July 30, 1975

Subject: Monitoring Report #1

Municipal Office Center, Port Huron, Michigan

Collins & Catlin, Inc., General Contractor

Project: 75:60

Date of Monitoring: July 28, 1975 (working day 146)

Monitored from Issue P2 dated July 17, 1975

Target Contract Completion Date: Approximately September 8, 1977 (working day 686)

Note: The contractor's completion date will be earlier if at all possible. The network plan will reflect the contractor's target completion.

## Actions taken:

- Inspected project
- Conferred with Mr. Charles Smith re job progress
- Reviewed network with representatives of owner, architect/engineer and mechanical/electrical contractors
- Evaluated project status

## General Summary

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As of July 28, 1975 (working day 146) work on pits, tie beams and grade beams at the core and at the elevator shafts is well in work and expected to be substantially complete at the core by the evening of August 1, 1975 (working day 151). The target completion date was the morning of July 29, 1975 (working day 147 so the projected lag is approximately 4 working days. Monitoring Report #1 Municipal Office Center Port Huron, Michigan Page two

Another lag, more serious, relates to installation of underground utilities. It is planned that the slab on grade which is to be post tensioned will be started at the mechanical equipment room, column line 16 - 19 / B - H and move next into the tower and from there out into the garage area. Therefore, it is critical that utility work coming into the mechanical equipment and tower area be started immediately. It was due to begin no later than July 18, 1975 (working day 140). The work has not yet started and thus, there is already a lag of 6 working days. Apparently the mechanical contractor who is to install the plumbing has been awarded a large road contract and has diverted his equipment to that project. Presently it is his intent to move on the office center project Thursday morning, July 31, 1975 (working day 149) which will put him nine working days behind the current schedule. This is a real lag and critical since we are already concerned about winter weather effects on deck pours.

The mechanical contractor said it should take approximately a week and a half to install underground plumbing at the equipment room. From the equipment room he will move to the tower area with underground work and complete there while work on the floor slab on grade in the mechanical equipment room begins.

Also, critical to the work is the electrical installation which cannot be installed until after the plumbing is substantially along.

We made a major review of the anticipated floor pour schedule. Floor pours have been numbered as follows:

Pour #1	C/L 16 - 19 / B - H	Ground floor
Pour #2	C/L 8 - 16 / A - F	Ground floor
Pour #3	C/L 1 - 4.5 / D - M	Ground floor
Pour #4	C/L 4.5 - 7.3 / D - M	Ground floor
Pour #5	C/L 7.3 - 14.5 / I - M	Ground floor
Pour #6	C/L 14.5 - 21 / I - M	Ground floor
Pour #7	C/L 8 - 19 / A - F	First floor

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Pour #8	C/L 8 - 19 / A - H	Second floor
Pour #9	C/L 8 - 16 / A - F	Third floor
Pour #10	C/L 8 - 16 / A - F	Fourth floor
Pour #11	C/L 8 - 16 / A - F	Fifth floor
Pour #12	C/L 8 - 16 / A - F + ove	rhang Sixth floor
Pour #13	C/L 8 - 16 / A - F + over	hang Seventh floor
Pour #14	C/L 8 - 16 / A - F	Roof
Pour #15	C/L 1 - 4.5 / D - M	First fleor
Pour #16	C/L 4.5 - 7.3 / I - M	First floor
Pour #17	C/L 7.3 - 14.5 / I - M	First floor
Pour #18	C/L 14.5 - 21 / I - M	First floor

The following schedule of pours has been set up through the end of the year:

# Early Start/Early Finish Dates

Pour No.	Date Pour Completed Morning of	Date Fost Tensioning Completed Morning of
1	August 13, 1975 (working day 158)	August 21, 1975 (working day 164)
2	September 2, 1975 (working day 171)	September 10, 1975 (working day 177)
3	September 15, 1975 (working day 180)	October 3, 1975 (working day 194)
4	September 25, 1975 (working day 188)	October 3, 1975 (working day 194)

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## Early Start/Early Finish Dates

Pour No.	Date Pour Completed Morning of	Date Post Tensioning Completed Morning of
5	October 3, 1975 (working day 194)	October 13, 1975 (working day 200)
6	<b>October 13, 1975</b> (working day 200)	October 21, 19 <b>7</b> 5 (working day 206)
7	October 13, 1975 (working day 200)	October 21, 1975 (working day 206)
8	November 11, 1975 (working day 221)	November 19, 1975 (working day 227)
9	December 11, 1975 (working day 242)	December 19, 1975 (working day 248)
15	November 6, 19 <b>7</b> 5 (working day 218)	November 24, 1975 (working day 230)
16	November 14, 1975 (working day 224)	November 24, 1975 (working day 230)
17	December 10, 1975 (working day 241)	December 18, 1975 (working day 247)
18	December 22, 1975 (working day 249)	December 31, 1975 (working day 255)

(Note: These are taken from sheets Pl and P2 of the preliminary calculations and will be checked in detail at our next diagramming session.)

The next planning conference will bring the job on up through close-in and hopefully some work can be done on the interior rough and finish work for each of the areas.

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It is also planned during the next meeting to review the diagramming to date with major subcontractors. At this session we shall bring the network to an interim closing point which will allow us to number the nodes and if desirable, prepare a computer run for work through close-in.

Presently the network diagram carries the job through completion of all structural pours and according to the present plan of work, it appears that the job will be closed in sometime in mid or late summer 1976.

Ralph J. Stephenson, P.E.

RJS m

August 19, 1975

Subject: Monitoring Report #2

Municipal Office Center, Port Huron, Michigan

Collins & Catlin, Inc., General Contractor

Project: 75:60

Date of Monitoring: August 14, 1975 (working day 159)

Monitored from Issues P2 and P3 dated July 17, 1975 and August 14, 1975 respectively

Target Contract Completion Date: Approximately September 8, 1977 (working day 686)

Note: The contractor's target completion will be earlier if at all possible. The network plan will reflect the contractor's completion.

## Actions taken:

- Completed diagramming close-in of project with all contractors concerned
- Reviewed job progress with Mr. Martinek and Mr. Smith
- Evaluated project status

## General Summary

As of August 14, 1975 (working day 159) most major fill at the ground floor high areas is complete. Pits and tie beams are complete and underground utility work at column line 16 - 19 / B - H is presently in work. Utility installation at this area started on August 5, 1975 (working day 152) and there still remains about 5 working days on the task from next Monday, August 18, 1975 (working day 161). This will bring completion of underground work at column line 16 - 19 / B - H to August 25, 1975 (working day 166). Completion signals the start of filling and fine grading for pour #1 (see Monitoring Report #1 for location). It is estimated that to make ready for pour #1 will take about 9 working days which brings the pour date to September 8, 1975 (working day 175). The current lag on the project is approximately 18 working days. It is directly due to difficulties in installing underground utilities at the mechanical equipment room. There was a delay in start of installation of Monitoring Report #2 Municipal Office Center Port Huron, Michigan Page two

mechanical underground plumbing and in addition, electrical work and city installed fire service now must be completed. This reflects itself in a direct delay to concrete work and is a very critical lag. Mr. Smith hopes to be able to pick up some additional time as the floor pours proceed throughout the ground floor. However, it should be cautioned that an 18 working day loss of time at this season of the year will reflect itself quite directly into additional losses during the winter season. Therefore, it is to be stressed that if any time is to be picked up, it must be regained now while the weather is good.

As part of our diagramming work, we consulted with the marble contractor, miscellaneous iron contractor, sash and glazing contractor and metal wall panel contractor regarding the close-in sequencing and times. It is presently expected that when the sixth floor pour (#12) is complete it will be stripped and reshored at the south elevation overhang. At this point which is about March 30, 1976 (working day 318) installation of struts for marble will begin at the south elevation with marble erection to follow closely. Strut and marble elevation will move then to the north elevation and be completed there to the sixth floor. While marble is being erected at the south elevation, soffit miscellaneous iron and window washing track will be installed at the north elevation. Miscellaneous iron and window washing track for the overhang will then move to the west elevation, next to the east elevation and when marble is done to the sixth floor at the south elevation, soffit miscellaneous iron and window washing track of the installed at the marble is done to the sixth floor at the south elevation, soffit miscellaneous iron and window washing track of the installed.

Next, miscellaneous iron will be erected at the north elevation seventh floor when the seventh floor pour (#13) has been post tensioned. This will allow marble at the north elevation soffit and wall at the sixth floor to be installed followed by the remaining elevations of the building.

The sequence for this work is outlined on sheet P4 and has been reviewed and generally agreed to by all concerned. However, again, it should be pointed out that the calculations shown are preliminary and will be checked out as the computer run is made. Also, this is a preliminary network and is subject to evaluation and review by those concerned.

Generally our preliminary calculations show that the roof should be on the high and low areas by about early September 1976 and all glass and glazing should be done about mid-September 1976. Presently those concerned with the close-in trades feel that this plan of work is feasible. However, it will be necessary to pick up the 18 lost working days as quickly as possible to regain alignment with the proposed plan of work. Monitoring Report #2 Municipal Office Center Port Huron, Michigan Page three

It was decided the network diagram should be translated into a computer run from the beginning of the job using the original target logic and durations as shown.

We also discussed briefly movement of the rough and finish trades at each floor. It is expected that sheet metal ductwork, mechanical plumbing and rough electrical feeders will move up in the tower unit following closely upon stripping of the decks. This also includes risers as well as horizontal runouts. The target is to complete all rough mechanical and electrical work at each floor by the time the building is closed in. Also desired is to complete as much of the stud work as possible since this is generally a trade that can be exposed partially or totally to weather. If it is possible to bring the job to the point where interior finish trades such as gyp board, painting and ceiling work can begin at the same time close-in is complete, the project can probably be finished off down and out from the sixth floor through the first. Generally a project of this type runs much more smoothly if this downward finishing sequence can be followed, and it appears here that there is an excellent chance for such a plan to be followed. The matter will be studied in greater detail as the project moves on through the floor pouring sequence.

In summary, the project currently lags by 18 working days primarily in installation of underground utility work at column line 16 - 19 / B - H. This basically was caused by delayed start to underground work.

The diagram has now been prepared through close-in. I shall prepare a computer run along with a project status report as of August 15, 1975. The network will not be redrafted at this time since the rough plans of work should be adequate for our current purposes. I shall be in touch with Mr. Martinek soon to discuss future planning work meetings.

Ralph J. Stephenson, P.E.

RJS/m

March 4, 1976

Subject: Monitoring Report #3

Municipal Office Center, Port Huron, Michigan

Collins & Catlin, Inc., General Contractor

Project: 75:60

Date of Monitoring: March 1, 1976 (working day 297)

Monitored from Issue P3 dated August 14, 1975 for sheets P2, P3 and P4

Target Contract Completion Date: Approximately September 8, 1977 (working day 686)

Note: The contractor's target completion will be earlier if at all possible. The network plan will reflect the contractor's completion goal.

## Actions taken:

- Inspected project
- Participated in construction conference
- Reviewed job progress with Mr. Martinek, Mr. Smith, the architect/engineer, and the owner's representative
- Evaluated project status
- Diagrammed construction of the public meeting room (PMR) area

## General Summary

As of March 1, 1976 (working day 297) the third floor has been poured out and is ready for post tensioning. Pour #18 which is the last pour in the low rise parking deck area has also been completed and is ready for post tensioning.

The project currently lags by 52 working days in the tower unit. This is a direct lag in project progress and can be used as a measure of the job status.

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Reviewing projected target schedules with Mr. Smith, he is hoping to pick up some time in subsequent pours. There are mixed feelings about the possibility of doing this but if the weather breaks and stays good, there is a chance of reducing the floor turnover cycle. It is hoped that the sixth floor, pour #12, can be poured out by early May 1976. This could reduce the lag from its present 52 working days to from 36 to 40 working days. Since at this point it is anticipated that after stripping and reshoring the sixth floor, south elevation marble could be erected, this would then give a direct lag in close-in at that point of between 36 and 40 working days.

It should be noted that the present agreed-upon close-in sequence is shown on sheet P4 dated August 14, 1975. I strongly recommend this sequence be reviewed carefully by all contractors involved in the close-in to insure that the plan is still a valid logic sequence.

If no pickup of time is projected during the closing in, present projections indicate that the lag of 36 to 40 working days will bring close-in to early November. This is for all glazing to be completed. It should be noted that roofing is intended to be finished slightly earlier. Since roofing is a critical element for installing finish trades, it will probably mark an important milestone in being able to start interior work which must be protected from weather.

Our planning sequence has anticipated that rough interior work including masonry, above floor sheet metal ductwork, above floor mechanical piping and rough electrical conduit, along with metal studs and in-wall mechanical and electrical work, will move up as floors are cleared of shoring. Thus, rough work will move from the lower floors to the upper floors. The present plans call for start of interior finish work, generally drywall, at the core and exterior walls to begin at the 6th floor and work down and out of the building on the ground floor. This is a desirable, although sometimes difficult sequence to maintain. Its success depends upon aggressively moving rough work up right in back of the pours as they are stripped.

One point brought up by the electrical contractor was that he will need drywall in the electrical room in order to mount major panels at each floor. From discussions with him and the other contractors, it appears that this can be accomplished in limited areas by providing weather temporary protection, if required. It is the intent to meet with the contractors involved to see if this problem can be resolved. Monitoring Report #3 Municipal Office Center Port Huron, Michigan Page three

As part of our afternoon planning and monitoring, we prepared a detailed construction network for the public meeting room (PMR). This diagram took construction from foundations on through to completion and lockup. Fortunately most materials are on the job for an early work start on this area but of importance will be timely delivery of special elements required and not now on the job. Also, there will be some field dimensioning necessary because of the compound curves at the openings to the outside from the interior of the building.

Overall, it is expected that the public meeting room can be completed before the end of 1976. However, it should be remembered that temporary heat will be needed about November 1, 1976 (working day 469) and possibly earlier to keep finish trades installed both at the PMR and the tower from being exposed to cold and possibly damaging temperatures. This matter should be given careful attention at an early date.

I left the rough PMR network with Mr. Martinek who will check it over and distribute it as required.

It was decided that our next monitoring will be sometime within the next two to three months, preferably at a point where a re-evaluation of the network can be made based upon field progress on floor construction. I shall be in contact with Mr. Martinek regarding setting this next monitoring date.

Ralph J. Stephenson, P.E.

RJS m

## February 2, 1977

Subject: Nonitoring Report #4

Municipal Office Center, Fort Huron, Michigan

Collins & Catlin, Inc., General Contractor

Project: 75:60

Date of Monitoring: January 31, 1977 (working day 531)

Monitored from Issue P6 dated November 24, 1976, sheet F4B

Target Contract Completion Date: Approximately September 8, 1977 (working day 686)

Note: Presently a revised target completion date is being established. This will be firmly set at a later point when a full evaluation of delays has been made.

### Actions taken:

- Inspected project
- Reviewed job progress with Mr. Smith, with the architect/engineer and with the owner's representative
- Farticipated in construction conference
- Evaluated project status

#### General Summary

As of January 31, 1977 (working day 531) the project is being severely hampered by unseasonably cold weather, blowing snow and continued high winds. This type weather has been experienced since early November.

At present wall marble is erected on the south face up to the soffit with the exception of the false column at the center. Soffit marble is also erected except for a corner piece at the floor of the 6th level.

On the west elevation all marble is erected to the soffit and soffit marble is substantially complete. Such pieces are just being put in place at the west elevation.

On the north elevation, all marble to the soffit, including the soffit has been erected and the lower marble to sill height has been erected at the 6th floor. On the north upper unistruct and miscellaneous iron erection is in work. Menitoring Report #4 Municipal Office Center Port Huron, Michigan Page two

On the east elevation such is partially in place but remains to be trimmed and plumbed. Marble is partially up on the elevator shaft and a portion of the moffit is erected.

In discussions at the construction meeting, it was decided that most marble on all elevations up to the soffit level could be completed within the next 10 to 15 working days. This, of course, is presuming that reasonable work progress can be made without major disruption by weather and that crew sizes can be maintained. Using this assumption on marble, it is estimated that completion of all sash and glazing at the west, south and north elevations can be completed about March 1, 1977 (working day 552) to the soffit. East elevation glazing could be completed by March 14, 1977 (working day 561) to the soffit level.

Reviewing close-in of the 6th floor, this will probably be the most difficult portion of the project. It is expected marble could begin there within the next 10 to 15 working days, after other elevations are complete. Best projections presently are that marble work will take approximately 50 working days to complete at the 6th floor with sash and glazing being completed about 10 working days later. If we presume that marble can begin in 10 working days from January 31, 1977 (working day 531), this would bring completion of the 6th floor close-in to 70 working days later or May 9, 1977 (working day 601). It was emphasized at the construction meeting that this duration did not include any special allowance for unusual weather. However, it does correspond roughly to the original durations established that did assume a normal amount of winter weather. We shall try to keep the early May or mid-Hay date as a close-in point for the vertical closure at the 6th floor.

Reofing on the penthouse is presently in work and could be completed within the next week. Roofing at the seventh floor (roof over the 6th floor) cannot be installed until the marble parapet is erected and the associated cants and blocking are also in place. Another restraint on roofing at the 6th floor roof is the marble at the elevator at the penthouse floor. Apparently the design of the marble at this point in the building has still not been remoived and I strongly recommend that immediate attention be given this matter. It was discussed on November 24, 1976 (working day 486) but apparently a decision has not been made as yet. This is very critical since it will be necessary to fabricate marble for this particular detail if revisions are made. The eless-in of the roof at the 7th floor is important to putting the 6th floor in the dry.

Assuming a close-in point of May 9, 1977 (working day 601), this date is 179 working days later than the original close-in point projected of August 25, 1976 (working day 422) shown in the Issue F3 network dated August 14, 1975. The target completion date from that close-in point was estimated at May 18, 1977 (working day 608). Adding the current lag of 179 working days brings the new completion date to February 1, 1978 (working day 787).

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It appears presently this would be a reasonable target assumption although there is always the possibility of compressing the interior finish work process once installation actually begins. In addition, there is a further possibility, according to Mr. Smith, of concurrently working multiple floors on the finish work. This, too, would help reduce the total time required from the close-in point.

Another alternative might be to begin finish work at the 5th level rather than the 6th level. As it is, there seems to be a possibility that 5th floor finish work at the core might be able to be started earlier than the 6th floor because of better weather protection on the floor. If this is the case, the sequence might well be on finish work from 5 on down, deing 6 concurrently when it is closed in. This could considerably compress the time and possibly recepture some of the current lag.

It is the intent to meet again on March 7, 1977 to update the diagram and to get a better feeling for a close-in point and the ultimate completion date.

Ralph J. Stephenson, P.E.

rjs R

June 1, 1977

Subject: Monitoring Report #5

Municipal Office Center, Port Huron, Michigan

Collins & Catlin, Inc., General Contractor

Project: 75:60

Date of Monitoring: May 31, 1977 (working day 616)

Monitored from Issue P7 dated April 4, 1977

Target Contract Completion Date: Approximately September 8, 1977 (working day 686)

Note: Our present Issue P7 dated April 4, 1977 shows a total completion date at the first floor of the morning of December 5, 1977 (working day 747). This was used as the monitoring target.

## Actions taken:

- Inspected project
- Participated in construction conference
- Evaluated project status

## General Summary

As of May 31, 1977 (working day 616) the project is encountering major difficulties with a few key deliveries that are delaying work. The major of these is insulation, both rigid and non rigid insulation. This material has been promised for some time but is not yet on the job. It is currently restraining board work at both the ground and upper floors. The insulation status is not accurately known but it is anticipated that by next Monday, June 6, 1977 (working day 620) insulation should be delivered. However, there is no major assurance of this.

Evaluating 6th floor work against delivery of insulation, it appears that the projected lag at the 6th floor could be as much as 5 to 15 working days measured against late start dates. This is in finish trades which are still expected to move from the 6th floor down, finishing out at one.

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Ground floor work, due to its urgent nature, is anticipated to be done concurrently or ahead of the 6th floor. The target total completion date for ground floor is September 26, 1977 (working day 698). The current lag at the ground floor primarily in insulation and board work is projected at about 16 working days over our Issue P7 network dated April 4, 1977. This plan showed the ground floor being complete by August 19, 1977 (working day 673). Adding the lag of 16 working days brings projected completion now to September 12, 1977 (working day 688) which is just slightly ahead of the desired turnover point. However, it should be noted that this loss has occurred over the past two months and the size of the lag which has been incurred in that short period of time is of concern.

At the ground floor another critical item is release of Bulletin #43. This bulletin is now being priced and it is urgent that rapid approval be given. The current lag on the bulletin is about 24 working days but this could be reduced if the work can be put into the field immediately.

If insulation delivery can be expedited to the job and óth floor work begun as presently projected, it is possible to finish out the building from the 6th floor on down. However, there has been momentum gained by the plastering trades in moving up from the first floor. If this finishing trend is not reversed soon there will be enough work underway in the finish trades so it might be difficult to change direction. Therefore, I strongly recommend that everything possible be done to get finish work started at the 6th floor.

Presently at six there still is about 2 weeks of sheet metal ductwork to be done, the ceiling suspension for plaster work at the elevator lobbies must be installed and there remain some gyp board partitions at the stairwells to be installed. This work should be accomplished as rapidly as possible if it is the intent to finish down and out of this building.

Giass problems still plague the job and although not delaying close-in, are presently a source of aggravation relative to finishing the exterior and interior of the building. Glass required for the entire rest of the project except at the connecting link and replacements for broken panes is now in shipment and should be on the job by Thursday, June 2, 1977 (working day 618). There is some difficulty in confirming the fact that this shipment is actually on the way and efforts are being made now to Monitoring Report #5 Municipal Office Center Port Huron, Michigan Page three

trace the truck. It is, of course, important to get this glass on the job since it interferes with other work in progress, particularly at the 6th floor where all exterior glass has to be replaced.

At the elevators it will be necessary to totally enclose the shafts with smooth materials. Plaster is presently being applied. A' bulletin must be issued to cover extra work in the elevator shafts. Extensive discussion of the matter indicated that elevator shaft sheathing should not delay work on finishes at the interior of the floors.

At the public meeting room, the roof is on, the sash is substantially installed and we are now awaiting the arrival of glass. No rough overhead work has been done inside on sheet metal, piping or electrical. It is estimated that rough interior work should take no more than 5 to 10 working days and installation of glass should take no more than 10 working days. Thus, within the next 3 weeks, the building should be closed in and if desired, mechanical and electrical above-ceiling work could be completed.

It can be assumed that the interior finishes of the public meeting area are such that between 90 and 100 working days would be required to do the interior finish work from the time the rough work is complete and the building is completely closed to weather. Thus, this area is now becoming important.

So far as outstanding revisions are concerned, Bulletin #43 affecting the first floor is being priced, as noted above. A bulletin for installing sheathing at the east and west elevators has not yet been issued and will be required for this work to be completed. Also, reflected ceiling plans must be prepared for all floors since the present reflected ceiling plans indicate only the typical floor layout. A preliminary reflected ceiling plan has been prepared and is being reviewed and approved by the city.

The mirror glass installation at the elevator on the 6th floor has not yet been detailed and this matter must be cleared before permanent glass can be installed.

In summary, the project is struggling to maintain adherence to the present Issue P7 plan of work dated April 4, 1977. Major problems are being encountered in delivery of insulation which restrains

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installation of interior board. Also revisions at the ground floor are causing temporary problems but these should be resolved shortly. The lags are becoming serious although if road blocks to maintaining job continuity can be cleared away within the next two or three weeks, the job should be able to regain speed and pick up some time.

Ralph J. Stephenson, P.F.

R.S m

August 17, 1977

Subject: Monitoring Report #6

Municipal Office Center, Port Huron, Michigan

Collins & Catlin, Inc., General Contractor

Project: 75:60

Date of Monitoring: August 17, 1977 (working day 671)

Monitored from Issue P7 dated April 4, 1977

Target Contract Completion Date: Approximately September 8, 1977 (working day 686)

Note: This date has been extended by change order and currently the target is February, 1978. An exact time will be established at a later date.

## Actions taken:

- Inspected project
- Conferred with Mr. Martinek, Mr. Smith and Mr. Neil Davis re job progress
- Evaluated current project position

### General Summary

As of August 17, 1977 (working day 671) the project is encountering some serious delay difficulties that prevent work continuity at all floors. There are four or five fundemental items affecting parts or all of the job. These include:

- The possibility of using disconnect plugs at each light fixture
- The pricing, selection and award of a paint contract
- The delivery of some hollow metal, particularily the door frame at the ground floor that was affected by bulletin #43

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- The purchase and delivery of raised computor flooring by owner
- The issuance of a bulletin to revise the electrical system to a low voltage installation
- The release of a bulletin regarding food service equipment and related items at the fourth floor
- The release of various service outlets, including electrical and mechanical, for owner equipment such as printing equipment
- Issuance of a bulletin for a door at the first floor rubbish chute area

In total they represent a serious potential for job hold up and extension. They also, and equally important, represent potential cost additions to the job which each month increase due to continuing escalation of both labor and material. This cost increase of course, is passed along by the various suppliers and others involved in the change. Thus, it is important <u>now</u>, to resolve as many of these loose ends as it is possible.

At the ground floor, which is presently the most critical area, the delay makes it appear that carpet will be complete there sometime from October 2, 1977 (working day 703) on through to as late as possibly October 17, 1977 (working day 713). Much will depend upon prompt processing of the paint problem, the disconnect switch decision, the low voltage change over and of course the receipt of the hollow metal frame and door which is at the photo lab area. All of these items are critical and together represent a very serious bottleneck.

## First Floor

At the first floor the current lag is about 25 working days in taping and sanding dry wall. This area will be held up shortly by the door frame addition at the trash chute, the need to award a contract for painting and the bulletin on disconnects at light fixtures. The lag above is measured against the issue P7, target date of approximately December 5, 1977 (working day 747). Monitoring Report #6 Municipal Office Center Port Huron, Michigan

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#### Second Floor

The second floor is currently maintaining fair progress compared to the issue #1 network, target completion of November 11, 1977 (working day 732). However, this progress will soon be disrupted by the several decision items discussed above.

In addition to the low voltage revision, the pricing and contract award on painting and the change on disconnects at light fixtures, it will be necessary to provide the computer floor sometime in the near future. Apparently, the owner is presently working on this item.

## Third Floor

The current lag at the third floor ranges from 10 to 20 days behind the target of October 21, 1977 (working day 717) primarily in ceramic tile and in start of ceiling grid. The third floor will be further delayed by revisions to the low voltage system, the electrical disconnect decision, the change order on painting and in addition must have a bulletin issued for the sink at the print room.

#### Fourth Floor

The current lag at the fourth floor ranges from 22 to 38 working days in the office areas over a target completion of September 30, 1977 (working day 702) as given in the issue #P7 network dated April 4, 1977. (Note sheet P9 that issue #P7 was not noted; however, the September 30, 1977 (working day 702) target completion identifies the sheet.)

Items of delay at the fourth floor include, a bulletin to be issued for added rooms, the change order on painting, the revision to a low voltage system, installation of electrical disconnects and most recently, the addition of food service equipment which will require, in addition to floor plumbing, installation of two hoods at the ceiling. This matter could become very important since apparently the air discharge of the two hoods is such that additional air must be provided to the floor if they are operated simultaneously. This problem is currently under study by the mechanical engineer.

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#### Fifth Floor

The approximate current lag at the fifth floor is about 41 working days primarily in the installation of backing and tin tube piping. This is measured against a target completion in the issue P7 of July 31, 1977 (working day 661). The items of potential delay at the fifth floor include, issuant of a change order for painting, the revision to a low voltage system and the bulletin on the disconnects at the light fixtures.

### Sixth Floor

This area lags by about 54 working days over an issue P7 target completion of August 19, 1977 (working day 673). The area is a leased area and as yet full floor layouts are not available. There is no current word as to when information will be available on how the floor is to be built.

Decisions presently affecting the floor in addition to the leasing arrangement include, the painting change order, work on the low voltage system and installation of the electrical disconnects.

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Thus the job presently is slowing measurably in continuous work effort since the trades are jumping from area to area wherever they can find work. It is critical to complete the ground floor but as noted above there are many restraints on this area proceeding continuously on through to completion. I strongly suggest every effort be made to clear problem areas at the ground floor selectively if at all possible.

Another area of concern is the lobby and the public meeting room. It appears to me that there could be as much as three to six months of additional work in these two areas. Since the lobby is the main entrance into the building, there will be a strong demand for this space to become available and usable at the same time the upper floors of the building are put into use. Therefore, the lobby becomes a very critical link from the outside.

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I suggest at our next monitoring session we further consider the above points and perhaps where difficult work remain, we should prepare small summary diagrams of these areas.

I shall be in touch with Mr. Martinek as to the next meeting date.

Ralph J. Stephenson P.E.

RJS

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