

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

November 16, 1991

Mr. Robert Baumeister
Chief Estimator
Witcher Construction Co.
3601 Minnesota Drive Suite 650
Minneapolis, Minnesota 55435

91:7

Dear Bob:

Re: Horizon Woodbury data runs & bar charts

Enclosed is the data run and bar charts for Horizon Woodbury, issue #5, dated November 4, 1991. Note that the data run is arrayed in ascending order of early starts and early finishes.

The bar chart is printed out in a single sheet format and can be assembled in a single chart or left as a series of individual sheets. The assembly order is with sheet #1 at the top and stacking vertically to sheet #7.

If there are any questions about the material please call.

Regards,

Ralph J. Stephenson P. E.

	activity	early start	early finish	late start	late finish
1	001-T/R TO NOVEMBER 5, 1991	11/5/91	11/5/91	11/5/91	11/5/91
2	014-HORIZON & WITCHER EXECUTE CONSTRUCTION CONTRACT - 5	11/5/91	11/11/91	11/5/91	11/11/91
3	053-HORIZON NEGOTIATE ? COMPLETION OF OFF SITE UTIL BY CITY - 10	11/5/91	11/18/91	11/5/91	11/18/91
4	038-NSP INSTALL OFF SITE ELECTRICAL SERVICE TO CENTER - 10	11/5/91	11/18/91	4/22/92	5/5/92
5	039-NSP INSTALL OFF SITE GAS SERVICE TO CENTER - 10	11/5/91	11/18/91	4/22/92	5/5/92
6	022-AWARD TESTING LAB CONTRACT - 1	11/12/91	11/12/91	11/12/91	11/12/91
7	023-AWARD GRADING CONTRACT - 1	11/12/91	11/12/91	11/12/91	11/12/91
8	024-AWARD SITE UTILITY CONTRACT - 1	11/12/91	11/12/91	11/12/91	11/12/91
9	026-AWARD ELECTRICAL DESIGN BUILD CONTRACT - 1	11/12/91	11/12/91	5/7/92	5/7/92
10	027-AWARD PAVING CONTRACT - 2	11/12/91	11/13/91	5/7/92	5/8/92
11	028-AWARD SITE WORK CONCRETE CONTRACT - 2	11/12/91	11/13/91	5/7/92	5/8/92
12	037-STRIP SITE & GRADE AT BUILDING AREA SITE - 9	11/13/91	11/25/91	11/13/91	11/25/91
13	062-CITY OF WOODBURY INSTALL SANITARY SEWER & WATER SERVICE TO SITE - 75	11/19/91	3/5/92	11/19/91	3/5/92
14	040-COMPLETE STRIP & GRADE SITE & STOCKPILE TOPSOIL & REMOVE EXCESS - 20	11/26/91	12/24/91	11/26/91	12/24/91
15	E T/R TO SET LATE FINISH OF WINTER SITE WORK	12/24/91	12/24/91	12/24/91	12/24/91
16	301-PART EXCAV, FORM, REINF & POUR MODULE 3 WALL & COL FOOTINGS (2, 11) - 3	12/26/91	12/30/91	1/23/92	1/27/92
17	302-PART ERECT MODULE 3 MASONRY FOUNDATION WALLS TO GRADE (12) - 3	12/31/91	1/3/92	1/28/92	1/30/92
18	303-CONT(1) EXCAV, FORM, REINF & POUR MODULE 3 WALL & COL FOOTINGS (2, 11) - 3	12/31/91	1/3/92	1/31/92	2/4/92
19	304-PART FORM, REINFORCE, SET ANCHOR BOLTS & POUR MODULE 3 INT & EXT COL PIERS (2) - 3	12/31/91	1/3/92	2/6/92	2/10/92
20	308-PART BACKFILL, SET INSULATION & COMPACT MODULE 3 EXT & INT FOUNDATION WALLS (11, 2) - 2	1/6/92	1/7/92	2/12/92	2/13/92
21	306-CONT(1) ERECT MODULE 3 MASONRY FOUNDATION WALLS TO GRADE (12) - 3	1/6/92	1/8/92	2/5/92	2/7/92

Listed in early start, early finish sequence

	activity	early start	early finish	late start	late finish
2 2	307-COMPLETE EXCAV, FORM, REINF & POUR MODULE 3 WALL & COL FOOTINGS (2, 11) - 3	1/6/92	1/8/92	2/5/92	2/7/92
2 3	311-COMP FORM, REINFORCE, SET ANCHOR BOLTS & POUR MODULE 3 INT & EXT COL PIERS (2) - 3	1/6/92	1/8/92	2/11/92	2/13/92
2 4	305-PART ERECT MODULE 3 HOLLOW METAL FRAMES & MASONRY BLOCK WALLS TO BEARING LEVEL (2, 12) - 6	1/6/92	1/13/92	1/31/92	2/7/92
2 5	310-COMP ERECT MODULE 3 MASONRY FOUNDATION WALLS TO GRADE (12) - 3	1/9/92	1/13/92	2/10/92	2/12/92
2 6	313-COMP BACKFILL, SET INSULATION & COMPACT MODULE 3 EXT & INT FOUND WALLS (11, 2) - 2	1/14/92	1/15/92	2/14/92	2/17/92
2 7	309-CONT(1) ERECT MODULE 3 HOLLOW METAL FRAMES & MASONRY BLOCK WALLS TO BEARING LEVEL (2, 12) - 3	1/14/92	1/16/92	2/10/92	2/12/92
2 8	312-COMP ERECT MODULE 3 HOLLOW METAL FRAMES & MASONRY BLOCK WALLS TO BEARING LEVEL (2, 12) - 3	1/17/92	1/21/92	2/13/92	2/17/92
2 9	316-PART ERECT MODULE 3 STRUCTURAL STEEL & JOISTS (10) - 3	2/18/92	2/20/92	2/18/92	2/20/92
3 0	317-PART PLUMB & DETAIL MODULE 3 STRUCTURAL STEEL & JOISTS (10) - 3	2/21/92	2/25/92	2/21/92	2/25/92
3 1	318-COMP ERECT MODULE 3 STRUCTURAL STEEL & JOISTS (10) - 3	2/21/92	2/25/92	2/21/92	2/25/92
3 2	320-COMP PLUMB & DETAIL MODULE 3 STRUCTURAL STEEL & JOISTS (10) - 3	2/26/92	2/28/92	2/26/92	2/28/92
3 3	321-PART ERECT MODULE 3 METAL ROOF DECK (10) - 3	2/26/92	2/28/92	2/26/92	2/28/92
3 4	321-PART INSTALL MODULE 3 ROOF CURBS, BLOCKING, SUMP PANS & NAILERS (5, 2) - 3	3/2/92	3/4/92	3/2/92	3/4/92
3 5	322-COMP ERECT MODULE 3 METAL ROOF DECK (10) - 3	3/2/92	3/4/92	3/2/92	3/4/92
3 6	323-PART LAY MODULE 3 ROOF INSULATION & ROOFING (23) - 2	3/5/92	3/6/92	3/5/92	3/6/92
3 7	324-COMP INSTALL MODULE 3 ROOF CURBS, BLOCKING, SUMP PANS & NAILERS (5, 2) - 2	3/5/92	3/6/92	3/5/92	3/6/92
3 8	325-PART INSTALL MODULE 3 MANSARD FRAMING & PLYWOOD BACKING (22, 2) - 2	3/9/92	3/10/92	3/9/92	3/10/92
3 9	326-CONT(1) LAY MODULE 3 ROOF INSULATION & ROOFING (23) - 2	3/9/92	3/10/92	3/9/92	3/10/92
4 0	331-SET MODULE 3 ROOF TOP UNITS (5) - 1	3/11/92	3/11/92	3/11/92	3/11/92
4 1	329-COMP INSTALL MODULE 3 MANSARD FRAMING & PLYWOOD BACKING (22, 2) - 3	3/11/92	3/13/92	3/11/92	3/13/92
4 2	328-PART INSTALL PLYWOOD SOFFIT & SIGN BAND BACKING AT MODULE 3 (2) - 8	3/11/92	3/20/92	4/13/92	4/22/92

Listed in early start, early finish sequence

	activity	early start	early finish	late start	late finish
4 3	327-PART INSTALL MODULE 3 MANSARD PLYWOOD SUBSTRATE & STANDING SEAM ROOF (24) - 10	3/11/92	3/24/92	4/21/92	5/4/92
4 4	351-PART INSTALL MODULE 3 ABOVE FLOOR SHEET METAL DUCTWORK AT STORE & TO/R AREAS (5) - 3	3/12/92	3/16/92	4/2/92	4/6/92
4 5	352-PART INSTALL MODULE 3 ABOVE FLOOR MECH & SPRINKLER PIPING AT STORE & TO/R AREAS (5) - 3	3/12/92	3/16/92	4/2/92	4/6/92
4 6	334-COMP LAY MODULE 3 ROOF INSULATION & ROOFING (23) - 2	3/16/92	3/17/92	3/16/92	3/17/92
4 7	354-COMP INSTALL MODULE 3 ABOVE FLOOR SHEET METAL DUCTWORK AT STORE & TO/R AREAS (5) - 3	3/17/92	3/19/92	4/9/92	4/13/92
4 8	356-COMP INSTALL MODULE 3 ABOVE FLOOR MECH & SPRINKLER PIPING AT STORE & TO/R AREAS (5) - 3	3/17/92	3/19/92	4/9/92	4/13/92
4 9	355-PART INSTL MODULE 3 MTL STUDS & IN WLL WK FOR DEMISING WLLS & TOILET RM WLLS (22) - 5	3/17/92	3/23/92	4/7/92	4/13/92
5 0	344-ERECT MODULE 3 TEMP CLOSURE & THAW SUBBASE FOR SLAB ON GRADE - 5	3/18/92	3/24/92	3/18/92	3/24/92
5 1	333-COMP INSTALL PLYWOOD SOFFIT & SIGN BAND BACKING AT MODULE 3 (2) - 8	3/23/92	4/1/92	4/23/92	5/4/92
5 2	359-COMP INSTL MODULE 3 MTL STUDS & IN WLL WK FOR DEMISING WLLS & TOILET RM WLLS (22) - 5	3/24/92	3/30/92	4/14/92	4/20/92
5 3	308-EXCAV, INSTL, TEST & BACKFILL MODULE 3 UNDERGROUND UTILITIES (17, 7) - 2	3/25/92	3/26/92	3/25/92	3/26/92
5 4	311-PART FILL, FINE GRADE & SET IN FLOOR WORK FOR MODULE 3 SLAB ON GRADE (2) - 2	3/25/92	3/26/92	3/25/92	3/26/92
5 5	332-COMP INSTALL MODULE 3 MANSARD PLYWOOD SUBSTRATE & STANDING SEAM ROOF (24) - 10	3/25/92	4/7/92	5/5/92	5/18/92
5 6	313-PART POUR MODULE 3 SLAB ON GRADE (2) - 1	3/27/92	3/27/92	3/27/92	3/27/92
5 7	314-COMP FILL, FINE GRADE & SET IN FLOOR WORK FOR MODULE 3 SLAB ON GRADE (2) - 1	3/27/92	3/27/92	3/27/92	3/27/92
5 8	315-COMP POUR MODULE 3 SLAB ON GRADE (2) - 1	3/30/92	3/30/92	3/30/92	3/30/92
5 9	338-PART INSTALL MODULE 3 STORE FRONT & ENTRY ALUMINUM FRAMING (22, 28) - 3	3/30/92	4/1/92	3/30/92	4/1/92
6 0	T/R TO SPRING WEATHER - APRIL 1, 1992	4/1/92	4/1/92	4/1/92	4/1/92
6 1	339-PART GLAZE MODULE 3 STORE FRONTS & ENTRIES (28) - 2	4/2/92	4/3/92	4/2/92	4/3/92
6 2	340-COMP INSTALL MODULE 3 STORE FRONT & ENTRY ALUMINUM FRAMING (22, 28) - 2	4/2/92	4/3/92	4/2/92	4/3/92
6 3	341-COMP GLAZE MODULE 3 STORE FRONTS & ENTRIES (28) - 2	4/6/92	4/7/92	4/6/92	4/7/92

Listed in early start, early finish sequence

	activity	early start	early finish	late start	late finish
6 4	T/R TO SPRING WEATHER - APRIL 13, 1992	4/13/92	4/13/92	4/13/92	4/13/92
6 5	358-PART HANG MODULE 3 GYP BD AT DEMISING PARTITIONS & TO/R AREAS (22) - 4	4/14/92	4/17/92	4/14/92	4/17/92
6 6	T/R TO SPRING & RESUMPTION OF SITE WORK - 04/15/92	4/15/92	4/15/92	4/15/92	4/15/92
6 7	054-PART EXCAVATE, INSTALL, TEST & BACKFILL SITE PHONE & TV CABLE CONDUIT - 3	4/15/92	4/17/92	5/6/92	5/8/92
6 8	055-PART EXCAVATE, INSTALL, TEST & BACKFILL SITE ELECTRICAL CONDUIT - 3	4/15/92	4/17/92	5/6/92	5/8/92
6 9	056-PART EXCAVATE, INSTALL, TEST & BACKFILL SITE GAS PIPING - 3	4/15/92	4/17/92	5/6/92	5/8/92
7 0	057-PART EXCAVATE, INSTALL, TEST & BACKFILL SITE SANITARY SEWERS - 5	4/15/92	4/21/92	4/29/92	5/5/92
7 1	061-INSTALL LIGHT POLE BASES & LIGHT POLE ANCHOR BOLTS - 5	4/15/92	4/21/92	5/8/92	5/14/92
7 2	059-PART EXCAVATE, INSTALL, TEST & BACKFILL SITE STORM SEWERS - 8	4/15/92	4/24/92	4/21/92	4/30/92
7 3	060-MASS EXCAVATE & GRADE FOR RETENTION BASIN - 8	4/15/92	4/24/92	5/12/92	5/21/92
7 4	058-PART EXCAVATE, INSTALL, TEST & BACKFILL SITE WATER LINES - 10	4/15/92	4/28/92	4/15/92	4/28/92
7 5	065-COMP EXCAVATE, INSTALL, TEST & BACKFILL SITE PHONE & TV CABLE CONDUIT - 2	4/20/92	4/21/92	5/11/92	5/12/92
7 6	066-COMP EXCAVATE, INSTALL, TEST & BACKFILL SITE ELECTRICAL CONDUIT - 2	4/20/92	4/21/92	5/11/92	5/12/92
7 7	067-COMP EXCAVATE, INSTALL, TEST & BACKFILL SITE GAS PIPING - 2	4/20/92	4/21/92	5/11/92	5/12/92
7 8	360-COMP HANG MODULE 3 GYP BD AT DEMISING PARTITIONS & TO/R AREAS (22) - 3	4/20/92	4/22/92	4/21/92	4/23/92
7 9	361-PART TAPE & SAND MODULE 3 GYP BOARD SURFACES (22) - 4	4/20/92	4/23/92	4/20/92	4/23/92
8 0	068-COMP EXCAVATE, INSTALL, TEST & BACKFILL SITE SANITARY SEWERS - 5	4/22/92	4/28/92	5/6/92	5/12/92
8 1	064-EXCAV, INSTL & BACKFILL UNDERGROUND LIGHTING CONDUIT - 5	4/22/92	4/28/92	5/15/92	5/21/92
8 2	T/R TO SPRING WEATHER - APRIL 23, 1992	4/23/92	4/23/92	4/23/92	4/23/92
8 3	330 PART INSTALL MODULE 3 FACE BRICK, STONE & DRYVIT VENEER (12) - 8	4/23/92	5/4/92	4/23/92	5/4/92
8 4	362-PART PAINT MODULE 3 TOILET ROOM SURFACES AS REQD (25) - 1	4/24/92	4/24/92	5/4/92	5/4/92

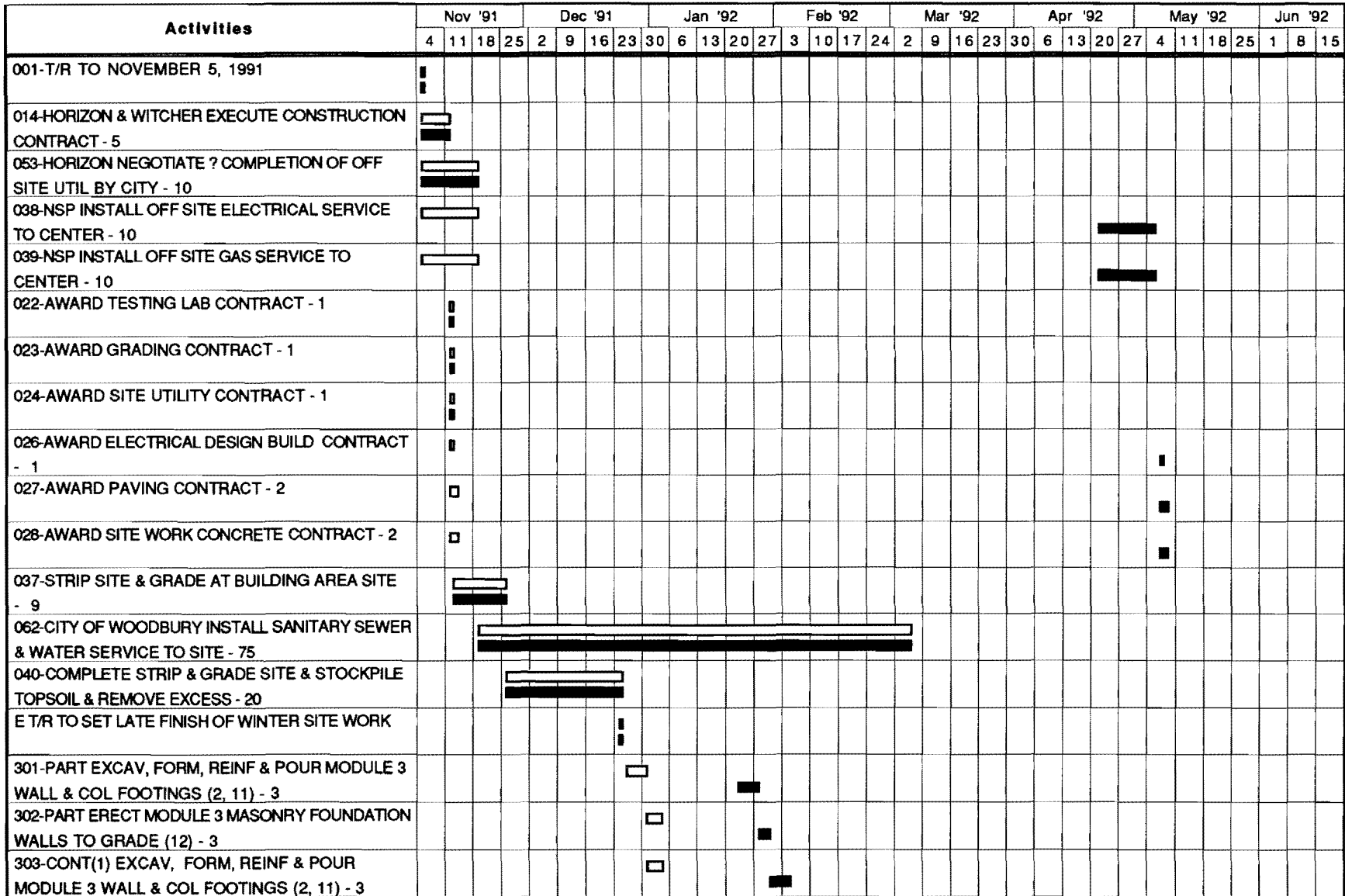
Listed in early start, early finish sequence

	activity	early start	early finish	late start	late finish
85	363-COMP TAPE & SAND MODULE 3 GYP BOARD SURFACES (22) - 4	4/24/92	4/29/92	4/24/92	4/29/92
86	364-PART INSTALL MODULE 3 SALES AREA ACOUSTIC CEILING SUSP & GRID (27) - 4	4/24/92	4/29/92	4/24/92	4/29/92
87	365-PART LAY RESILIENT FLOORING AT MODULE 3 TOILET ROOMS (26) - 1	4/27/92	4/27/92	5/5/92	5/5/92
88	070-COMP EXCAVATE, INSTALL, TEST & BACKFILL SITE STORM SEWERS - 8	4/27/92	5/6/92	5/1/92	5/12/92
89	369-PART SET MODULE 3 TOILET ROOM PLUMBING FIXTURES (5) - 2	4/28/92	4/29/92	5/6/92	5/7/92
90	063-PART INSTALL CONCRETE CURBS & GUTTERS - 2	4/29/92	4/30/92	5/11/92	5/12/92
91	071-INSTALL SITE LIGHT POLES & LAMPS - 3	4/29/92	5/1/92	6/9/92	6/11/92
92	069- COMP EXCAVATE, INSTALL, TEST & BACKFILL SITE WATER LINES - 10	4/29/92	5/12/92	4/29/92	5/12/92
93	366-COMPLETE PAINT MODULE 3 TOILET ROOM SURFACES AS REQD (25) - 1	4/30/92	4/30/92	5/6/92	5/6/92
94	372-PART INSTALL MODULE 3 TOILET ROOM DOORS, HARDWARE, TRIM, MIRRORS & ACCESSORIES (2) - 1	4/30/92	4/30/92	5/11/92	5/11/92
95	368-PART INSTALL MODULE 3 ACOUST CLG LIGHT FIXT, SPRINKLER HDS, GRILLS & DIFF (5, 7) - 3	4/30/92	5/4/92	5/1/92	5/5/92
96	367-COMP INSTALL MODULE 3 SALES AREA ACOUSTIC CEILING SUSP & GRID (27) - 4	4/30/92	5/5/92	4/30/92	5/5/92
97	370-COMP LAY RESILIENT FLOORING AT MODULE 3 TOILET ROOMS (26) - 1	5/1/92	5/1/92	5/7/92	5/7/92
98	073-PART PLACE & COMPACT GRAVEL SUBBASE - 5	5/1/92	5/7/92	5/15/92	5/21/92
99	373-COMP SET MODULE 3 TOILET ROOM PLUMBING FIXTURES (5) - 2	5/4/92	5/5/92	5/8/92	5/11/92
100	335-COMP INSTALL MODULE 3 FACE BRICK, STONE & DRYVIT VENEER (12) - 7	5/5/92	5/13/92	5/5/92	5/13/92
101	375-COMP INSTALL MODULE 3 TOILET ROOM DOORS, HARDWARE, TRIM, MIRRORS & ACCESSORIES (2) - 1	5/6/92	5/6/92	5/12/92	5/12/92
102	371-COMP INSTALL MODULE 3 ACOUST CLG LIGHT FIXT, SPRINKLER HDS, GRILLS & DIFF (5, 7) - 3	5/6/92	5/8/92	5/6/92	5/8/92
103	376-INSTALL MODULE 3 TOILET ROOM FANS & LIGHT FIXTURES (7) - 1	5/7/92	5/7/92	5/13/92	5/13/92
104	074-COMP INSTALL CONCRETE CURBS & GUTTERS - 2	5/13/92	5/14/92	5/13/92	5/14/92
105	377-CLEAN UP MODULE 3 & MOVE OUT (2) - 2	5/14/92	5/14/92	5/14/92	5/14/92

Listed in early start, early finish sequence

	activity	early start	early finish	late start	late finish
1 0 6	337-PAINT & CALK MODULE 3 EXTERIOR AS REQUIRED (25, 29) - 3	5/14/92	5/18/92	5/14/92	5/18/92
1 0 7	044-CONSTRUCT CONCRETE SIDEWALKS & TRASH AREA BASE SLAB - 5	5/15/92	5/21/92	5/15/92	5/21/92
1 0 8	342-CLEAN MODULE 3 EXTERIOR (2) - 1	5/19/92	5/19/92	5/19/92	5/19/92
1 0 9	075-COMP PLACE & COMPACT GRAVEL SUBBASE - 5	5/22/92	5/29/92	5/22/92	5/29/92
1 1 0	076-LAY BLACKTOP PAVING LEVELING COURSE - 2	6/1/92	6/2/92	6/1/92	6/2/92
1 1 1	077-LAY BLACKTOP PAVING WEARING COURSE - 1	6/3/92	6/3/92	6/5/92	6/5/92
1 1 2	078-INSTALL SITE SIGNAGE - 2	6/3/92	6/4/92	6/3/92	6/4/92
1 1 3	079-INSTALL FLAG POLES - 7	6/3/92	6/11/92	6/3/92	6/11/92
1 1 4	081-STRIPE PARKING AREAS - 1	6/4/92	6/4/92	6/11/92	6/11/92
1 1 5	080-INSTALL TRASH ENCLOSURE - 4	6/4/92	6/9/92	6/8/92	6/11/92
1 1 6	084-CLEAN UP & MOVE OFF SITE - 2	6/12/92	6/15/92	6/12/92	6/15/92

Listed in early start, early finish sequence



Saturday, November 16, 91

- Open bars show early starts & early finishes
- Solid bars show late starts & late finishes

Activities	Nov '91				Dec '91				Jan '92				Feb '92				Mar '92				Apr '92				May '92				Jun '92			
	4	11	18	25	2	9	16	23	30	6	13	20	27	3	10	17	24	2	9	16	23	30	6	13	20	27	4	11	18	25	1	8
304-PART FORM, REINFORCE, SET ANCHOR BOLTS & POUR MODULE 3 INT & EXT COL PIERS (2) - 3								□					■																			
308-PART BACKFILL, SET INSULATION & COMPACT MODULE 3 EXT & INT FOUNDATION WALLS (11, 2)									□				■																			
306-CONT(1) ERECT MODULE 3 MASONRY FOUNDATION WALLS TO GRADE (12) - 3									□				■																			
307-COMPLETE EXCAV, FORM, REINF & POUR MODULE 3 WALL & COL FOOTINGS (2, 11) - 3									□				■																			
311-COMP FORM, REINFORCE, SET ANCHOR BOLTS & POUR MODULE 3 INT & EXT COL PIERS (2) - 3									□				■																			
305-PART ERECT MODULE 3 HOLLOW METAL FRAMES & MASONRY BLOCK WALLS TO BEARING									□				■																			
310-COMP ERECT MODULE 3 MASONRY FOUNDATION WALLS TO GRADE (12) - 3									□				■																			
313-COMP BACKFILL, SET INSULATION & COMPACT MODULE 3 EXT & INT FOUND WALLS (11, 2) - 2										□			■																			
309-CONT(1) ERECT MODULE 3 HOLLOW METAL FRAMES & MASONRY BLOCK WALLS TO BEARING										□			■																			
312-COMP ERECT MODULE 3 HOLLOW METAL FRAMES & MASONRY BLOCK WALLS TO BEARING										□			■																			
316-PART ERECT MODULE 3 STRUCTURAL STEEL & JOISTS (10) - 3													■																			
317-PART PLUMB & DETAIL MODULE 3 STRUCTURAL STEEL & JOISTS (10) - 3													■																			
318-COMP ERECT MODULE 3 STRUCTURAL STEEL & JOISTS (10) - 3													■																			
320-COMP PLUMB & DETAIL MODULE 3 STRUCTURAL STEEL & JOISTS (10) - 3													■																			
321-PART ERECT MODULE 3 METAL ROOF DECK (10) - 3													■																			
321-PART INSTALL MODULE 3 ROOF CURBS, BLOCKING, SUMP PANS & NAILERS (5, 2) - 3													■																			
322-COMP ERECT MODULE 3 METAL ROOF DECK (10) - 3													■																			
323-PART LAY MODULE 3 ROOF INSULATION & ROOFING (23) - 2													■																			

Saturday, November 16, 91

- Open bars show early starts & early finishes
- Solid bars show late starts & late finishes

Activities	Nov '91				Dec '91				Jan '92				Feb '92				Mar '92				Apr '92				May '92				Jun '92						
	4	11	18	25	2	9	16	23	30	6	13	20	27	3	10	17	24	2	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15		
324-COMP INSTALL MODULE 3 ROOF CURBS, BLOCKING, SUMP PANS & NAILERS (5, 2) - 2																			□																
325-PART INSTALL MODULE 3 MANSARD FRAMING & PLYWOOD BACKING (22, 2) - 2																			□																
326-CONT(1) LAY MODULE 3 ROOF INSULATION & ROOFING (23) - 2																			□																
331-SET MODULE 3 ROOF TOP UNITS (5) - 1																			□																
329-COMP INSTALL MODULE 3 MANSARD FRAMING & PLYWOOD BACKING (22, 2) - 3																			□																
328-PART INSTALL PLYWOOD SOFFIT & SIGN BAND BACKING AT MODULE 3 (2) - 8																			□																
327-PART INSTALL MODULE 3 MANSARD PLYWOOD SUB STRATE & STANDING SEAM ROOF (24) - 10																			□																
351-PART INSTALL MODULE 3 ABOVE FLOOR SHEET METAL DUCTWORK AT STORE & TO/R AREAS (5) - 3																			□																
352-PART INSTALL MODULE 3 ABOVE FLOOR MECH & SPRINKLER PIPING AT STORE & TO/R AREAS (5)																			□																
334-COMP LAY MODULE 3 ROOF INSULATION & ROOFING (23) - 2																			□																
354-COMP INSTALL MODULE 3 ABOVE FLOOR SHEET METAL DUCTWORK AT STORE & TO/R AREAS (5) - 3																			□																
356-COMP INSTALL MODULE 3 ABOVE FLOOR MECH & SPRINKLER PIPING AT STORE & TO/R AREAS (5)																			□																
355-PART INSTL MODULE 3 MTL STUDS & IN WLL WK FOR DEMISING WLLS & TOILET RM WLLS (22)																			□																
344-ERECT MODULE 3 TEMP CLOSURE & THAW SUBBASE FOR SLAB ON GRADE - 5																			□																
333-COMP INSTALL PLYWOOD SOFFIT & SIGN BAND BACKING AT MODULE 3 (2) - 8																			□																
359-COMP INSTL MODULE 3 MTL STUDS & IN WLL WK FOR DEMISING WLLS & TOILET RM WLLS (22)																			□																
308-EXCAV, INSTL, TEST & BACKFILL MODULE 3 UNDERGROUND UTILITIES (17, 7) - 2																			□																
311-PART FILL, FINE GRADE & SET IN FLOOR WORK FOR MODULE 3 SLAB ON GRADE (2) - 2																			□																

Saturday, November 16, 91

- Open bars show early starts & early finishes
- Solid bars show late starts & late finishes

Activities	Nov '91				Dec '91				Jan '92				Feb '92				Mar '92				Apr '92				May '92				Jun '92									
	4	11	18	25	2	9	16	23	30	6	13	20	27	3	10	17	24	2	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15					
332-COMP INSTALL MODULE 3 MANSARD PLYWOOD SUB STRATE & STANDING SEAM ROOF (24) - 10																																						
313-PART POUR MODULE 3 SLAB ON GRADE (2) - 1																																						
314-COMP FILL, FINE GRADE & SET IN FLOOR WORK FOR MODULE 3 SLAB ON GRADE (2) - 1																																						
315-COMP POUR MODULE 3 SLAB ON GRADE (2) - 1																																						
338-PART INSTALL MODULE 3 STORE FRONT & ENTRY ALUMINUM FRAMING (22, 28) - 3																																						
T/R TO SPRING WEATHER - APRIL 1, 1992																																						
339-PART GLAZE MODULE 3 STORE FRONTS & ENTRIES (28) - 2																																						
340-COMP INSTALL MODULE 3 STORE FRONT & ENTRY ALUMINUM FRAMING (22, 28) - 2																																						
341-COMP GLAZE MODULE 3 STORE FRONTS & ENTRIES (28) - 2																																						
T/R TO SPRING WEATHER - APRIL 13, 1992																																						
358-PART HANG MODULE 3 GYP BD AT DEMISING PARTITIONS & TO/R AREAS (22) - 4																																						
T/R TO SPRING & RESUMPTION OF SITE WORK - 04/15/92																																						
054-PART EXCAVATE, INSTALL, TEST & BACKFILL SITE PHONE & TV CABLE CONDUIT - 3																																						
055-PART EXCAVATE, INSTALL, TEST & BACKFILL SITE ELECTRICAL CONDUIT - 3																																						
056-PART EXCAVATE, INSTALL, TEST & BACKFILL SITE GAS PIPING - 3																																						
057-PART EXCAVATE, INSTALL, TEST & BACKFILL SITE SANITARY SEWERS - 5																																						
061-INSTALL LIGHT POLE BASES & LIGHT POLE ANCHOR BOLTS - 5																																						
059-PART EXCAVATE, INSTALL, TEST & BACKFILL SITE STORM SEWERS - 8																																						

Saturday, November 16, 91

- Open bars show early starts & early finishes
- Solid bars show late starts & late finishes

Activities	Nov '91				Dec '91				Jan '92				Feb '92				Mar '92				Apr '92				May '92				Jun '92								
	4	11	18	25	2	9	16	23	30	6	13	20	27	3	10	17	24	2	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15				
	071-INSTALL SITE LIGHT POLES & LAMPS - 3																										□										
069- COMP EXCAVATE, INSTALL, TEST & BACKFILL SITE WATER LINES - 10																											▨										
366-COMPLETE PAINT MODULE 3 TOILET ROOM SURFACES AS REQD (25) - 1																											■										
372-PART INSTALL MODULE 3 TOILET ROOM DOORS, HARDWARE, TRIM, MIRRORS &																											■										
368-PART INSTALL MODULE 3 ACOUST CLG LIGHT FIXT, SPRINKLER HDS, GRILLS & DIFF (5, 7) - 3																											□										
367-COMP INSTALL MODULE 3 SALES AREA ACOUSTIC CEILING SUSP & GRID (27) - 4																											▨										
370-COMP LAY RESILIENT FLOORING AT MODULE 3 TOILET ROOMS (26) - 1																											□										
073-PART PLACE & COMPACT GRAVEL SUBBASE - 5																											▨										
373-COMP SET MODULE 3 TOILET ROOM PLUMBING FIXTURES (5) - 2																											□										
335-COMP INSTALL MODULE 3 FACE BRICK, STONE & DRYVIT VENEER (12) - 7																											▨										
375-COMP INSTALL MODULE 3 TOILET ROOM DOORS, HARDWARE, TRIM, MIRRORS &																											■										
371-COMP INSTALL MODULE 3 ACOUST CLG LIGHT FIXT, SPRINKLER HDS, GRILLS & DIFF (5, 7) - 3																											□										
376-INSTALL MODULE 3 TOILET ROOM FANS & LIGHT FIXTURES (7) - 1																											■										
074-COMP INSTALL CONCRETE CURBS & GUTTERS - 2																											■										
377-CLEAN UP MODULE 3 & MOVE OUT (2) - 2																											▨										
337-PAINT & CALK MODULE 3 EXTERIOR AS REQUIRED (25, 29) - 3																											▨										
044-CONSTRUCT CONCRETE SIDEWALKS & TRASH AREA BASE SLAB - 5																											▨										
342-CLEAN MODULE 3 EXTERIOR (2) - 1																											▨										

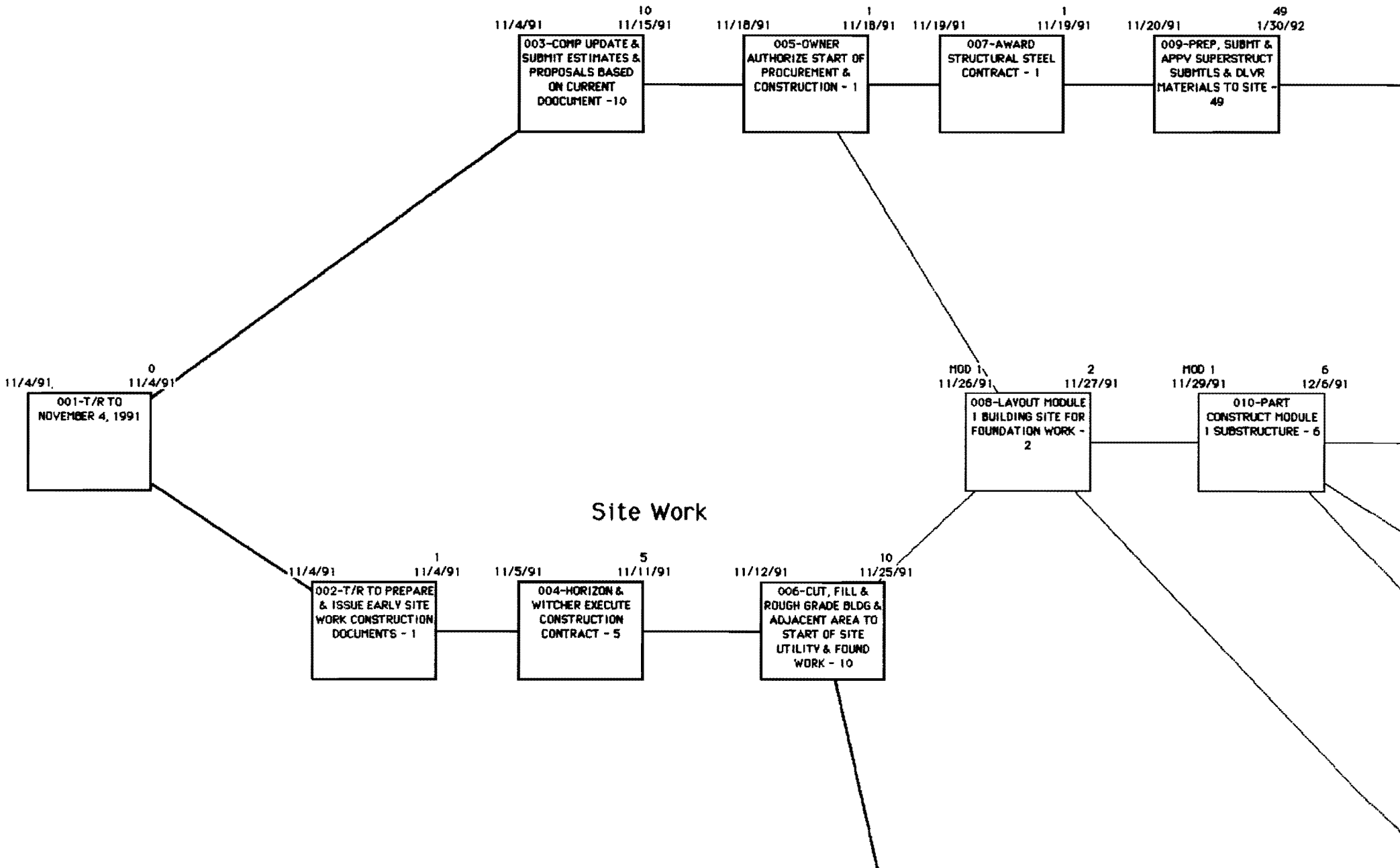
Saturday, November 16, 91

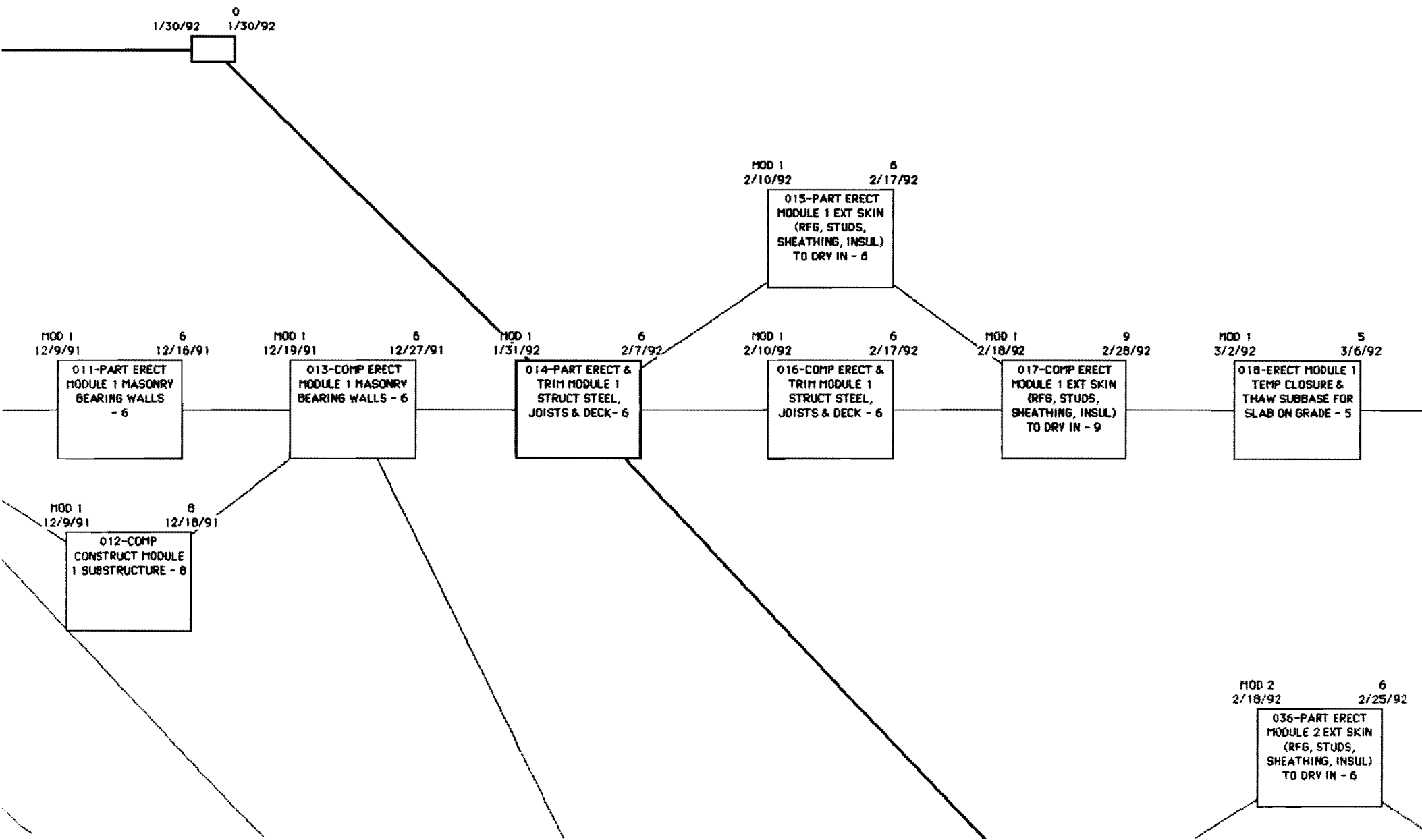
- Open bars show early starts & early finishes
- Solid bars show late starts & late finishes

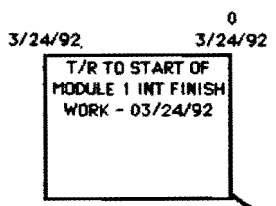
Note

This network model is based on a 5 working day week, 8 hours per day with 6 holidays per year assumed non working days.

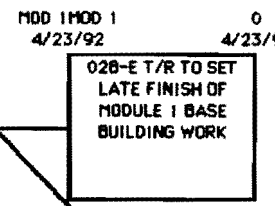
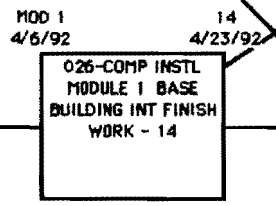
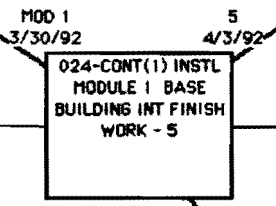
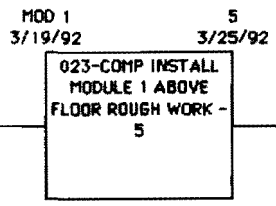
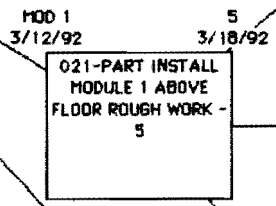
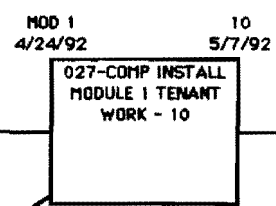
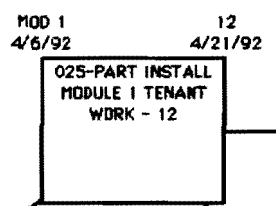
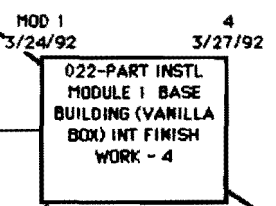
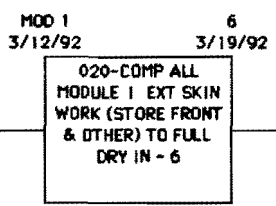
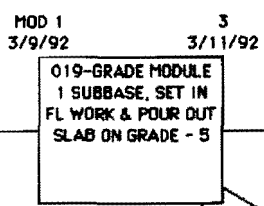
Structural Steel







MODULE #1 WORK



MODULE #2 WORK

MOD 1 0
5/7/92 5/7/92

029-ET/R TO SET
LATE FINISH OF
MODULE 1 TENANT
WORK

Summary Plan of Phase 1

NETWORK MODEL FOR MANUFACTURER'S MARKET PLACE - Woodbury, Minnesota

Witcher Construction
Co.

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

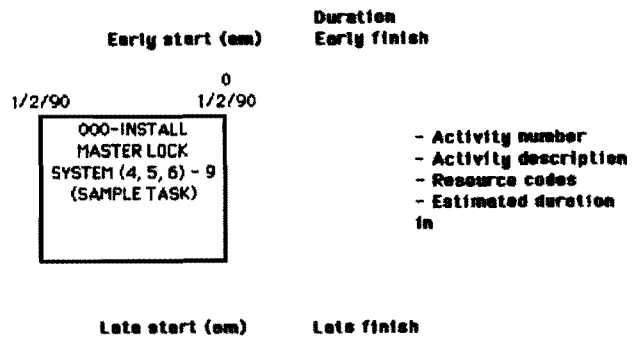
Issue #1 - March 26, 1991
Issue #2 - March 28, 1991
Issue #3 - April 11, 1991
Issue #4 - April 30, 1991
Issue #5 - November 4, 1991
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disk 286

Reserved Activity Numbers

041 046
042 047
043 048
044 049
045 050

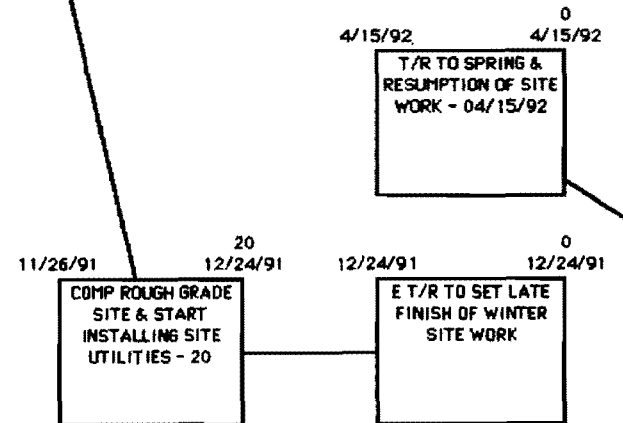
SHEET
#sm1

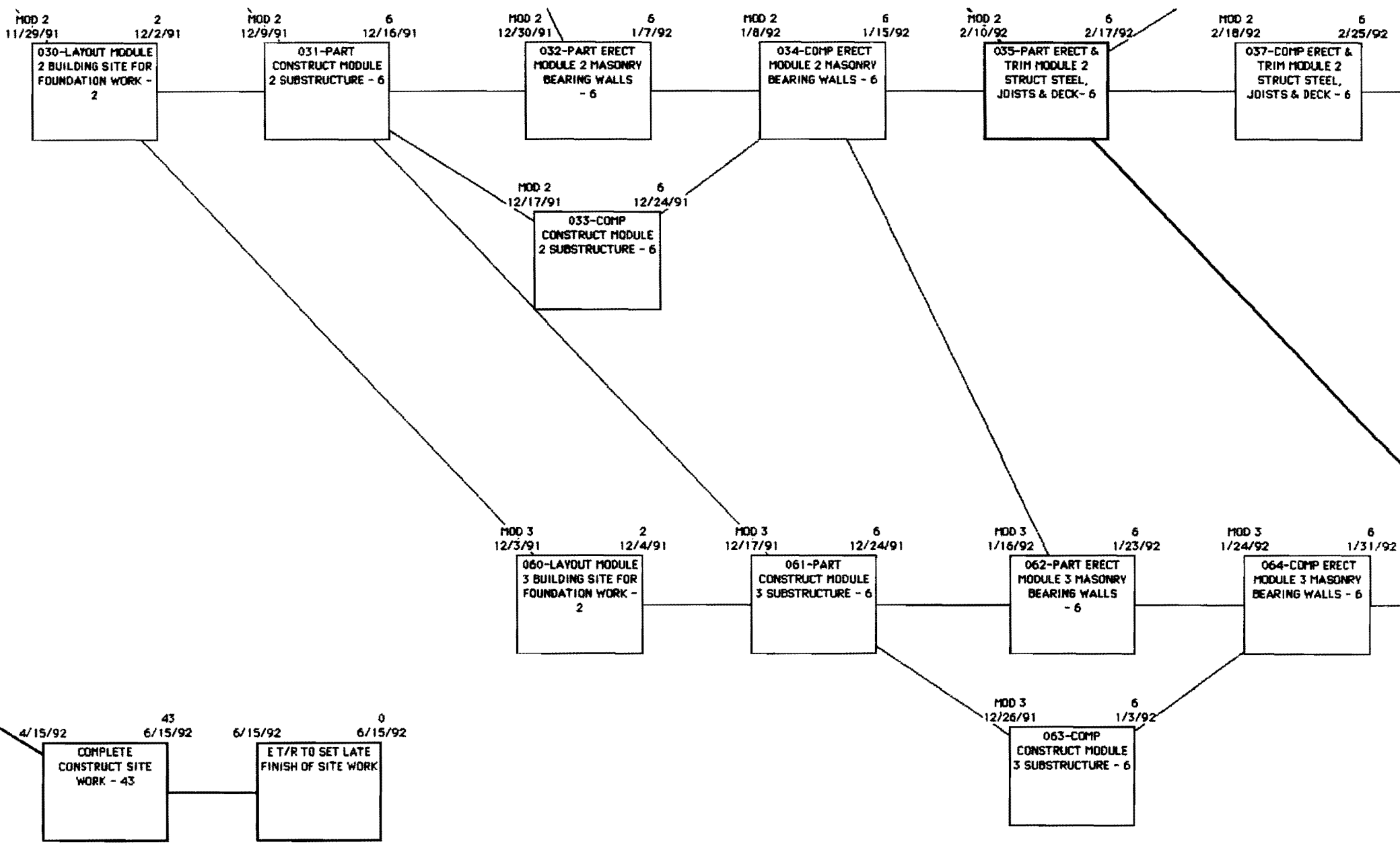
SITE WORK

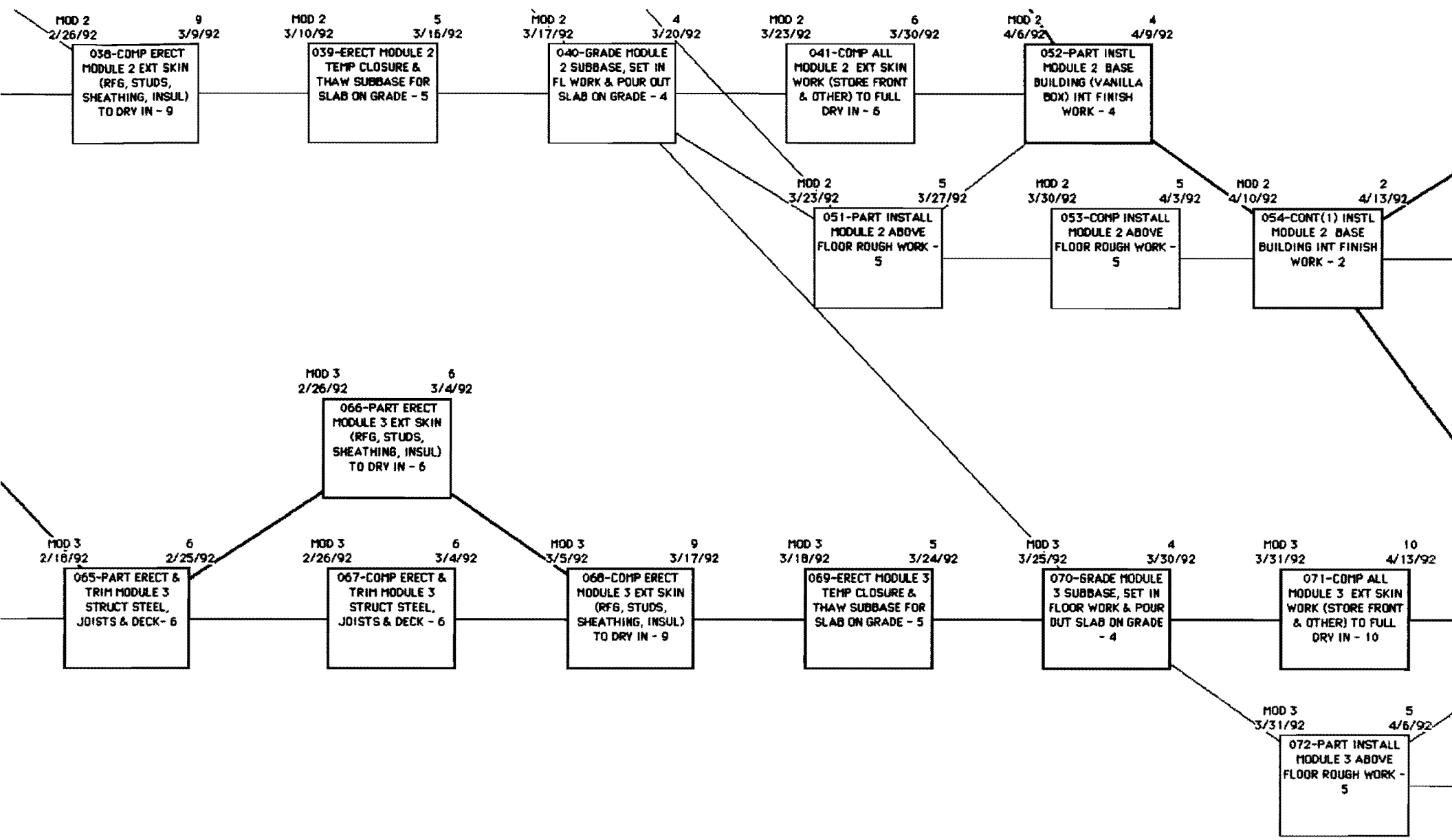


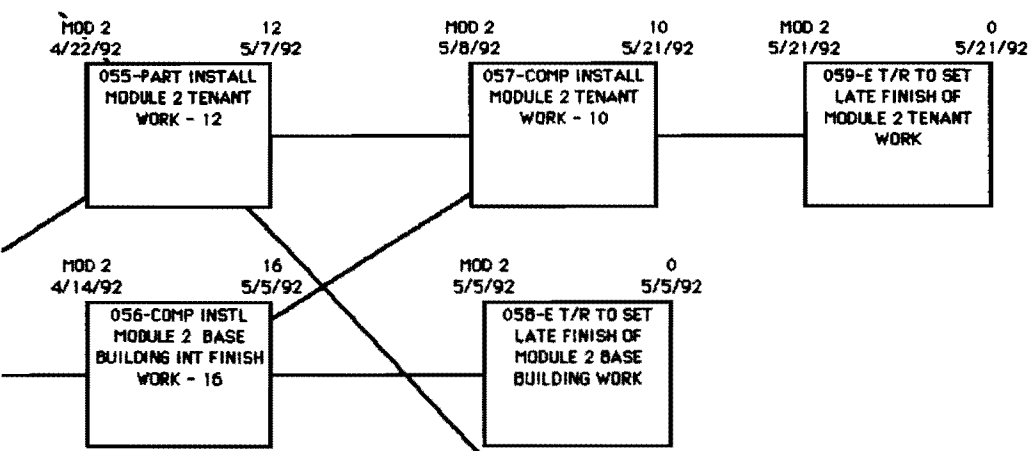
Activity

Site Work

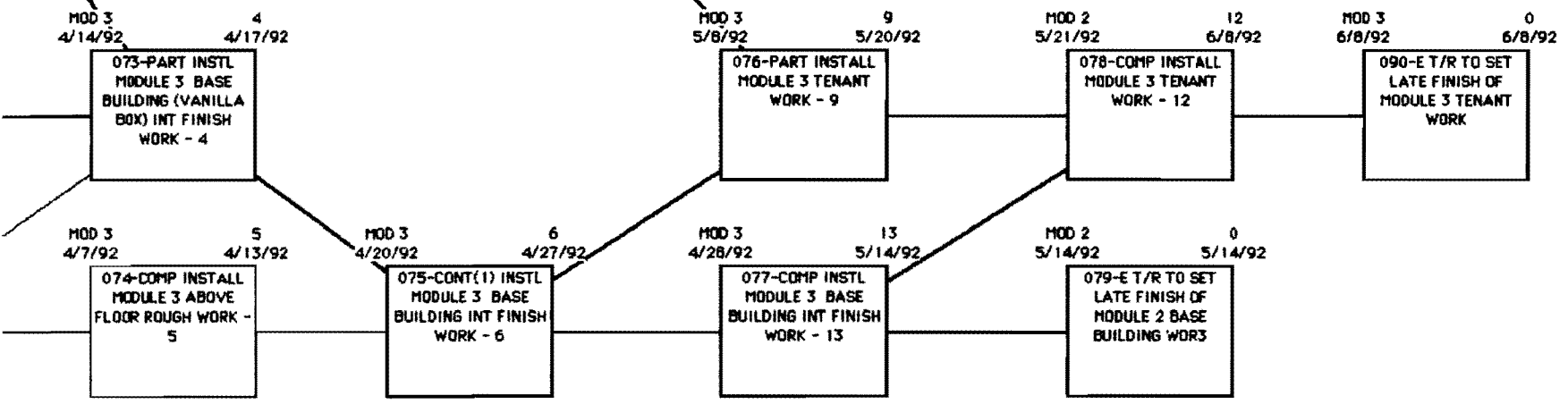


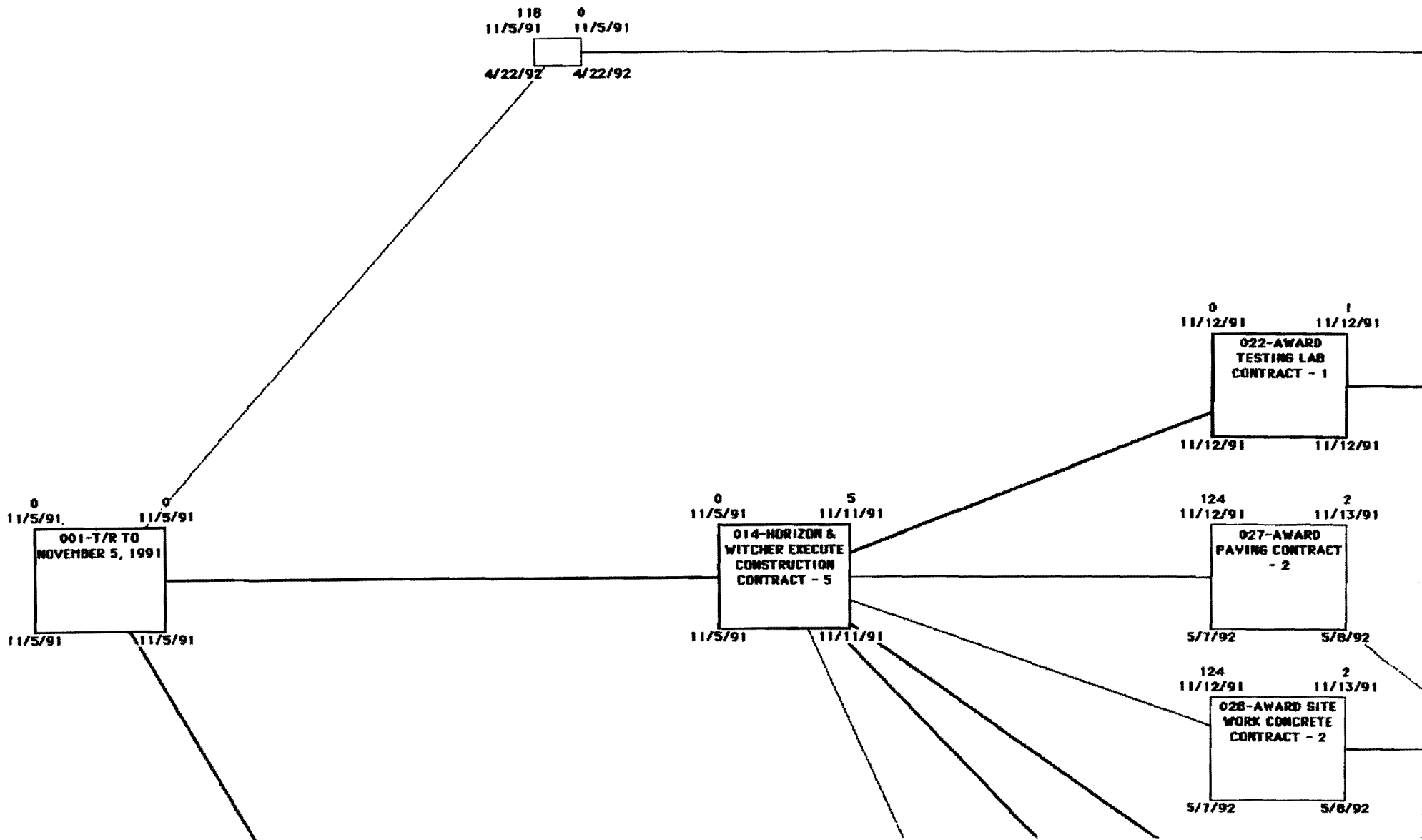


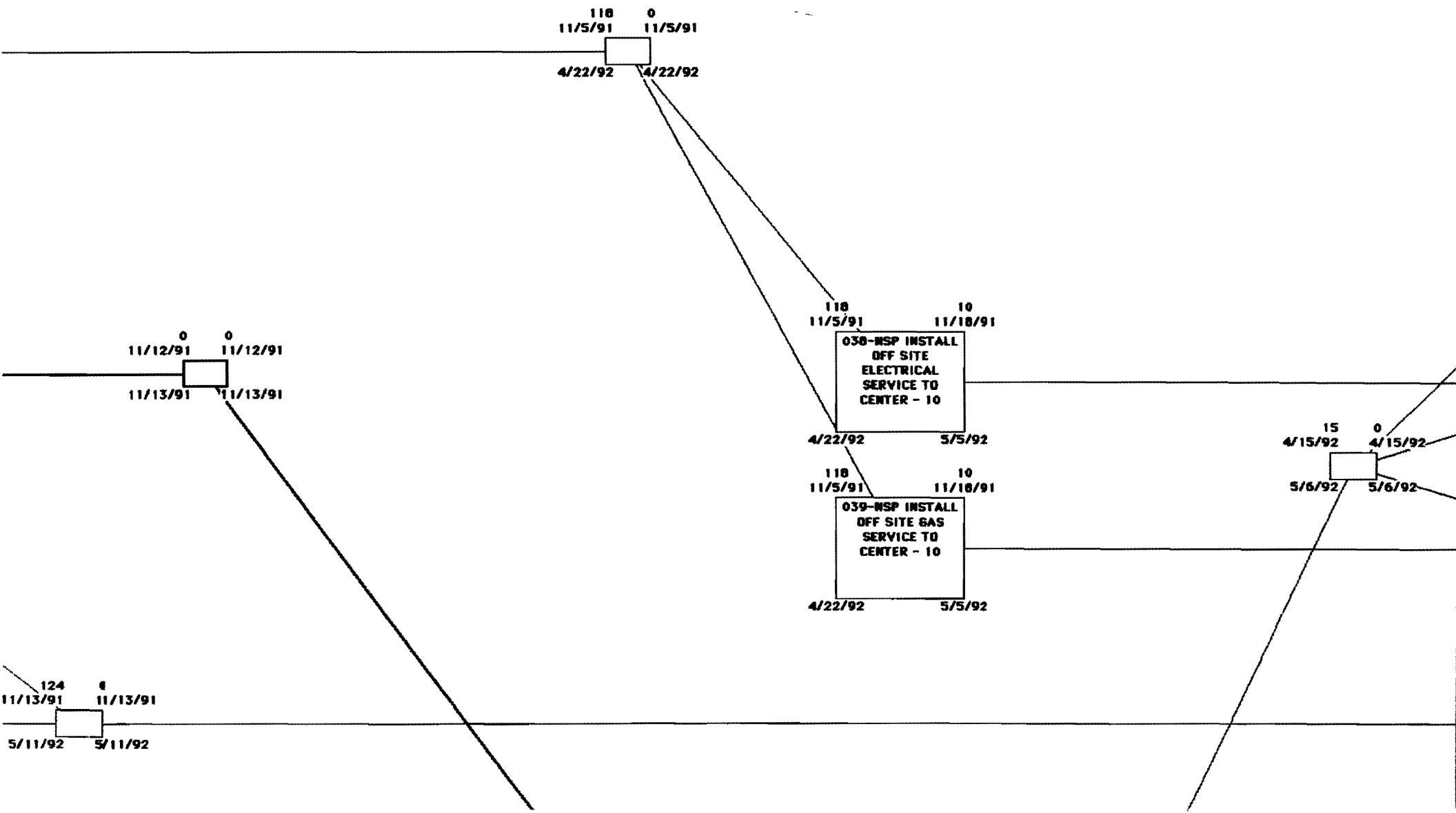


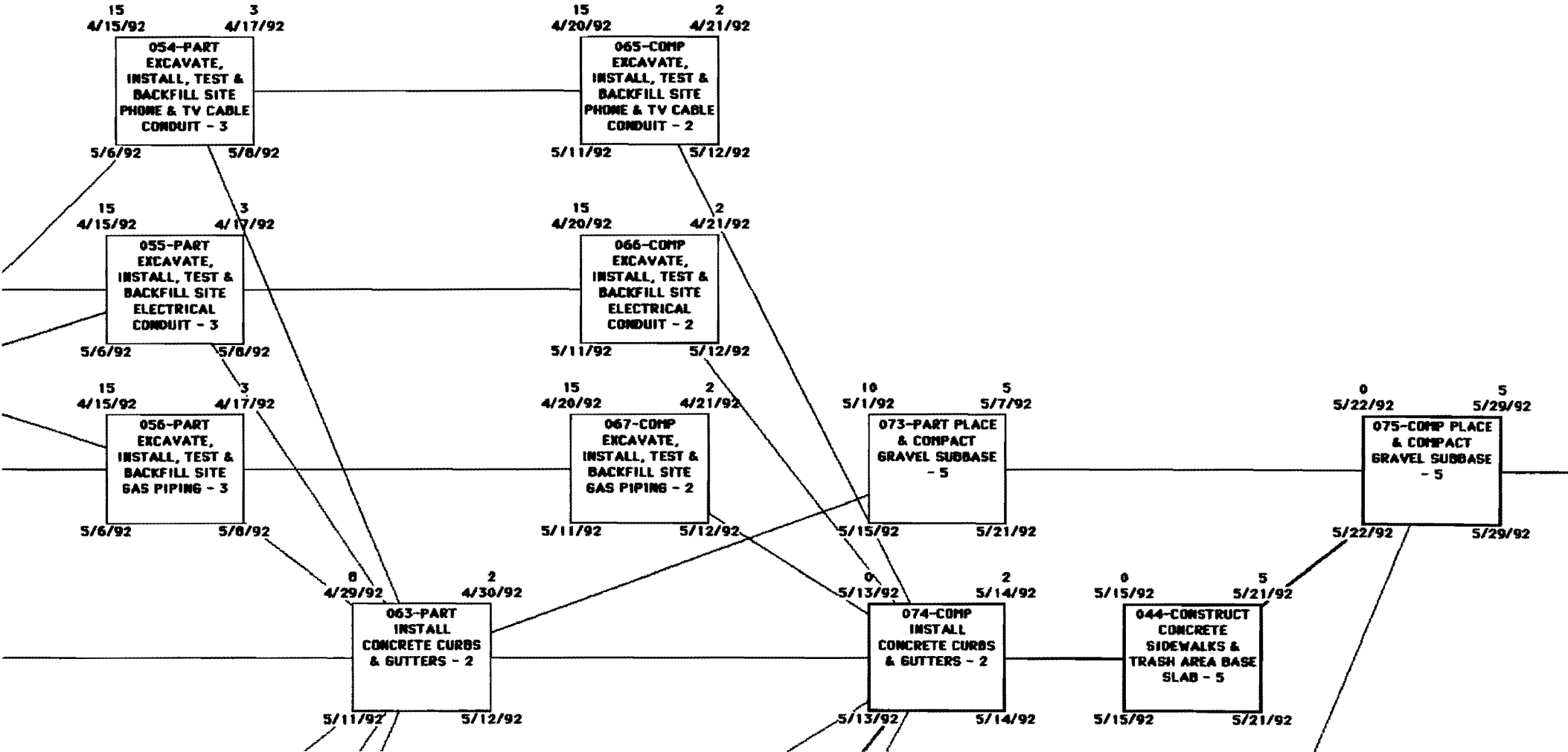


MODULE #3 WORK

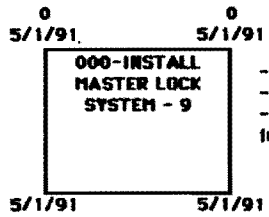








Responsibility codes Duration
 Early start (am) Early finish



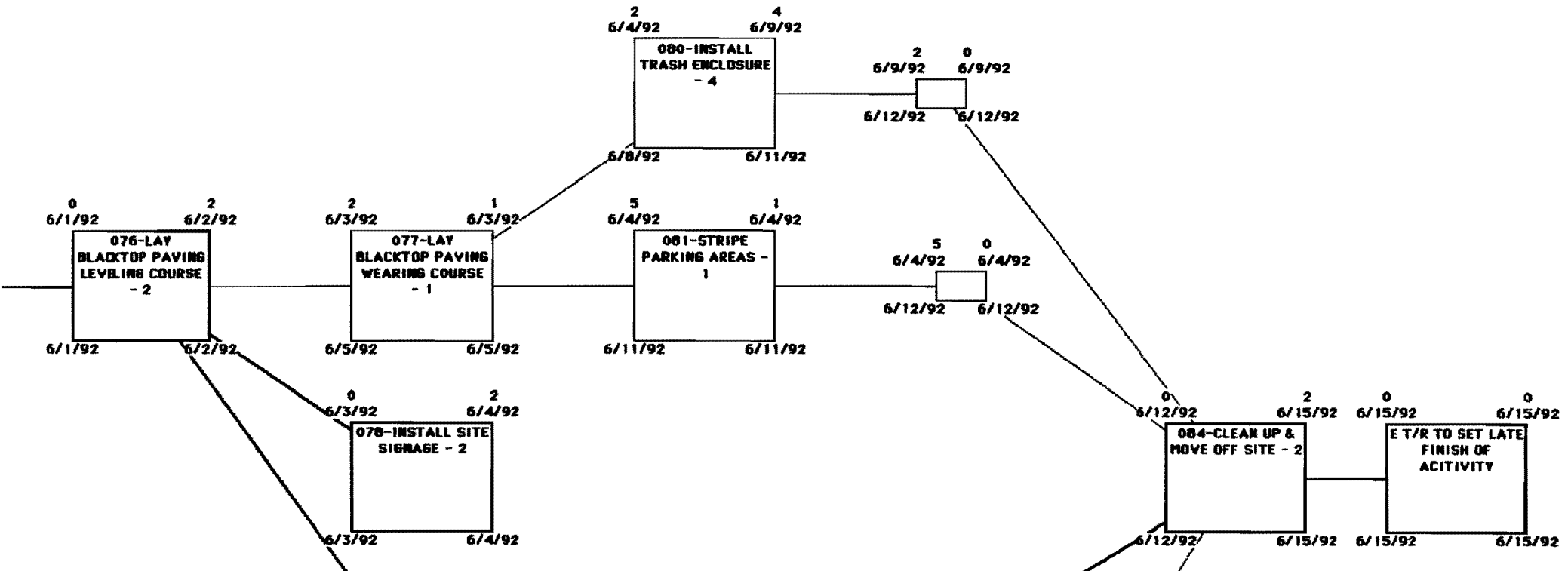
- Activity number
 - Activity description
 - Estimated duration
 in

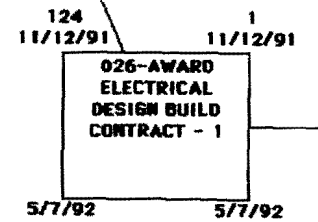
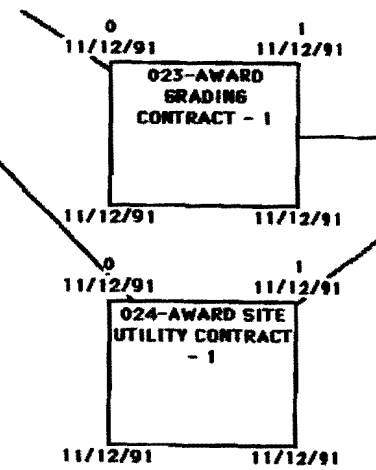
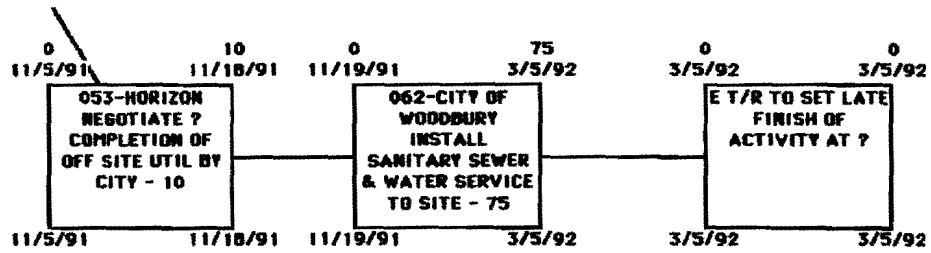
Late start (am) Late finish

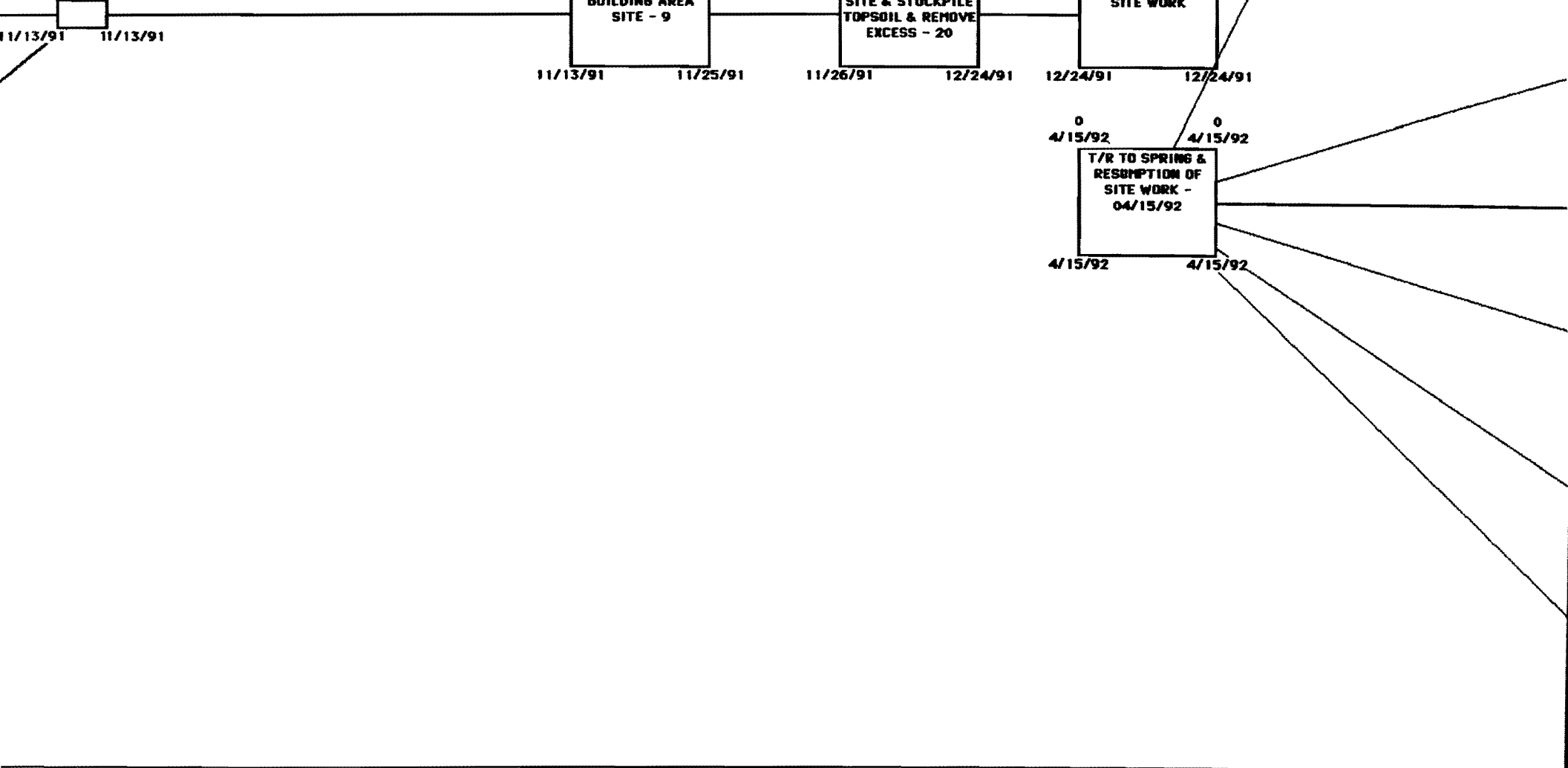
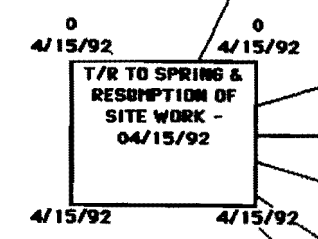
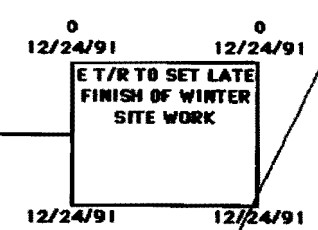
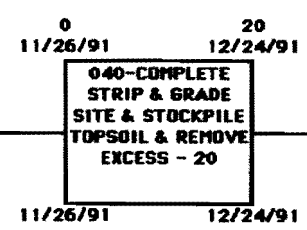
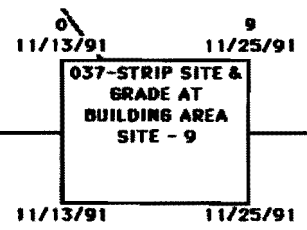
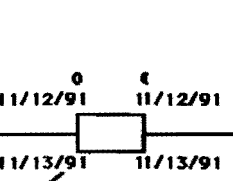
Activity

Reserved Activity Numbers

041 046
 042 047
 043 048
 044 049
 045 050







10 5
4/15/92 4/21/92
057-PART
EXCAVATE,
INSTALL, TEST &
BACKFILL SITE
SANITARY SEWERS
- 5
4/29/92 5/5/92

10 5
4/22/92 4/28/92
068-COMP
EXCAVATE,
INSTALL, TEST &
BACKFILL SITE
SANITARY SEWERS
- 5
5/6/92 5/12/92

0 10
4/15/92 4/28/92
058-PART
EXCAVATE,
INSTALL, TEST &
BACKFILL SITE
WATER LINES - 10
4/15/92 4/28/92

0 10
4/29/92 5/12/92
069-COMP
EXCAVATE,
INSTALL, TEST &
BACKFILL SITE
WATER LINES - 10
4/29/92 5/12/92

4 8
4/15/92 4/24/92
059-PART
EXCAVATE,
INSTALL, TEST &
BACKFILL SITE
STORM SEWERS - 8
4/21/92 4/30/92

4 8
4/27/92 5/6/92
070-COMP
EXCAVATE,
INSTALL, TEST &
BACKFILL SITE
STORM SEWERS - 8
5/1/92 5/12/92

19 8
4/15/92 4/24/92
060-MASS
EXCAVATE &
GRADE FOR
RETENTION BASIN
- 8
5/12/92 5/21/92

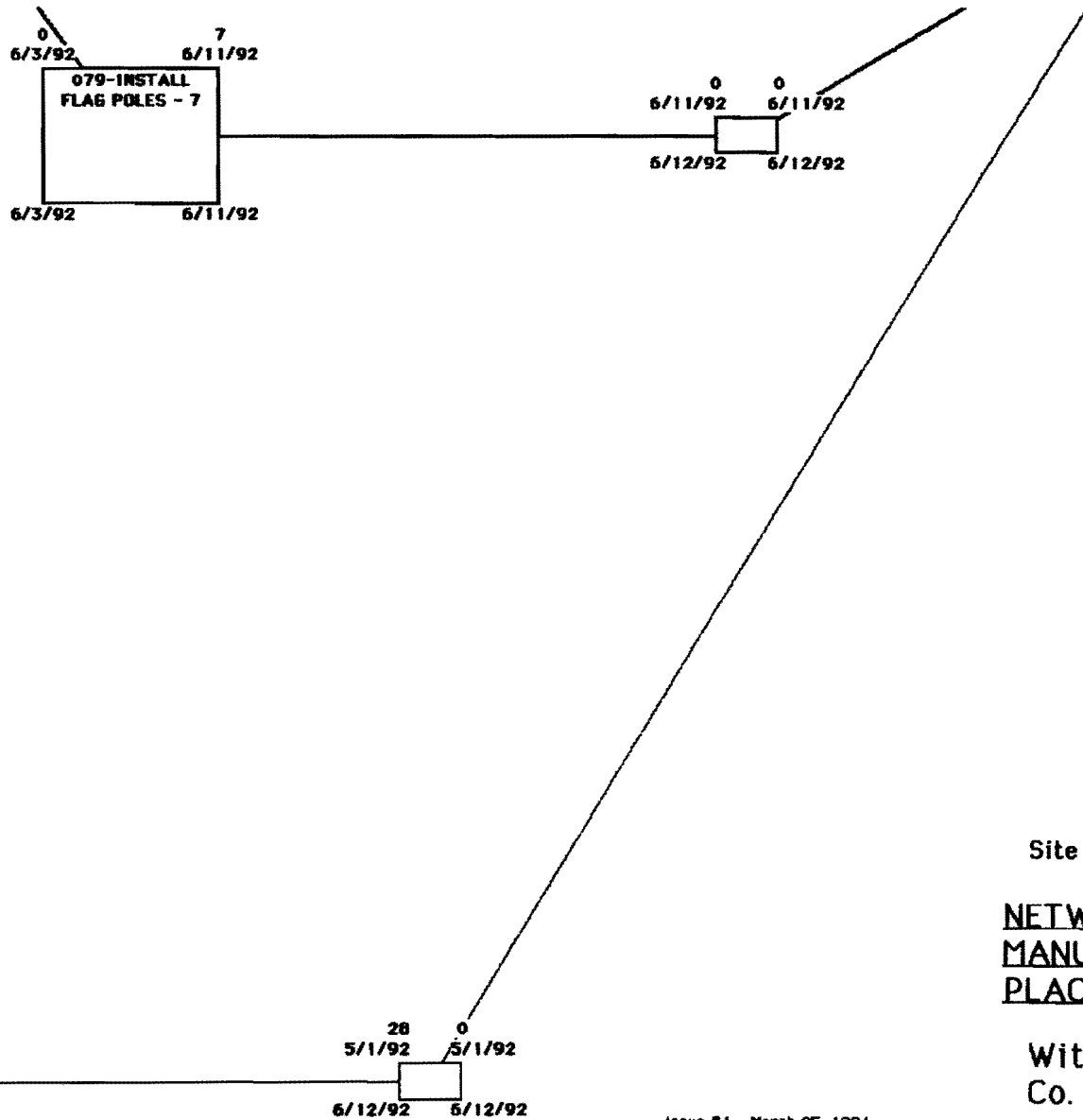
17 0
4/28/92 4/28/92
5/22/92 5/22/92

17 0
4/28/92 4/28/92
5/22/92 5/22/92

17 5
4/15/92 4/21/92
061-INSTALL
LIGHT POLE BASES
& LIGHT POLE
ANCHOR BOLTS - 5
5/8/92 5/14/92

17 5
4/22/92 4/28/92
064-EXCAV, INSTL
& BACKFILL
UNDERGROUND
LIGHTING CONDUIT
- 5
5/15/92 5/21/92

28 3
4/29/92 5/1/92
071-INSTALL SITE
LIGHT POLES &
LAMPS - 3
6/9/92 6/11/92



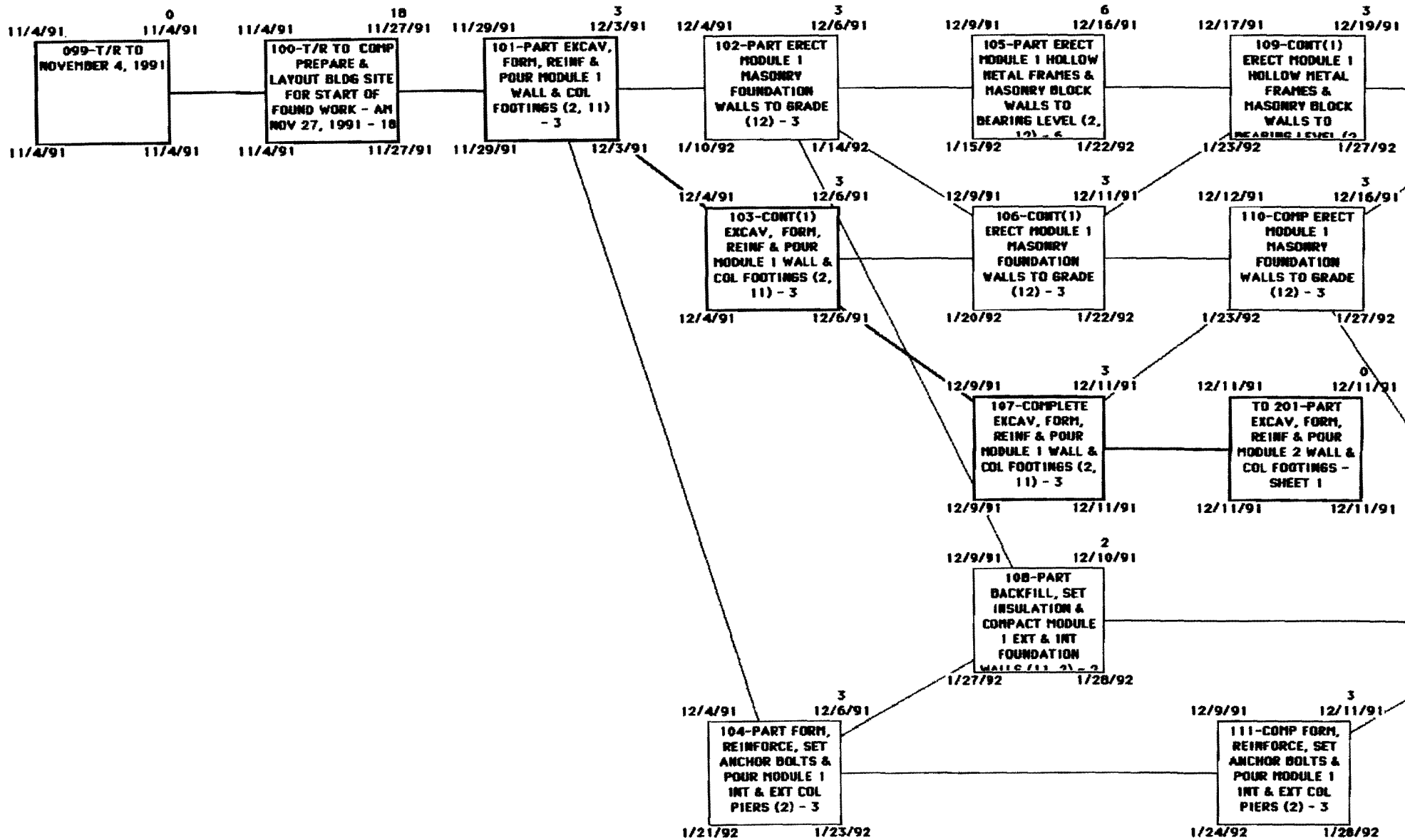
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 Issue #2 - May 1, 1991
 Issue #3 & 4 - none
 Issue #5 - November 5, 1991
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 disk 286

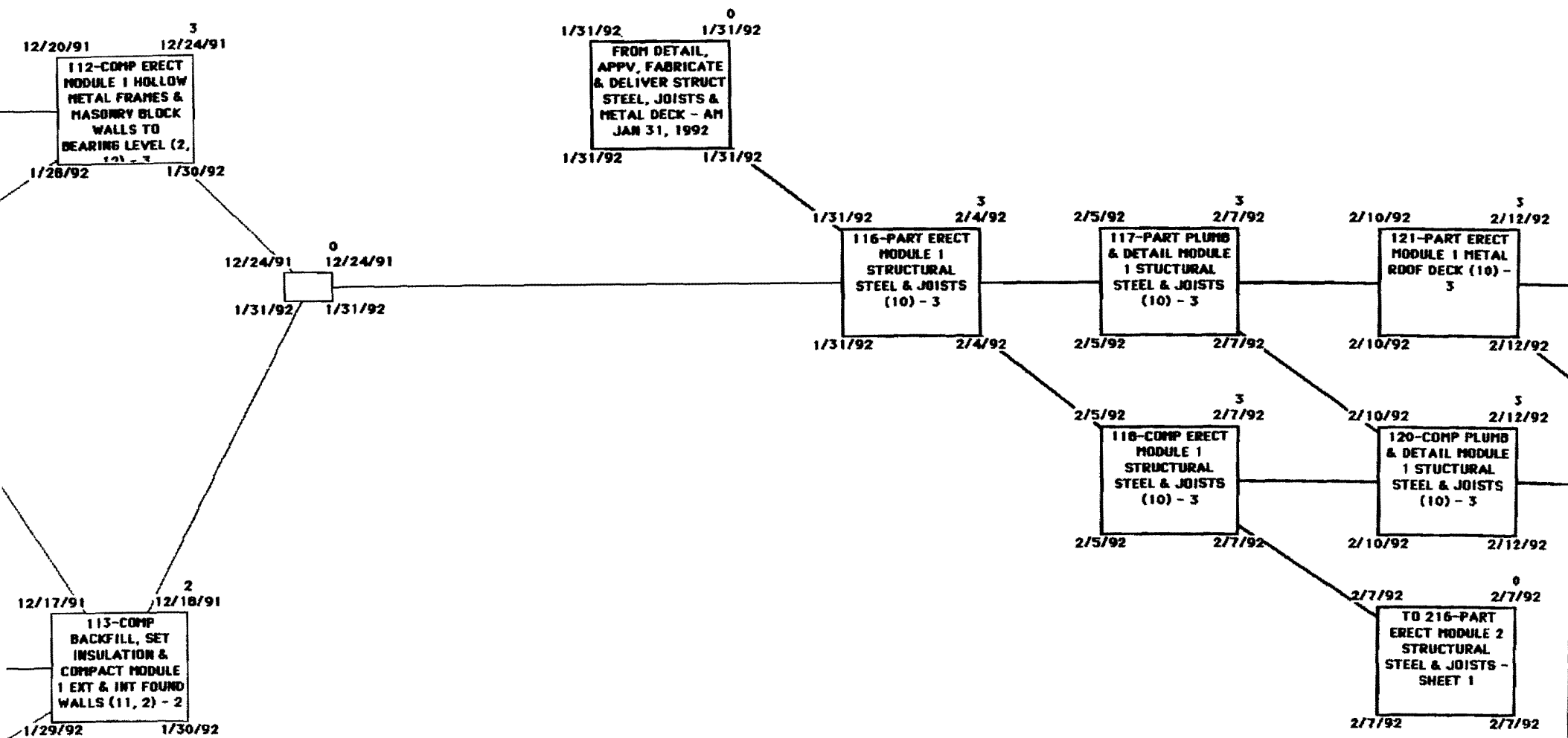
Site work

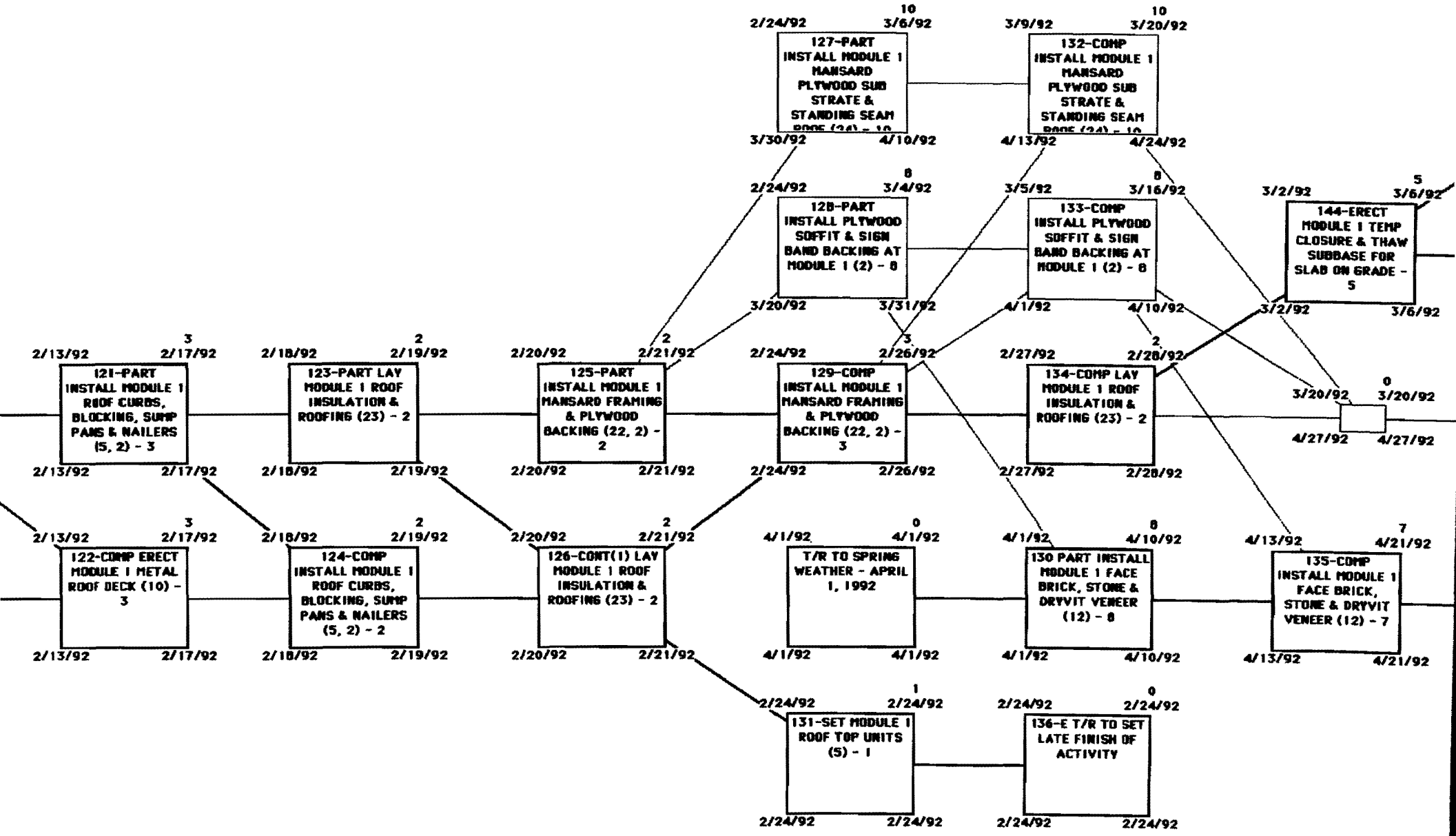
NETWORK MODEL FOR
MANUFACTURER'S MARKET
PLACE - Woodbury, Minnesota

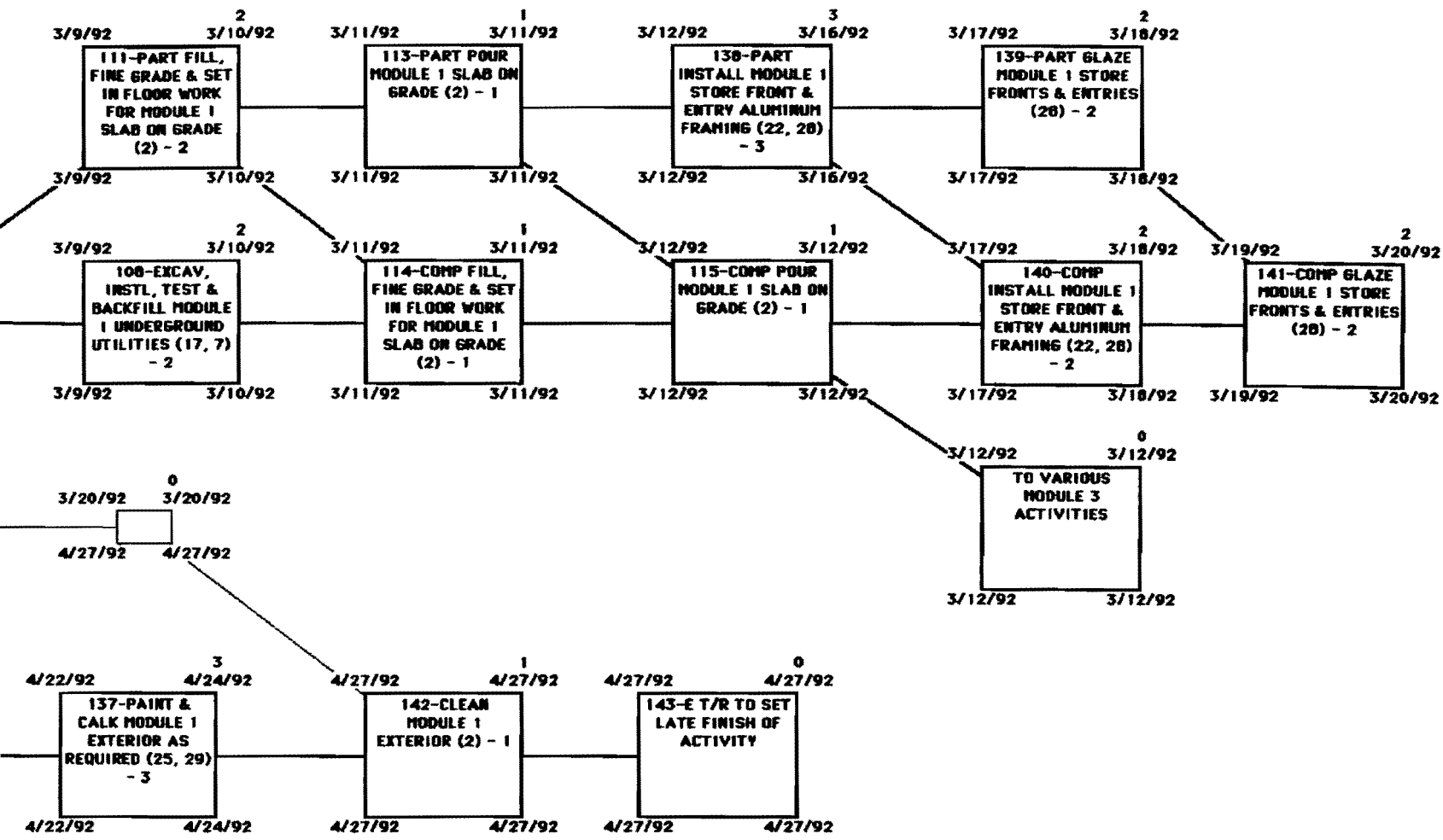
Witcher Construction
 Co.

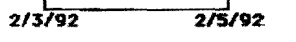
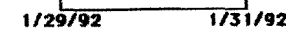
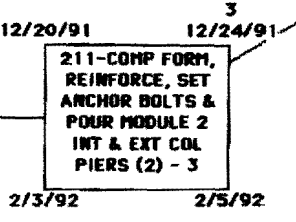
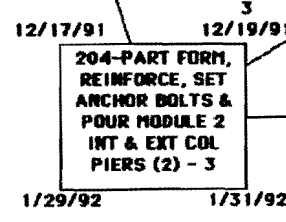
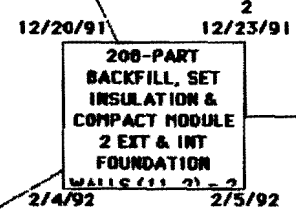
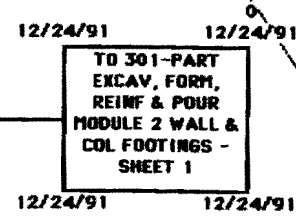
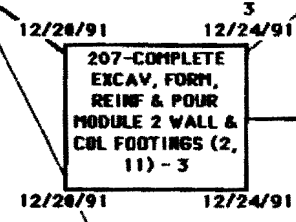
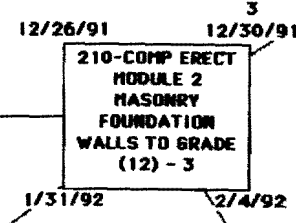
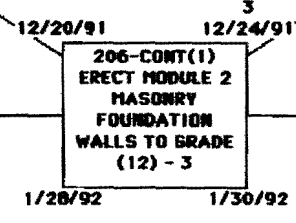
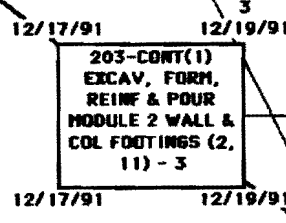
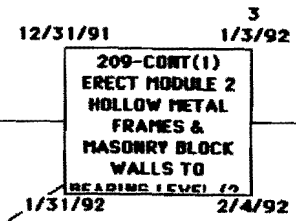
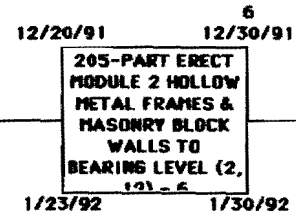
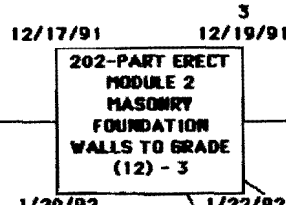
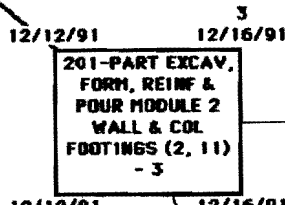
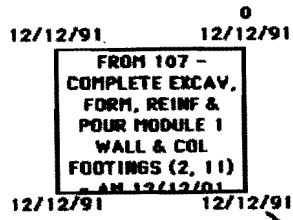
Ralph J. Stephenson PE PC
 Consulting Engineer
 323 Hiawatha Drive
 Mt. Pleasant, Michigan 48858
 ph 517 772 2537

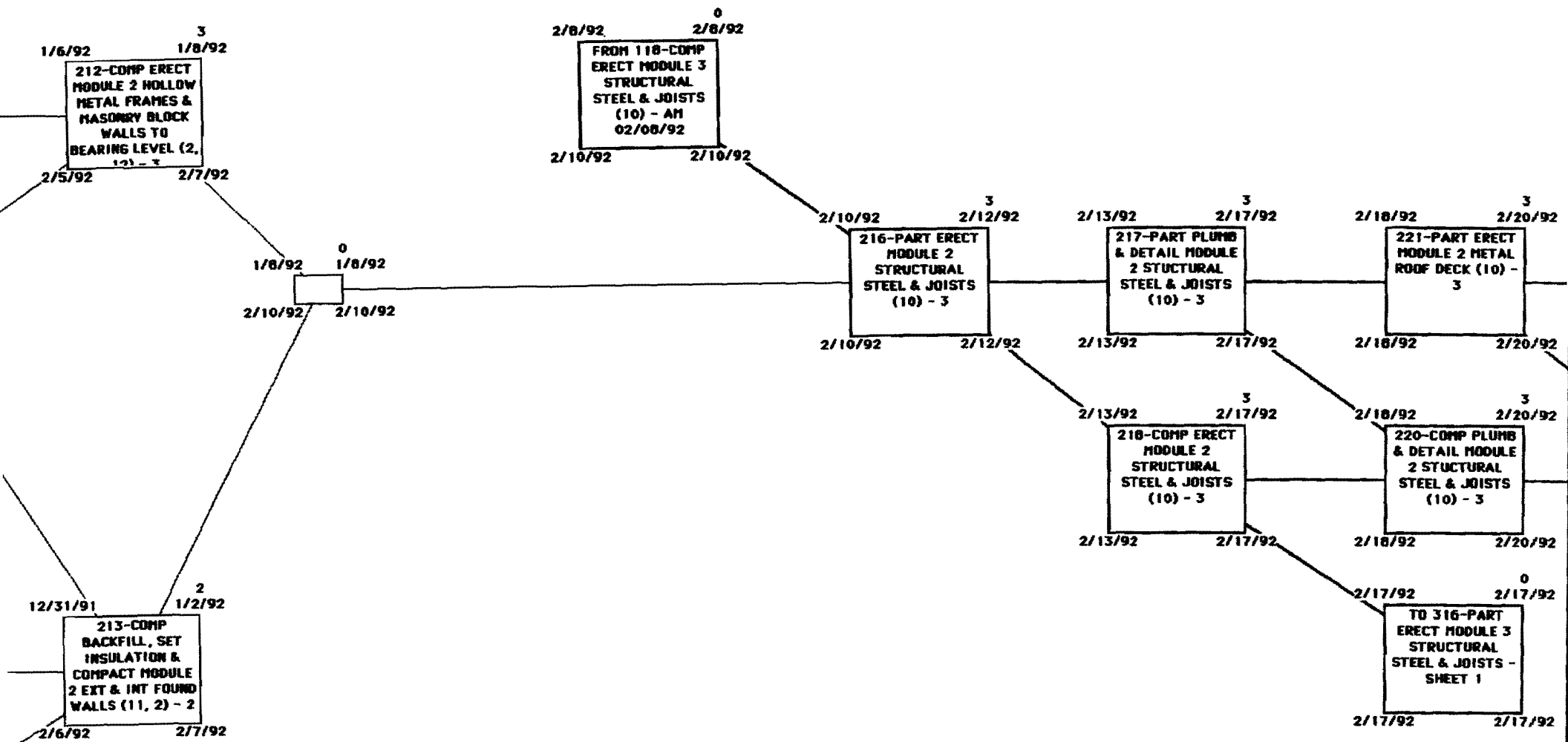


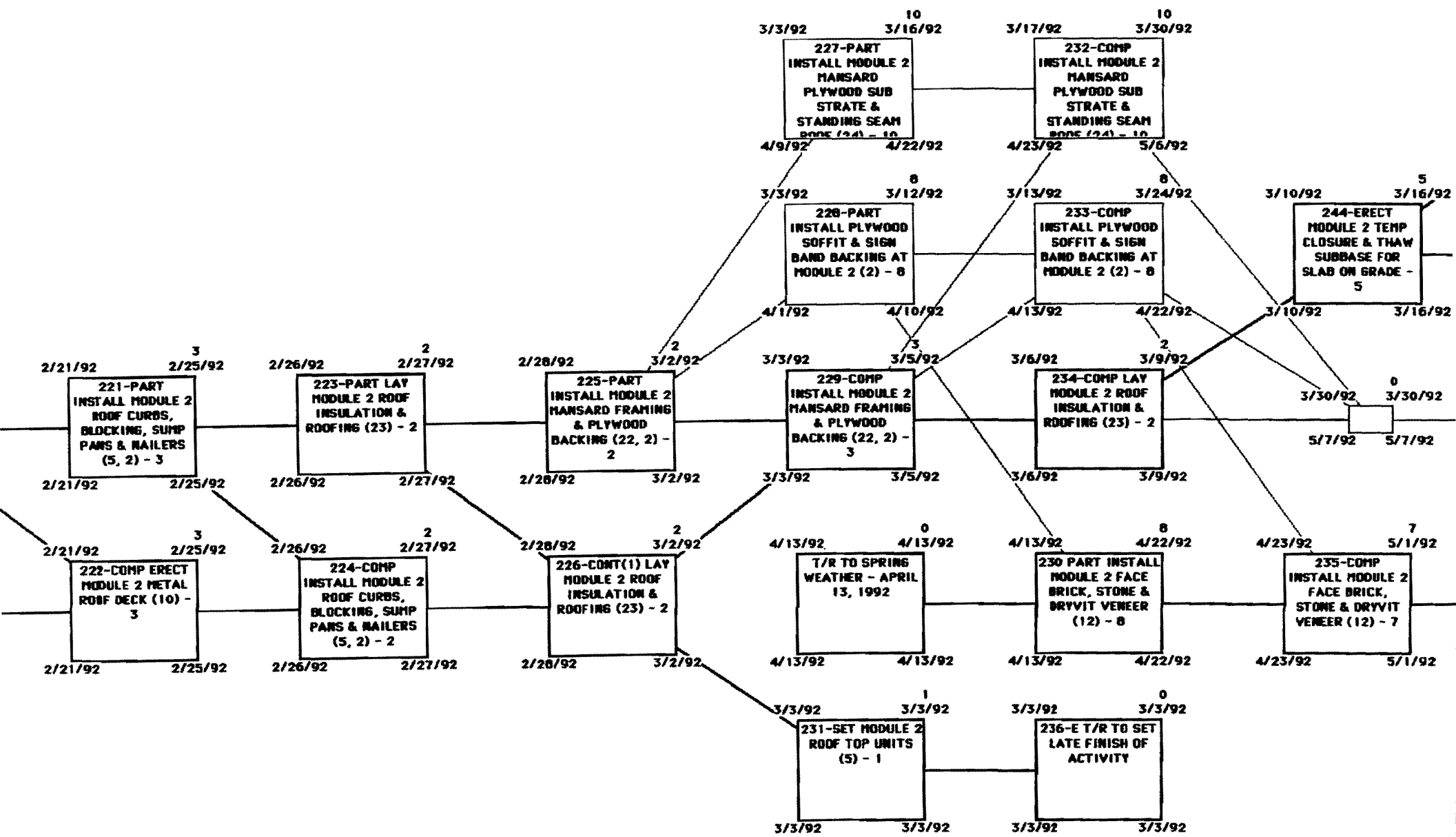


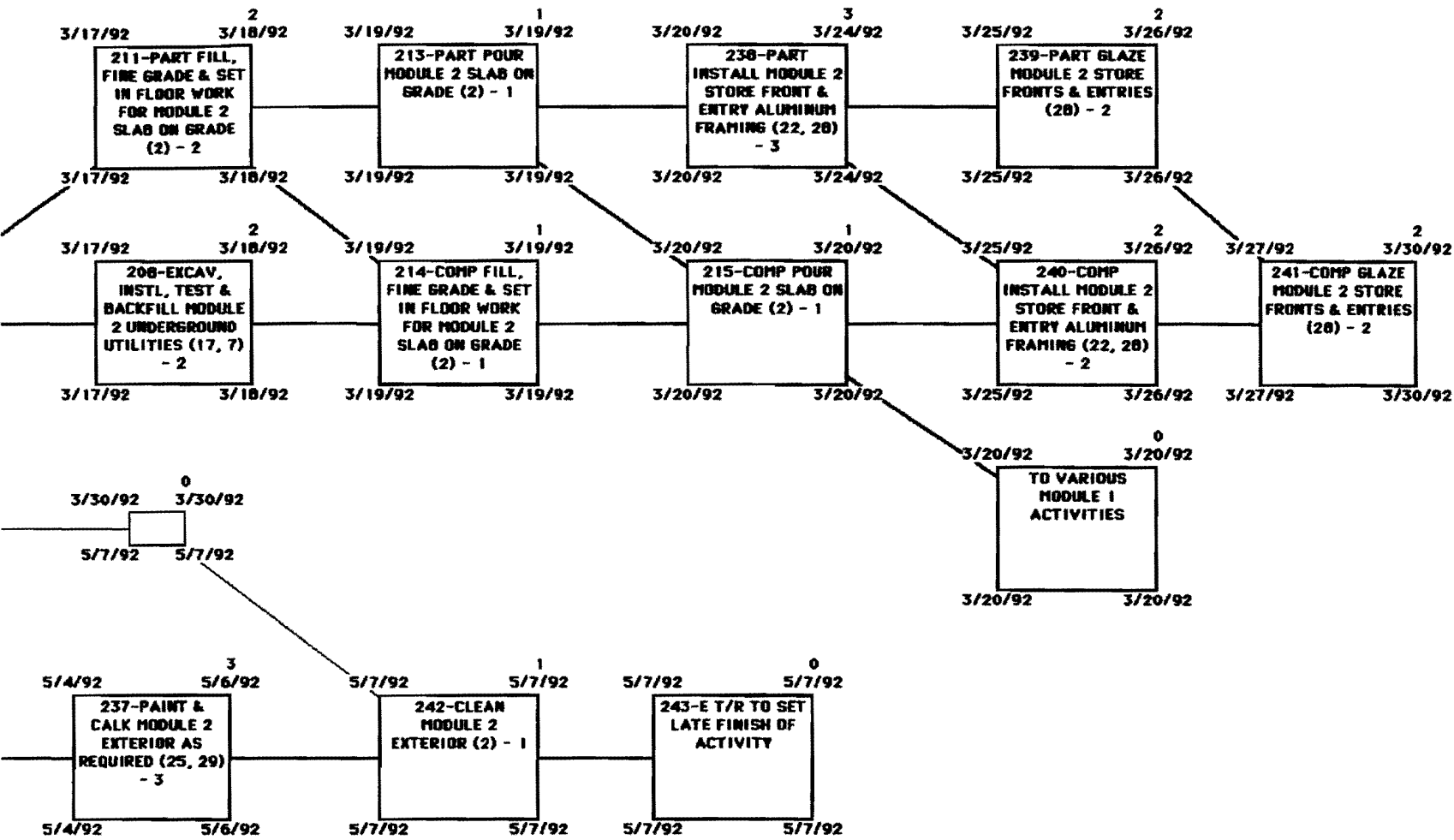


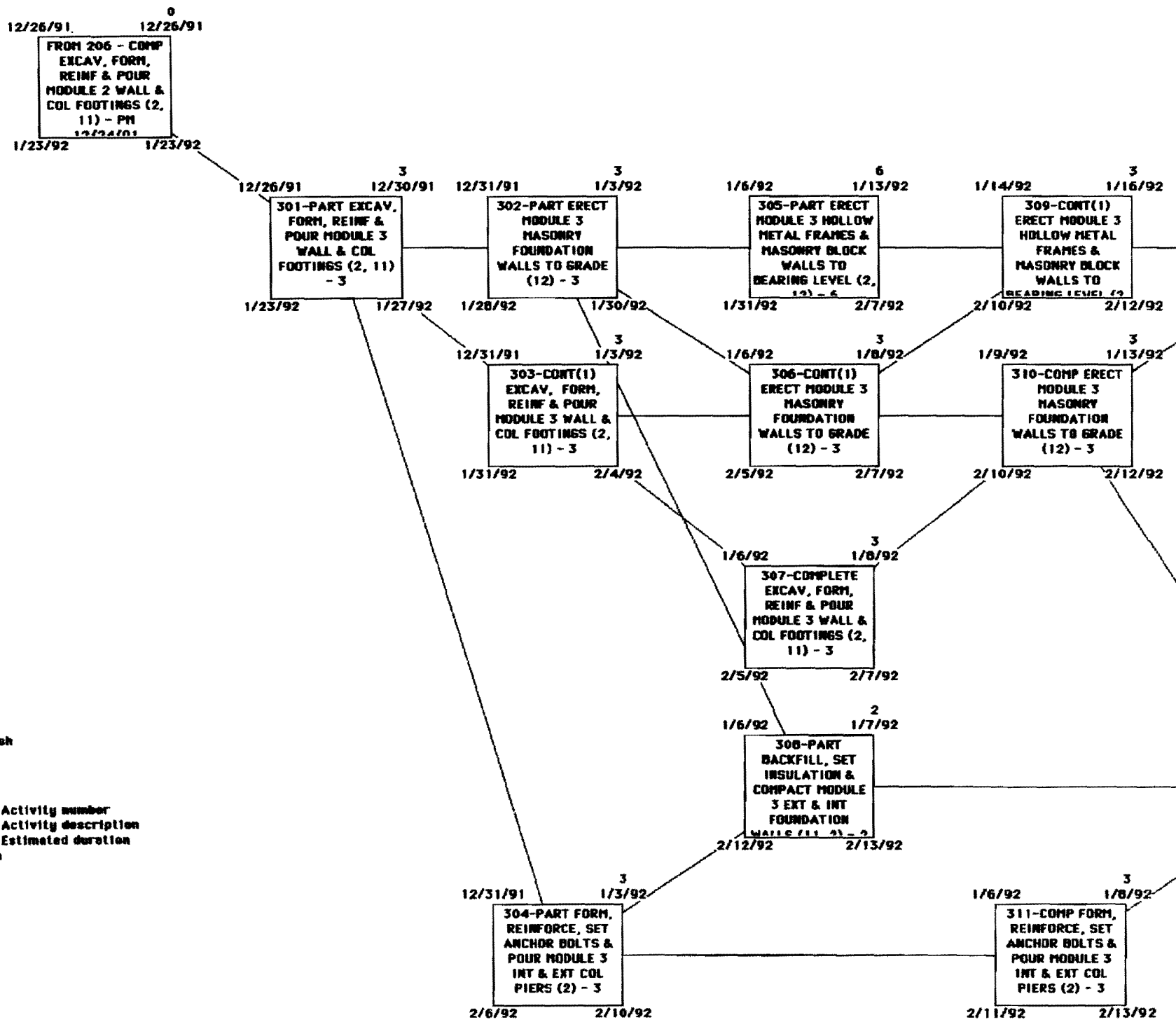












Responsibility codes Duration
 Early start (am) Early finish

5/2/91 0 5/2/91

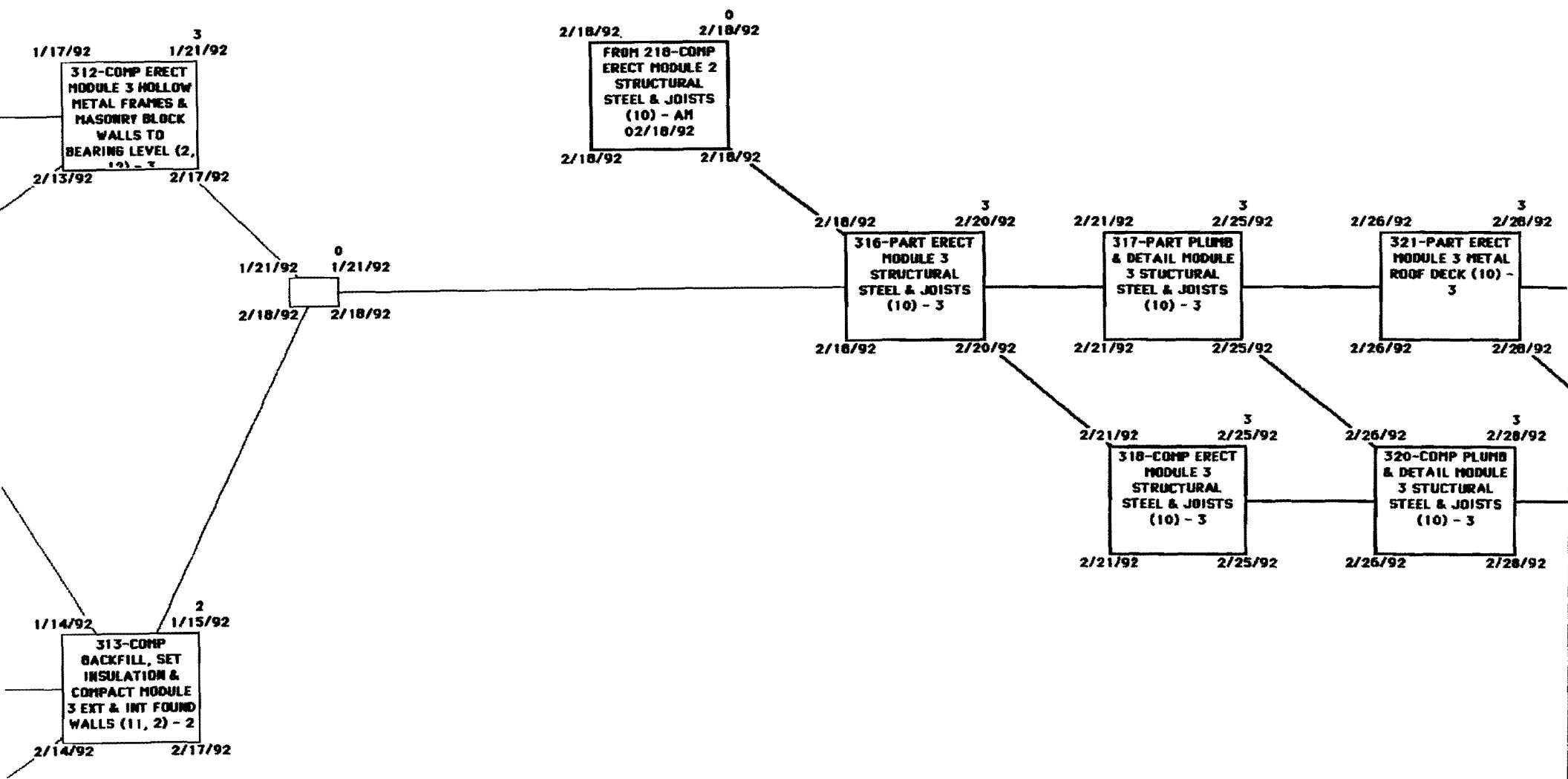
000-INSTALL
 MASTER LOCK
 SYSTEM (4, 5, 6) -
 9

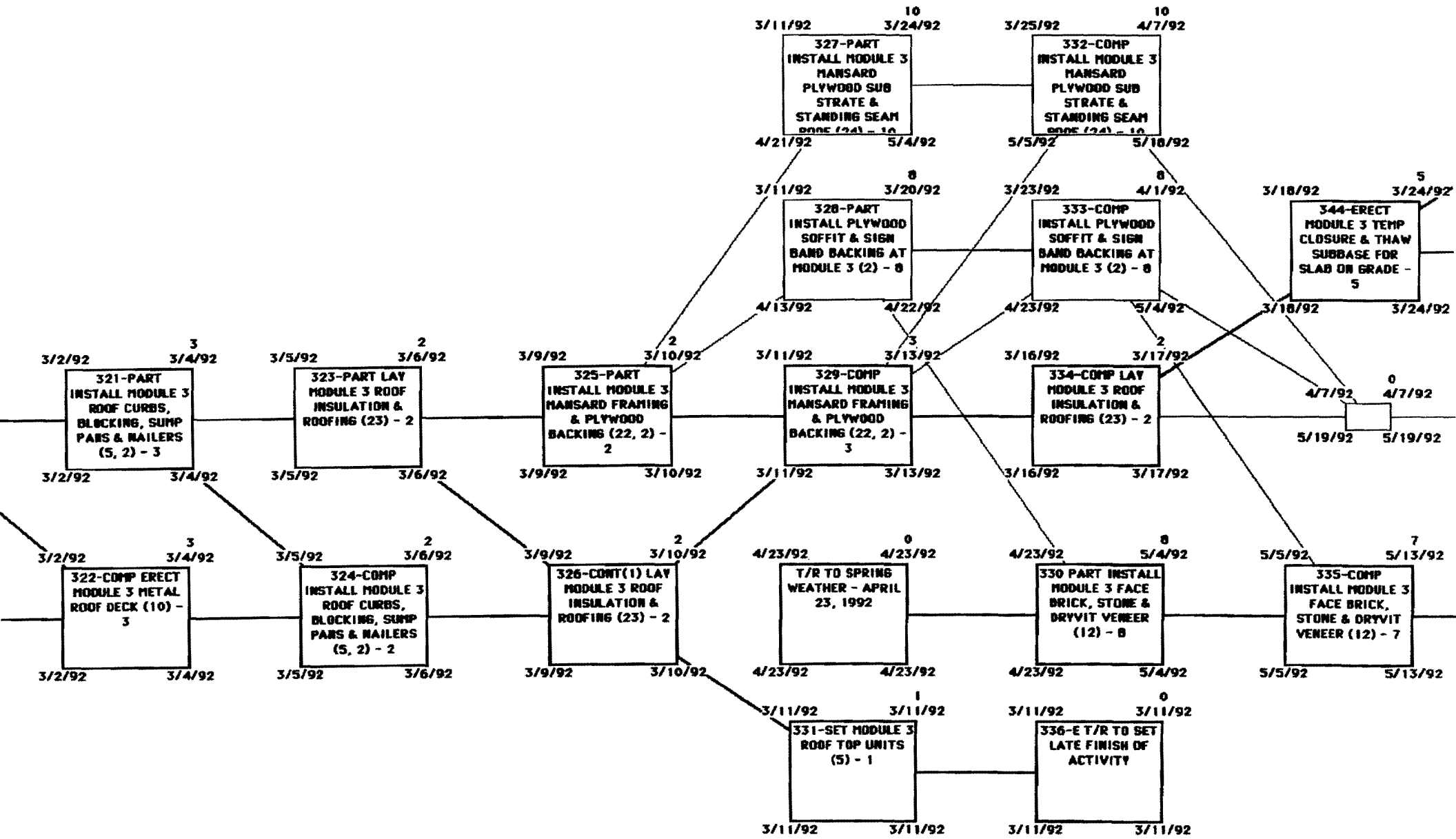
- Activity number
- Activity description
- Estimated duration
- in

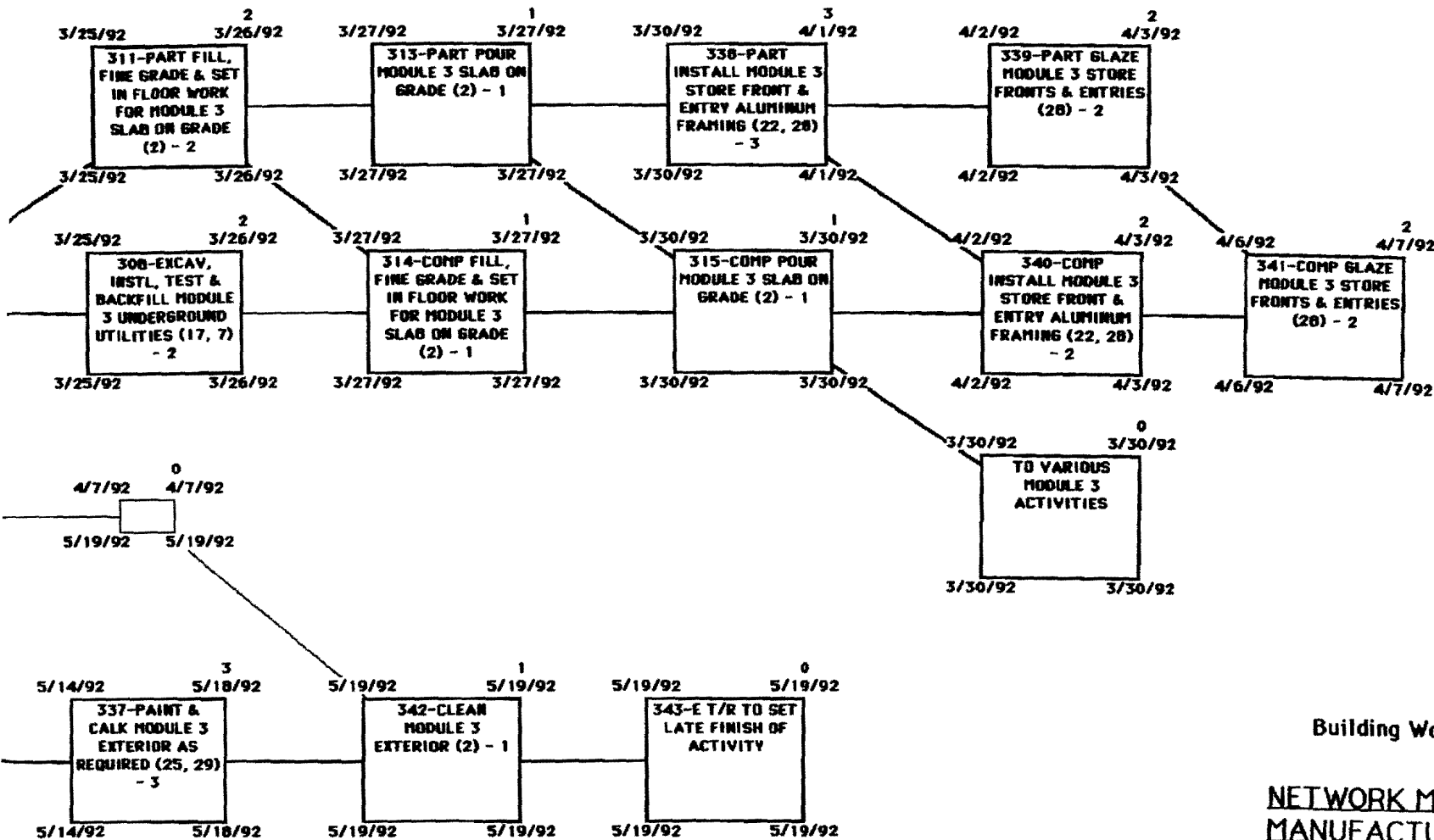
5/2/91 5/2/91

Late start (am) Late finish

Activity







Building Work - Modules 1, 2 & 3

NETWORK MODEL FOR
MANUFACTURER'S MARKET
PLACE - Woodbury, Minnesota

Witcher Construction
 Co.

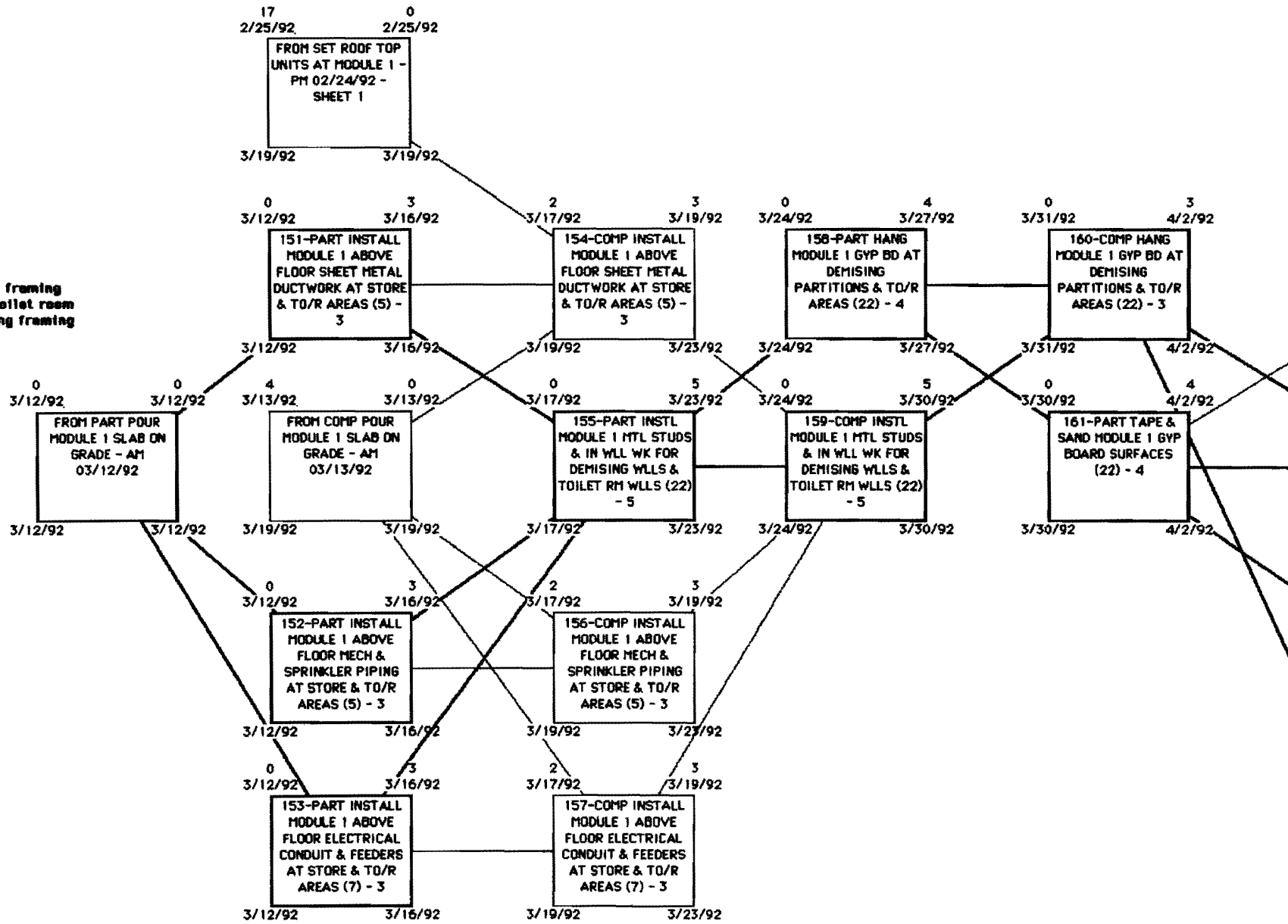
Reserved Activity Numbers

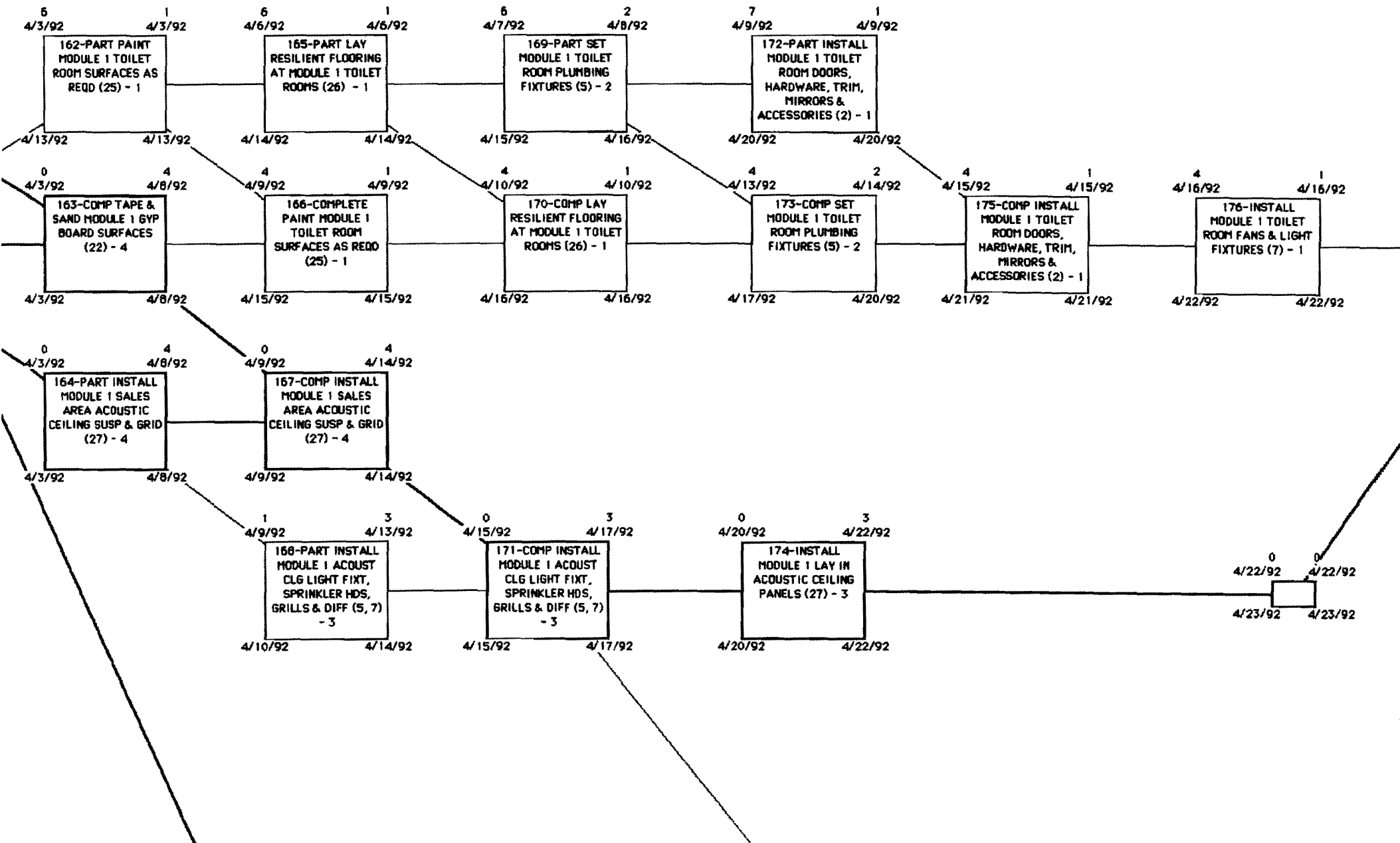
146
 147
 148
 144 149
 145 150

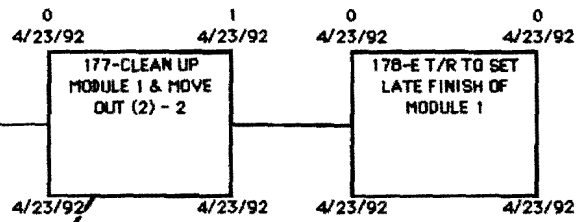
Issue #1 - none
 Issue #2 - May 3, 1991
 Issue #3 & 4 - none
 Issue #5 - November 4, 1991
 isht#1 wdbry
 disk 286

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

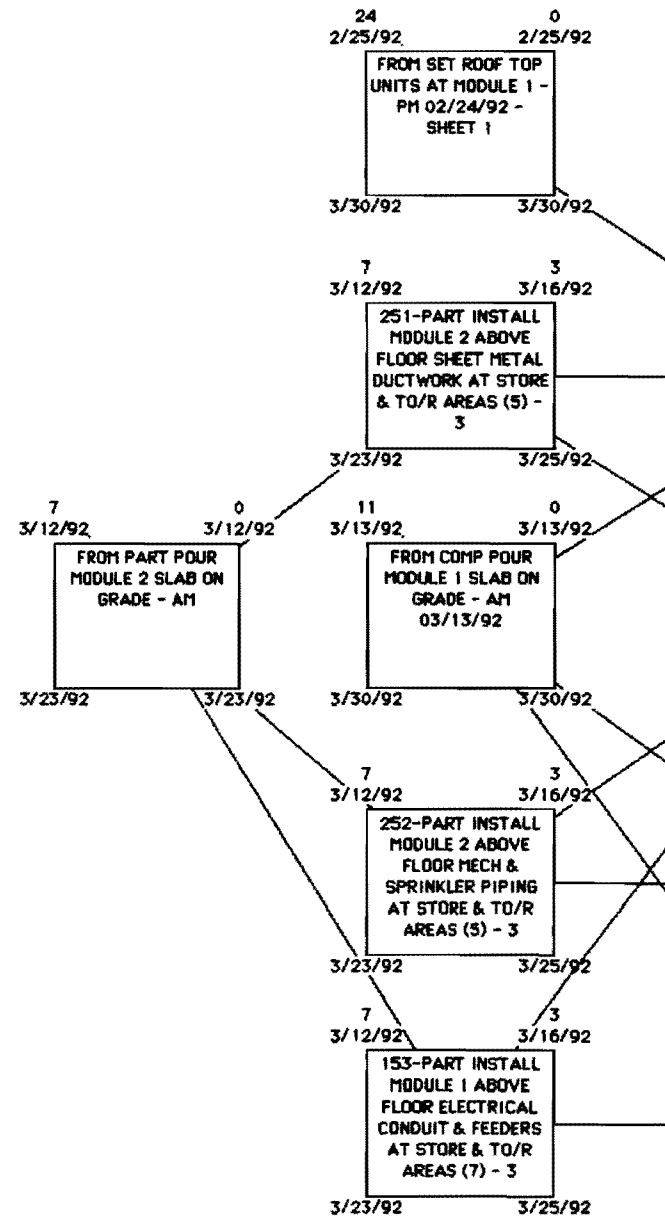
Note: Wall framing includes toilet room hard ceiling framing

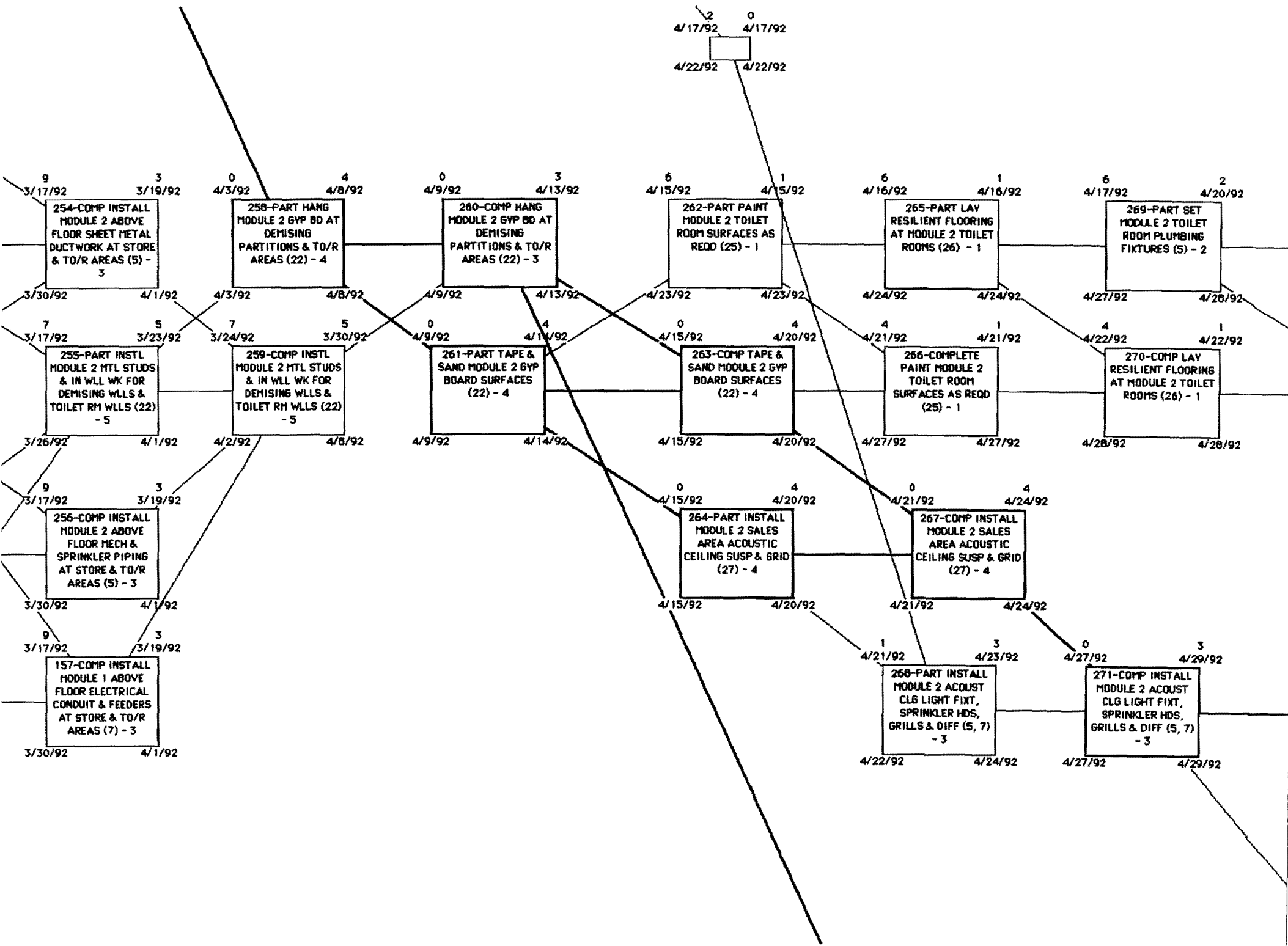


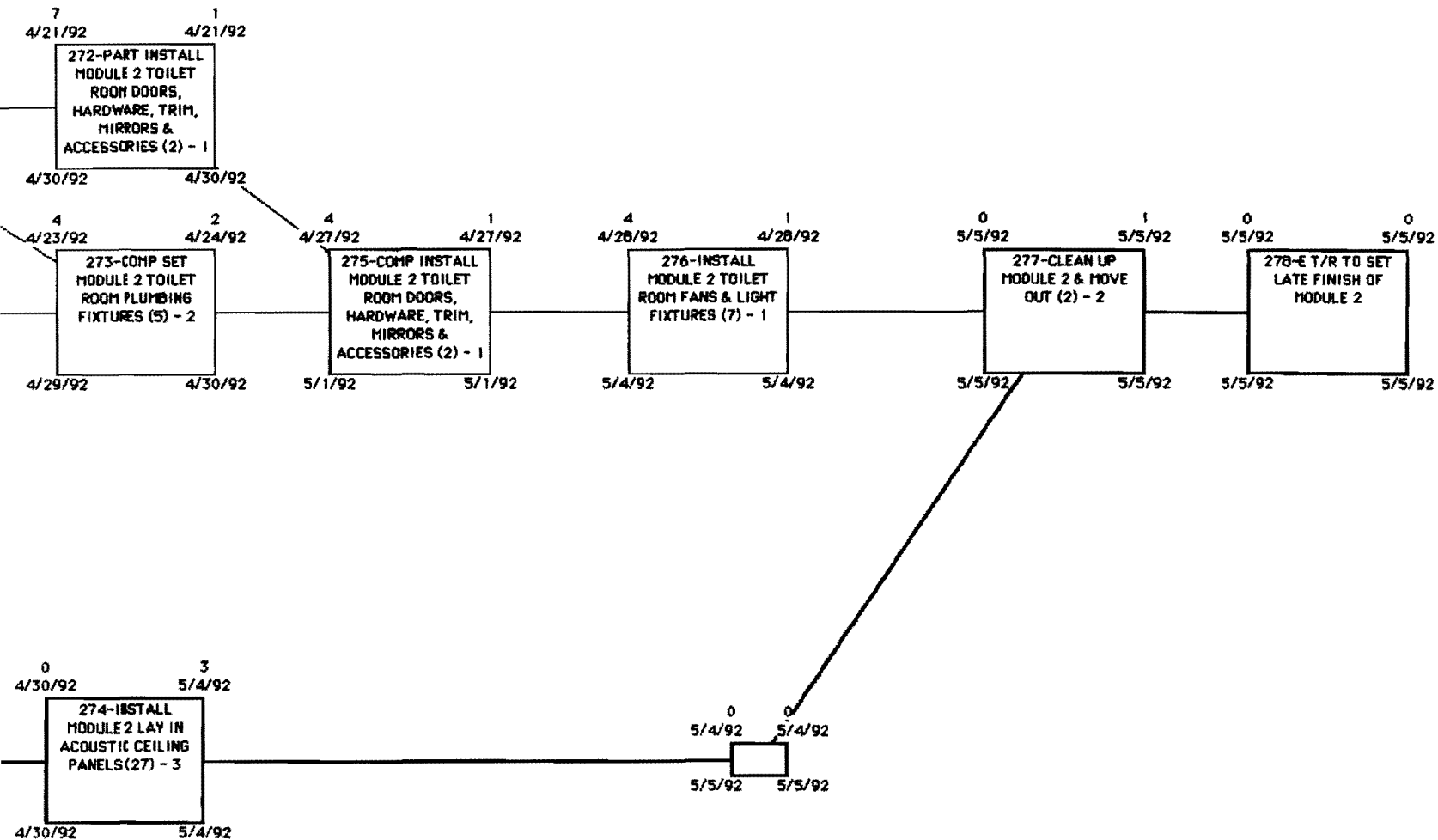


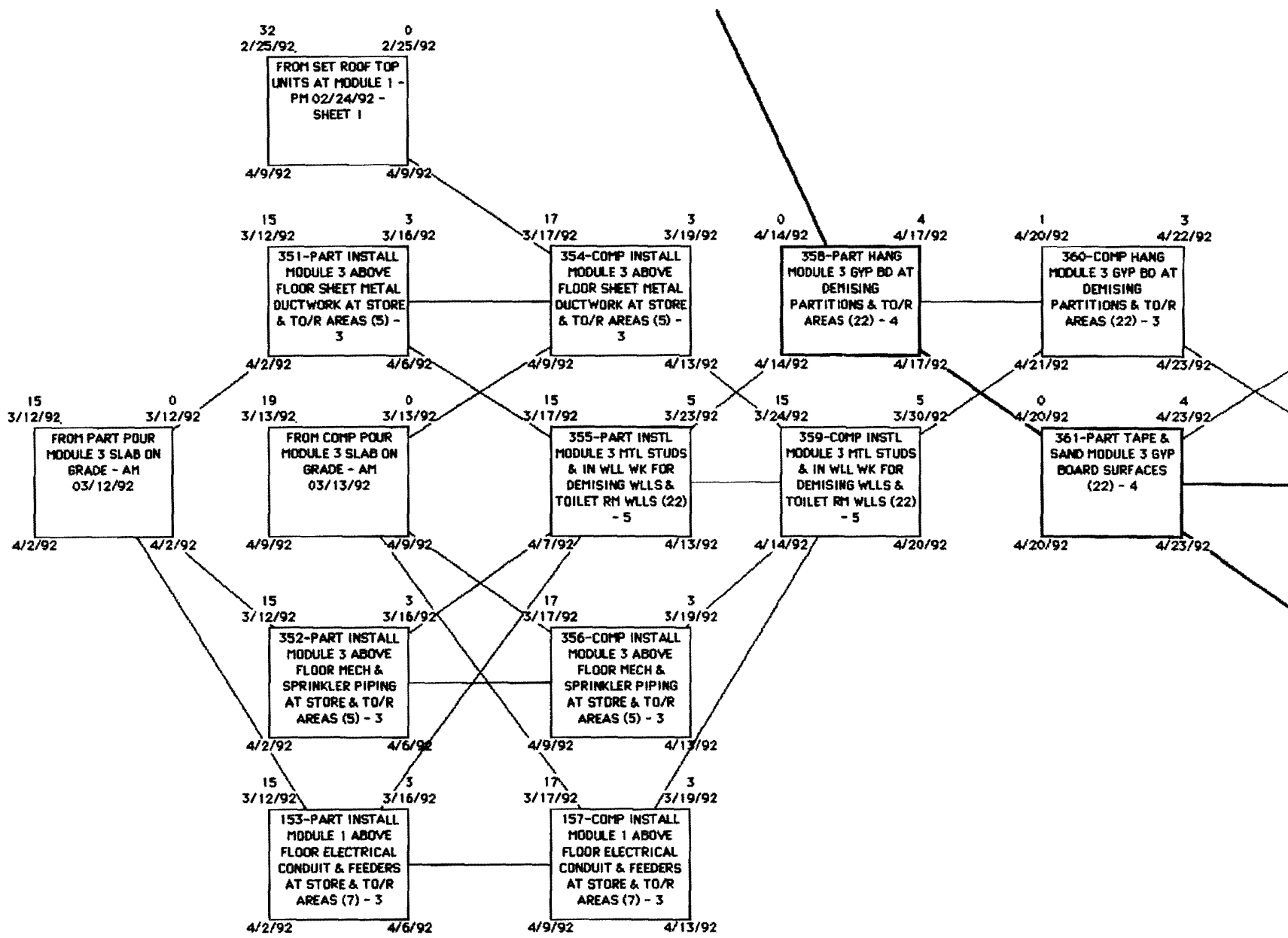


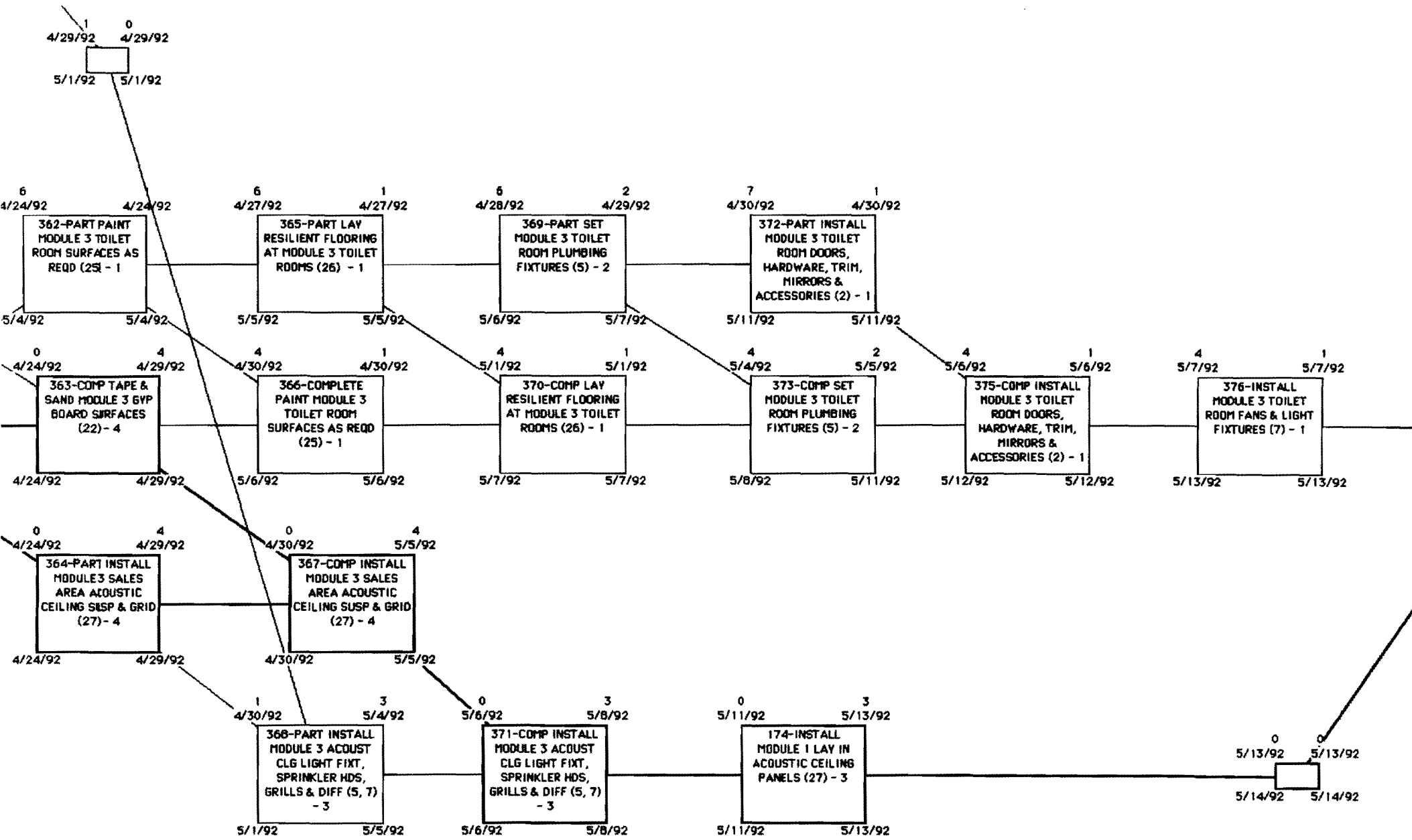


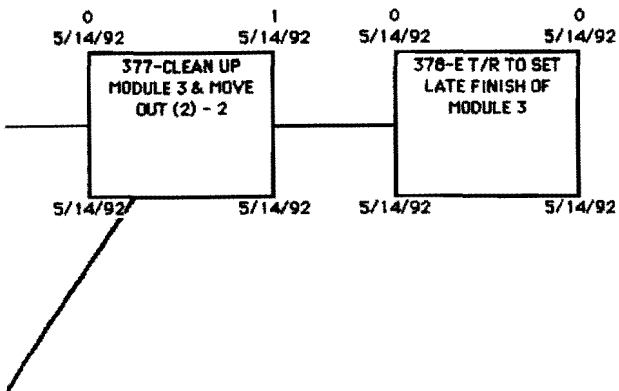












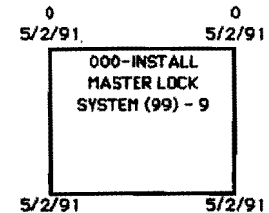
Reserved Activity Numbers

From 178, 278 & 378 up

len 151, 251, 351
hen 178, 278, 378

Issue #1 - none
Issue #2 - May 2, 1991
Issue #3 & 4 - none
Issue #5 - November 5, 1991
15ent#2 wdbry
disk 286

Responsibility codes Duration
Early start (em) Early finish



- Activity number
- Activity description
- Responsibility codes
- Estimated duration in

Late start (em) Late finish

Activity

Interior Work

NETWORK MODEL FOR
MANUFACTURER'S MARKET
PLACE - Woodbury, Minnesota

Witcher Construction
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