
6/2/92 ( )
unit B
5/13/92 5/21/92
116-PART ERECT UNIT B INTERIOR MASONRY PARTITIONS - 7
5/13/92 5/21/92


unit B
5/20/92
5
5/27/92
132-COMP INSTALL UNIT B ABOVE CEILING ROUGH FIRE PROTECTION PIPING WORK - 5
6/8/92
6/12/92
unit B
5/26/92
7
6/3/92
133-COMP INSTALL UNIT B ABOVE CEILING ROUGH ELECT CONDUIT & FEEDERS - 7
6/4/92
6/12/92
unit B
5/26/92
7
6/3/92
134-COMP INSTL UNIT B ABV CLG SECURITY, LIFE SAFETY & COMMUNICATIONS CONDUIT & WIRE - 7
6/4/92
6/12/92
unit B
6/3/92
8
6/12/92
135-COMP ERECT UNIT B INTERIOR MASONRY PARTITIONS - 7
6/3/92
6/12/92
unit B
5/22/92
7
6/2/92
127-CONT(1) ERECT UNIT B INTERIOR MASONRY PARTITIONS - 7
5/22/92
6/2/92
unit B
6/3/92
3
6/5/92
136-CONSTRUCT SLAB ON GRADE RAMPS IN UNIT B AT ELEVATION CHANGES - 3
7/6/92
7/8/92
unit B
6/9/92
0
6/9/92
7/9/92
7/9/92
unit B
5/22/92
6/2/92
128-CUT EXISTING UNIT B FLOOR SLAB, INSTL UG UTIL & PATCH SLAB - 7
6/24/92
7/2/92
unit B
6/3/92
5
6/9/92
137-CONSTRUCT RAISED WOOD FLOOR IN UNIT B - 5
7/1/92
7/8/92
unit B
5/4/92
155-T/R TO AM 05/04/92
5/4/92
Location
Early start
Duration
Early finish
unit B
1/2/92
0
1/2/92
1/2/92
1/2/92
Late start
Late finish
Activity Key
Reserved Activity Nur
141 146
142 147
143 148
144 149
145 150
lan 101
han 184





Underground Water Storage Tank



Issue #1 - May 1, 1992
Issue #2 - May 8, 1992
Issue #3 - May 12, 1992
i3 sht #B2 thom rd renov
disk #313

Unit B Work

NETWORK MODEL FOR MOTT COMMUNITY COLLEGE
Southern Lakes Campus Project
Thompson Road
Fenton, Michigan

MacKenzie, Knuth and Klein
A Division of Ghafari Associates, Inc.
Architect of Record

THA Associates
Coordinating Architect

Erickson & Lindstrom
General Contractor

Ralph J. Stephenson PE PC
Consulting Engineer
323 Hiawatha Drive
Mt. Pleasant, Michigan 48858
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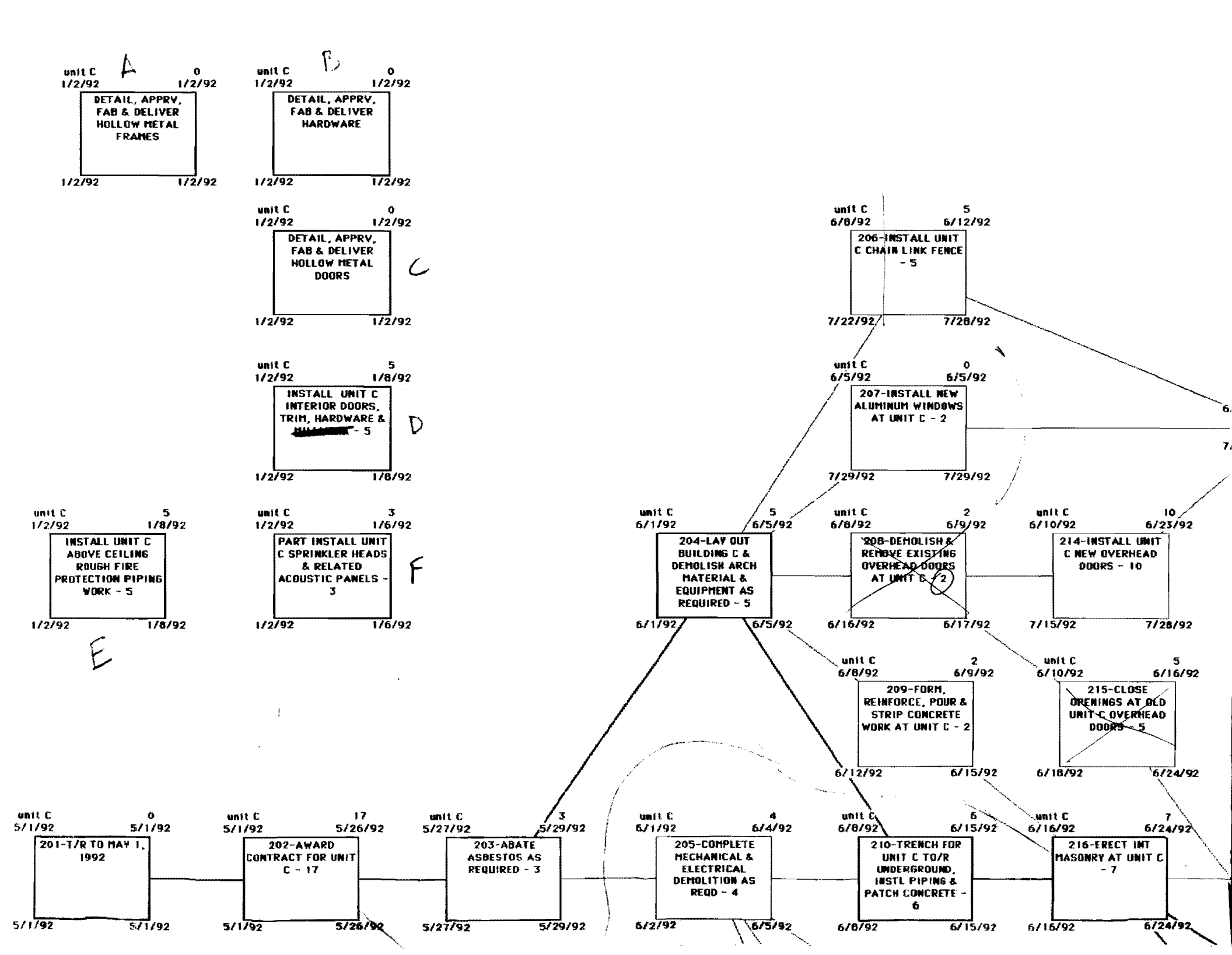
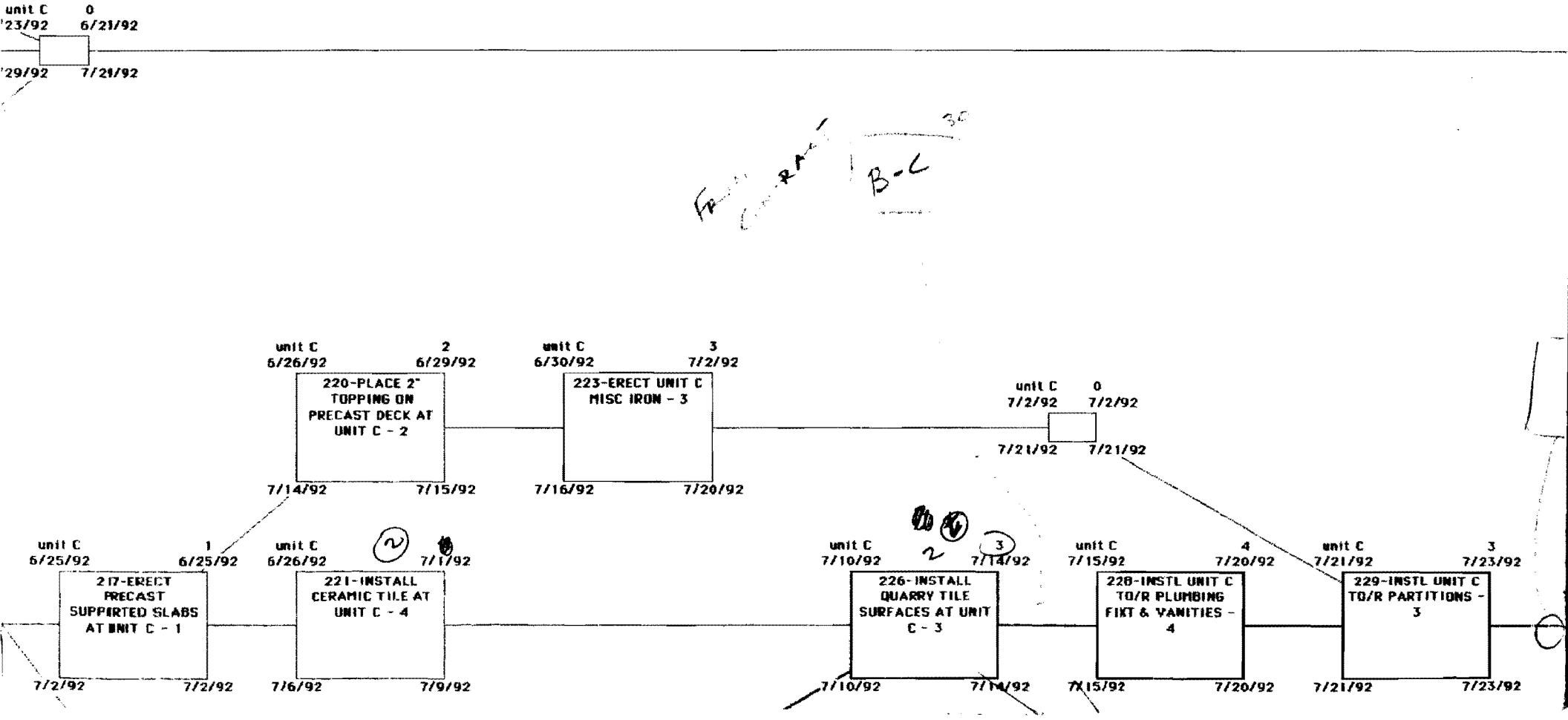
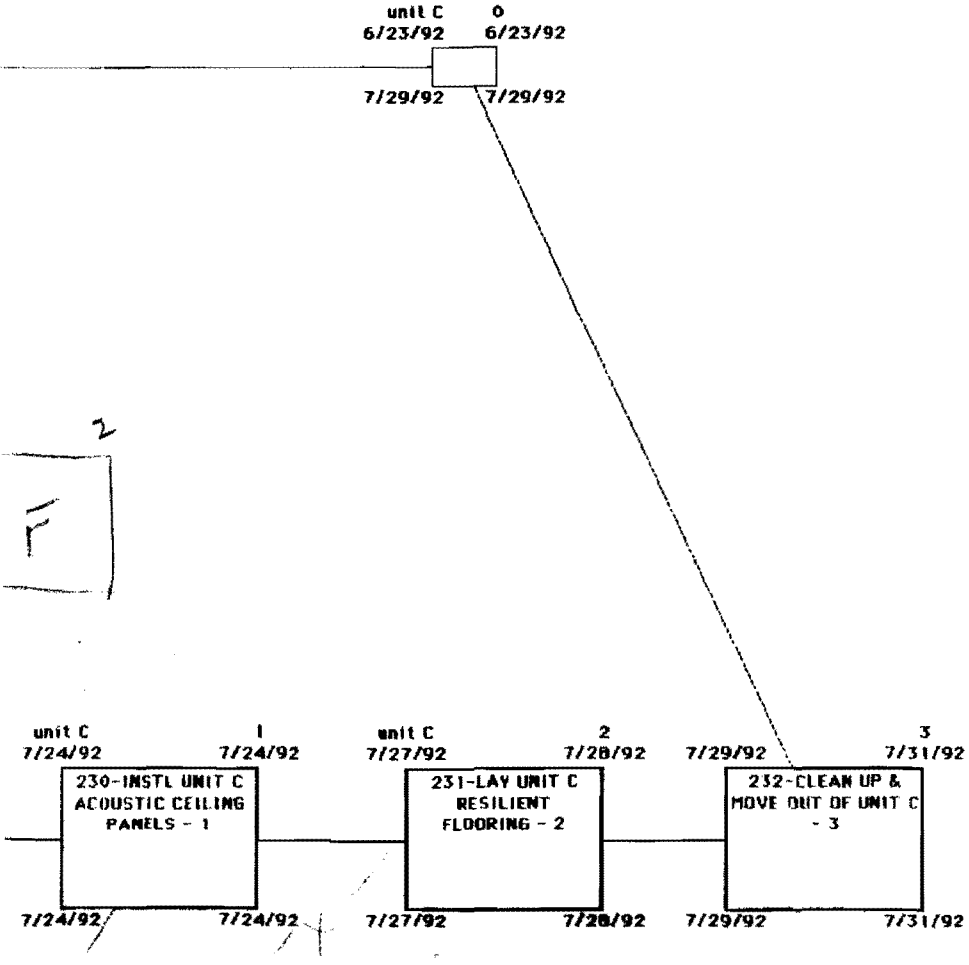
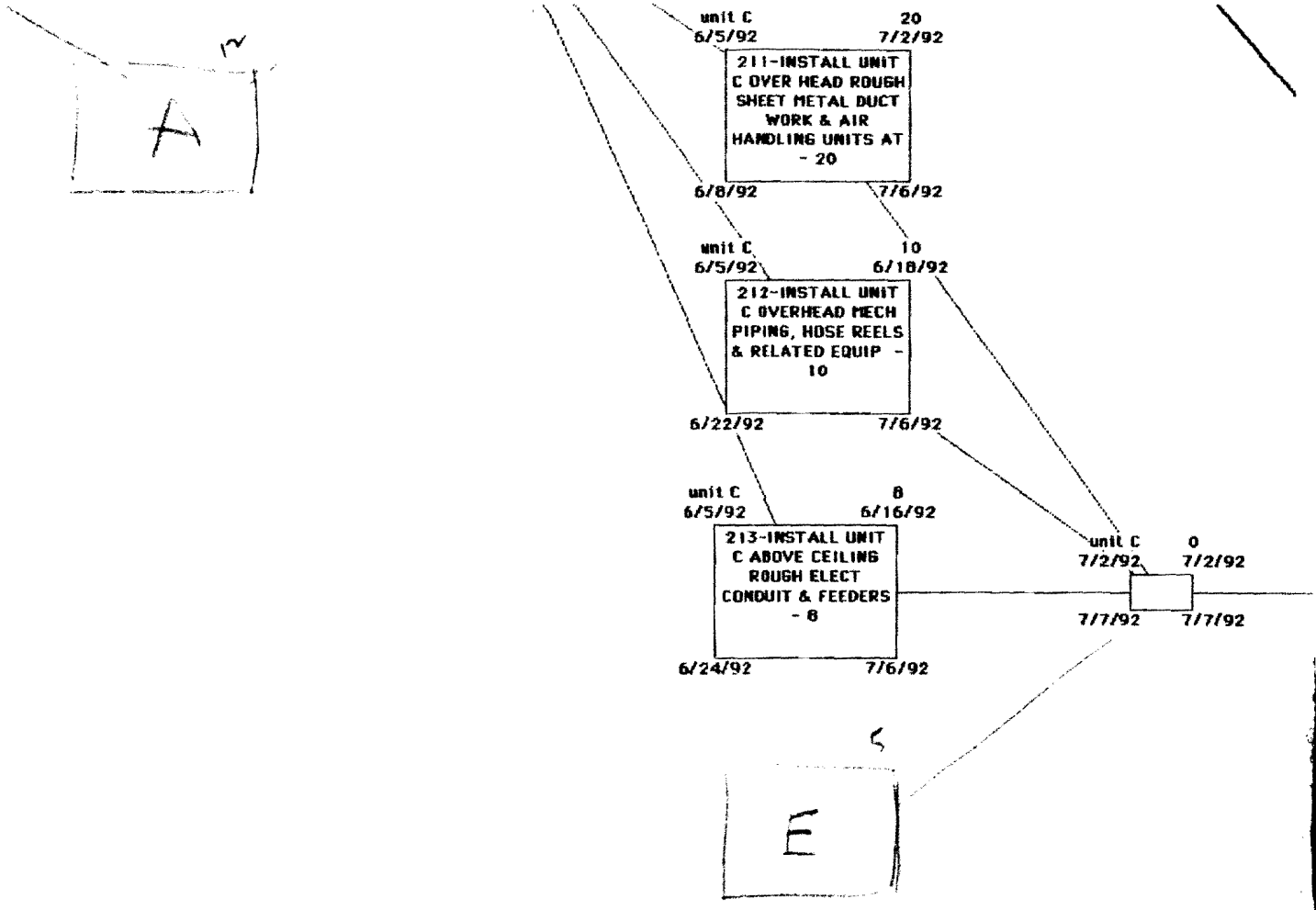
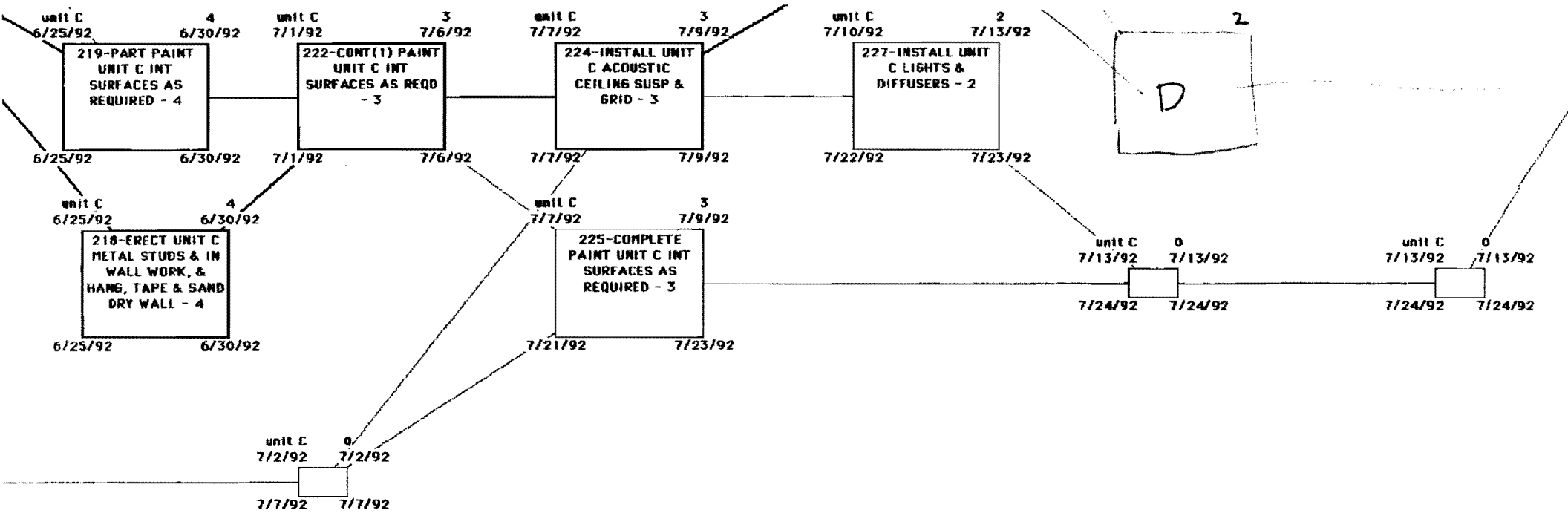
Sheet #B2


unit C 0
1/2/92 1/2/92
DETAIL, APPRV, FAB & DELIVER HOLLOW METAL FRAMES
1/2/92 1/2/92
A
unit C 0
1/2/92 1/2/92
DETAIL, APPRV, FAB & DELIVER HARDWARE
1/2/92 1/2/92
B
unit C 0
1/2/92 1/2/92
DETAIL, APPRV, FAB & DELIVER HOLLOW METAL DOORS
1/2/92 1/2/92
C
unit C 5
1/2/92 1/8/92
INSTALL UNIT C INTERIOR DOORS, TRIM, HARDWARE & [redacted] - 5
1/2/92 1/8/92
D
unit C 5
1/2/92 1/8/92
INSTALL UNIT C ABOVE CEILING ROUGH FIRE PROTECTION PIPING WORK - 5
1/2/92 1/8/92
E
unit C 3
1/2/92 1/6/92
PART INSTALL UNIT C SPRINKLER HEADS & RELATED ACOUSTIC PANELS - 3
1/2/92 1/6/92
F
unit C 5
6/8/92 6/12/92
206-INSTALL UNIT C CHAIN LINK FENCE - 5
7/22/92 7/28/92
unit C 0
6/5/92 6/5/92
207-INSTALL NEW ALUMINUM WINDOWS AT UNIT C - 2
7/29/92 7/29/92
unit C 5
6/1/92 6/5/92
204-LAY OUT BUILDING C & DEMOLISH ARCH MATERIAL & EQUIPMENT AS REQUIRED - 5
6/1/92 6/5/92
unit C 2
6/8/92 6/9/92
208-DEMOLISH & REMOVE EXISTING OVERHEAD DOORS AT UNIT C - 2
6/16/92 6/17/92
unit C 10
6/10/92 6/23/92
214-INSTALL UNIT C NEW OVERHEAD DOORS - 10
7/15/92 7/28/92
unit C 2
6/8/92 6/9/92
209-FORM, REINFORCE, POUR & STRIP CONCRETE WORK AT UNIT C - 2
6/12/92 6/15/92
unit C 5
6/10/92 6/16/92
215-CLOSE OPENINGS AT OLD UNIT C OVERHEAD DOORS - 5
6/18/92 6/24/92
unit C 0
5/1/92 5/1/92
201-T/R TO MAY 1, 1992
5/1/92 5/1/92
unit C 17
5/1/92 5/26/92
202-AWARD CONTRACT FOR UNIT C - 17
5/1/92 5/26/92
unit C 3
5/27/92 5/29/92
203-ABATE ASBESTOS AS REQUIRED - 3
5/27/92 5/29/92
unit C 4
6/1/92 6/4/92
205-COMPLETE MECHANICAL & ELECTRICAL DEMOLITION AS REQD - 4
6/2/92 6/5/92
unit C 6
6/8/92 6/15/92
210-TRENCH FOR UNIT C T/R UNDERGROUND, INSTL PIPING & PATCH CONCRETE - 6
6/8/92 6/15/92
unit C 7
6/16/92 6/24/92
216-ERECT INT MASONRY AT UNIT C - 7
6/16/92 6/24/92


unit C
'23/92
0
6/21/92
'29/92
7/21/92
B-C
unit C
6/26/92
2
6/29/92
220-PLACE 2" TOPPING ON PRECAST DECK AT UNIT C - 2
7/14/92
7/15/92
unit C
6/30/92
3
7/2/92
223-ERECT UNIT C MISC IRON - 3
7/16/92
7/20/92
unit C
7/2/92
0
7/2/92
7/21/92
7/21/92
unit C
6/25/92
1
6/25/92
217-ERECT PRECAST SUPPERTED SLABS AT UNIT C - 1
7/2/92
7/2/92
unit C
6/26/92
7/1/92
221-INSTALL CERAMIC TILE AT UNIT C - 4
7/6/92
7/9/92
unit C
7/10/92
2
3
7/14/92
226-INSTALL QUARRY TILE SURFACES AT UNIT C - 3
7/10/92
7/14/92
unit C
7/15/92
4
7/20/92
228-INSTL UNIT C TO/R PLUMBING FIXT & VANITIES - 4
7/15/92
7/20/92
unit C
7/21/92
3
7/23/92
229-INSTL UNIT C TO/R PARTITIONS - 3
7/21/92
7/23/92

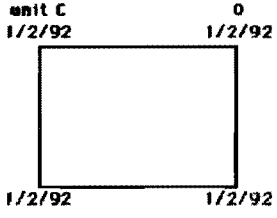

unit C
6/23/92
0
6/23/92
7/29/92
7/29/92
2
F
unit C
7/24/92
1
7/24/92
230-INSTL UNIT C ACOUSTIC CEILING PANELS - 1
7/24/92
7/24/92
unit C
7/27/92
2
7/28/92
231-LAY UNIT C RESILIENT FLOORING - 2
7/27/92
7/28/92
7/29/92
3
7/31/92
232-CLEAN UP & MOVE OUT OF UNIT C - 3
7/29/92
7/31/92


A
unit C
6/5/92
20
7/2/92
211-INSTALL UNIT C OVER HEAD ROUGH SHEET METAL DUCT WORK & AIR HANDLING UNITS AT - 20
6/8/92
7/6/92
unit C
6/5/92
10
6/18/92
212-INSTALL UNIT C OVERHEAD MECH PIPING, HOSE REELS & RELATED EQUIP - 10
6/22/92
7/6/92
unit C
6/5/92
8
6/16/92
213-INSTALL UNIT C ABOVE CEILING ROUGH ELECT CONDUIT & FEEDERS - 8
6/24/92
7/6/92
unit C
7/2/92
0
7/2/92
7/7/92
7/7/92
E


unit C
6/25/92
4
6/30/92
219-PART PAINT UNIT C INT SURFACES AS REQUIRED - 4
6/25/92
6/30/92
unit C
7/1/92
3
7/6/92
222-CONT(1) PAINT UNIT C INT SURFACES AS REQD - 3
7/1/92
7/6/92
unit C
7/7/92
3
7/9/92
224-INSTALL UNIT C ACOUSTIC CEILING SUSP & GRID - 3
7/7/92
7/9/92
unit C
7/10/92
2
7/13/92
227-INSTALL UNIT C LIGHTS & DIFFUSERS - 2
7/22/92
7/23/92
2
D
unit C
6/25/92
4
6/30/92
218-ERECT UNIT C METAL STUDS & IN WALL WORK, & HANG, TAPE & SAND DRY WALL - 4
6/25/92
6/30/92
unit C
7/7/92
3
7/9/92
225-COMPLETE PAINT UNIT C INT SURFACES AS REQUIRED - 3
7/21/92
7/23/92
unit C
7/13/92
0
7/13/92
7/24/92
7/24/92
unit C
7/13/92
0
7/13/92
7/24/92
7/24/92
unit C
7/2/92
0
7/2/92
7/7/92
7/7/92

Unit C

Location **Duration**
Early start **Early finish**



Late start **Late finish**

Activity Key

Reserved Activity Numbers

241	246
242	247
243	248
244	249
245	250

lan 201
han 232

Issue #1 & #2 - not issued
Issue # 3 - June 1, 1992
i3 sht #C1 southern lake
disk #313

Issue #3 Jun. 2, 92

Unit C Work

NETWORK MODEL FOR MOTT COMMUNITY COLLEGE
Southern Lakes Campus Project
Thompson Road
Fenton, Michigan

MacKenzie, Kauth and Klein
A Division of Ghafari Associates, Inc.
Architect of Record

THA Associates
Coordinating Architect

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General Contractor

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Sheet
#C1
C3