

June 19, 1973

Subject: Monitoring Report #1  
Phase One, Hurley Hospital, Flint, Michigan

Project: 73:23

Date of Monitoring: June 5, 1973 (working day 110)  
(using 1973 - 74 working day calendar)

Actions taken:

- Participated in pre-construction meeting at site
- Inspected site

Starting Date: To be set at May 24, 1973 (working day 103)

Target Completion Date: January 11, 1975 (working day 518 approximately)  
- to be confirmed

General Summary

This meeting was a pre-construction conference to establish general field and office procedures. A complete agenda was provided and the discussion revolved around items that affected early deliveries, long lead time items, purchasing, site access, job site layout and such critical early actions. It is the intent to set trailers immediately and construction will start on the job site Monday, June 11, 1973 (working day 114).

The matter of labor problems was discussed and all contractors agreed that presently there are no major difficulties although final contracts have not been signed by some of the trades. It was also pointed out that there currently is a strike of pipe and steam fitters in Bay City. However, all generally agreed that the labor situation does not look serious so far as work stoppages are concerned.

Items mentioned that are of major interest at the present time include:

- Kitchen equipment layout for floor pours
- Temporary permits for foundation work
- Notification of all appropriate governmental authorities re start of construction

Monitoring Report #1  
Phase One, Hurley Hospital  
Flint, Michigan  
June 19, 1973  
Page two

RALPH J. STEPHENSON, P. E.  
CONSULTING ENGINEER

- Tabulation of long lead time items for inclusion in early network planning program. (This material has been provided in preliminary form by the general contractor and the electrical contractor.)
- Adequate planning so hospital service is not interrupted at any time
- Preliminary power shutoff schedules
- Detailed planning re getting kitchen equipment into building
- Pinpointing location of owner's switchgear and transformers
- Use of existing elevators
- Distribution of shop drawings and cuts on equipment
- Job staffing including superintendents and foremen
- Disposition of Somat equipment

It was established that our first major diagramming session will be held on Monday, June 18, 1973 at the hospital. This meeting will primarily concern early work and we will make every effort to plan the building up through total close-in and start of rough and finish interior work. Each contractor involved should have at this meeting a responsible party from his office who is authorized to make planning decisions. It would be of help if each of the contractors could also have his superintendent at the meeting. It appears that all parties to the contract are geared to perform at a maximum effective level. The building team looks like a good one and all connected with the job are quite obviously anxious to get underway and move the job ahead quickly. Of prime urgency will be to aim for close-in just as quickly as possible so as to carry work on the project through the winter.

  
Ralph J. Stephenson, P. E.

RJS/m

Monitoring Report  
Phase One, Hurley Hospital  
Flint, Michigan  
June 19, 1973  
Page three

RALPH J. STEPHENSON, P. E.  
CONSULTING ENGINEER

To: Mr. Edward Evans  
Midwestern General Contractors, Inc.  
G-3573 Flushing Road  
Flint, Michigan 48504

Mr. Donald Eitniear  
Newkirk Electric Assoc, Inc.  
2751 Lippincott Blvd.  
Flint, Michigan 48507

Mr. Les Smith  
Davanay Plumbing & Heating  
2630 Lippincott Blvd.  
Flint, Michigan 48507

Mr. Jim Stiles  
Weinstein Electric Company  
213 First Avenue  
Flint, Michigan 48502

Mr. John Data  
c/o Hurley Hospital Engineering Dept.  
Sixth and Begole Streets  
Flint, Michigan 48502

Mr. John R. Fugard, Jr.  
Fugard, Orth & Assoc., Inc.  
520 North Michigan Avenue  
Chicago, Illinois 60611

*Kurt Koentopp*  
Mr. ~~Gene Koentopp~~  
Fugard, Orth & Assoc., Inc.  
520 North Michigan Avenue  
Chicago, Illinois 60611

Mr. Austin Gilbert  
c/o Hurley Hospital Engineering Dept.  
Sixth and Begole Streets  
Flint, Michigan 48502

Mr. Richard C. McCormick  
c/o Hurley Hospital Engineering Dept.  
Sixth and Begole Streets  
Flint, Michigan 48502

Mr. Sid Israel  
Great Lakes Hotel Supply Company  
1961 Grand River  
Detroit, Michigan 48226

June 20, 1973

Subject: Monitoring Report #2

Phase One, Hurley Hospital, Flint, Michigan

Project: 73:23

Date of Monitoring: June 18, 1973 (working day 119, 1973 - 74 working day  
calendar)

Actions taken:

- Inspected project
- Prepared preliminary network diagram through close-in

General Summary

Paving has been removed at the area, contractors have moved trailers on the job site, temporary utilities have been installed and the construction fence is partially erected. Excavation is expected to start for footings at the south third of the new addition on June 19, 1973 (working day 120).

Our planning at this session took into account the work necessary to build the structural frame and close in the new addition. Several items were discussed in the planning process. One was the assignment of responsibility codes to define the parties involved in each activity. Responsibility codes selected are as follows:

<u>Responsibility Code</u>	<u>Party</u>
1	Midwestern General Contractors, Inc.
2	Davanay Plumbing & Heating, mechanical contractors
3	Weinstein Electric Company, electrical contractors
4	Great Lakes Hotel Supply Company
5	Newkirk Electric Associates, Inc. communications division
6	Fugard, Orth & Assoc., Inc., architects and engineers

Responsibility Code

Party

7

Hurley Hospital Engineering

Each task in the network will be assigned a responsibility code, or multiple codes if more than one contractor or agency is involved. This will allow selective computer runs to be made designating the work to be accomplished over a given period of time and who is responsible for accomplishing it.

At the planning conference we also pinpointed several early critical items that will be soon needed on the job site. These include:

- Early foundation resteel - some already on the job site
- Building permits - currently being obtained
- Early hollow metal frames - to be detailed and approved. Concurrently, hardware templates must be provided for fabrication of the frames.
- Approval of brick sample wall - wall must be laid up and approved; brick has been selected.
- Miscellaneous iron columns and beams - there are several structural steel members that are used in early construction for shoring and other support areas - some of these are critical
- Owner decision on conduit and precast manholes - decision expected almost immediately
- Early resteel for columns and supported decks above the ground floor - supported deck work is due to start sometime the middle of July; early resteel for these supported floors will be needed then
- Resolve electrical interference at column H4 - owner and architect/engineer are now working on this

Monitoring Report #2  
Phase One, Hurley Hospital  
Flint, Michigan  
June 20, 1973  
Page three

RALPH J. STEPHENSON, P.E.  
CONSULTING ENGINEER

- Fabricate and deliver precast fascia panels - several types required and all are critical to erection of exterior masonry. I suggest careful attention be paid to the anchoring details.
  
- Kitchen equipment rough-in layout for the first floor - apparently this should pose no major problem but is an item that should be followed closely so that there will be no holdup in forming and setting in-floor work at the first floor supported slab (kitchen level)

Overall work on the job will begin at the south third of the foundations and proceed as presently planned to the north third and then back to the middle third. This jump sequence is due to the need to use heavier equipment for digging the deeper middle third footings. It is expected that the mechanical and electrical contractors will work closely in the excavated areas with the general contractor to install or relocate electrical conduit, sub drain lines and sewer lines.

There is some minor structural reconstruction to be accomplished at the existing tunnel and areaways. The intent is currently to complete backfilling to grade at all three sections of the foundation, middle, north and south thirds; to pour the ground floor on grade and then to start up with the supported floor system off of the concrete slab. This sequence forces the job into cold weather slightly but all contractors agreed it would save time at a later date when close-in and above floor operations became critical.

It appears with our present plan of work that supported floors above grade will begin sometime the middle of July and continue on through with the last pour at the penthouse roof slab being made early in November. Exterior masonry is expected to start near the end of September and continue through to the middle of January, after which all insulation and roofing will be installed. Close-in of the building is presently projected for the early part of February 1974. These dates are all shown in working days on the preliminary network diagram, Issue P1, which has been computed and distributed to all parties concerned.

It should be cautioned that the preliminary network is a rough diagramming study and is subject to further review and approval by all concerned. However, the dates that have been obtained are believed to be reasonably accurate and can be used for preliminary planning purposes.

Monitoring Report #2  
Phase One, Hurley Hospital  
Flint, Michigan  
June 20, 1973  
Page four

RALPH J. STEPHENSON, P.E.  
CONSULTING ENGINEER

A critical area that will be hard to plan is the transformer and switchgear rooms at the ground floor. It is desirable to get the very large pieces of electrical equipment set in place quite early. To do this, we must insure that the entrance doors to the two rooms at the ground floor level are large enough to take all of the equipment. Apparently this has been checked but will be further confirmed.

I will now check the preliminary network diagram, sheets P1 and P2, Issue P1 dated June 18, 1973 and draft it into final form for early processing. This network meanwhile should be reviewed by all contractors and others affected and comments forwarded to me if changes are to be made. I would appreciate having any revisions to the network diagram, Issue P1, in my hands no later than Friday, June 29, 1973, so changes can be made before the final computer run on the close-in diagram is made. If I do not hear from any parties to the contract by that date, I shall assume that the information we are presently working to is correct.

  
Ralph J. Stephenson, P.E.

RJS  
m

To: Mr. Edward Evans  
Mr. Les Smith  
Mr. Jim Stiles  
Mr. John Data  
Mr. John R. Fugard  
Mr. Curt Koentopper  
Mr. Austin Gilbert  
Mr. Richard C. McCormick  
Mr. Sid Israel  
Mr. Donald Eitniar

July 13, 1973

Subject: Monitoring Report #3  
Hurley Hospital Phase One  
Flint, Michigan

Project: 73:23

Date of Monitoring: July 10, 1973 (working day 134)

Actions taken:

- Inspected project
- Conferred with Mr. Ed Evans re job progress
- Participated in construction conference
- Evaluated job progress

Starting Date: May 24, 1973 (working day 103)

Completion Date: January 11, 1975 (working day 518 approx.)

General Summary

Work is currently about ten working days behind the present plan of work as outlined in Issue P1 dated June 18, 1973. The lag is primarily at the south third of the building where exterior foundation walls are presently in work, to be followed by installation of underground mechanical plumbing. Concurrently with these operations, installation of roof supports at the south tunnel and underground power feed conduit to columns A1 and A2 will start. This work all leads to completion of backfilling at that south third, currently scheduled for July 15, 1973 (working day 138).

Backfilling is followed immediately by construction of the south third columns to the first supported floor level, and preparation of sub base and setting in-floor work for the south third slab on grade. The south third slab on grade is due to be poured out by July 23, 1973 (working day 143) and is to be followed immediately by start of forming for the south third first floor supported slab.

The current lag of ten working days is directly in this sequence of work. It is very important that the time be picked up now since any continuation of this lag extends the job that much further into cold weather concreting operations. This, of course, is not desirable.



Monitoring Report #3  
Hurley Hospital Phase One  
Flint, Michigan  
July 13, 1973  
Page two

RALPH J. STEPHENSON, P. E.  
CONSULTING ENGINEER

The sequence of construction still is to be maintained from the south third of the building to the north third and back to the middle third. The sequence applies to the slab on grade, as well as to forming supported decks. All contractors at the meeting agreed this sequence was to be followed.

There have been some extenuating circumstances insofar as the lag is concerned. First, weather has been quite bad and the considerable precipitation has slowed work. Second, several unexpected underground obstructions have been encountered. These had to be removed in some cases and worked around in others. The site is very tight and trades are having difficulty in moving freely in the job area.

In conversations with the contractors, it appears there is some chance of picking up a good share of this lag time in the near future. They are all aware of the problem and will make concerted efforts to regain the lost days.

An item that soon will be very critical is the kitchen equipment rough-in layout for the first floor. Forming for this floor is due to start on July 23, 1973 (working day 143). Approved rough-in drawings will be needed by then or earlier. Thus, it becomes absolutely imperative to get this work in, approved and issued. Mr. Fugard said he would check with Mr. Israel directly on this matter.

Reviewing the status of early items we find the following:

- Building Permits - All permits have not yet been obtained. However, Mr. Evans and Mr. Meleski said that they will have these almost immediately. Currently there appears to be no problem although I suggest that all permits be obtained just as soon as they can to avoid working under conditions that may cause delays in the future.
- Hardware templets and hollow metal frames - In work at the present time and currently should cause no delay to the job. Mr. Meleski reports that the supplier of the stainless steel doors is on strike and there is some thought of an alternate supplier being submitted.
- Approval of brick sample walls - This wall is laid up and Mr. Fugard said that it would be viewed by him on this trip.

Monitoring Report #3  
Hurley Hospital Phase One  
Flint, Michigan  
July 13, 1973  
Page three

RALPH J. STEPHENSON, P. E.  
CONSULTING ENGINEER

- Miscellaneous iron columns and beams - Shop drawings on these have been approved. No difficulties currently anticipated.
- Early resteel for columns and supported decks above the ground floor - Supported deck work is still due to start the middle of July and apparently all shop drawings are well under control. Fabrication and delivery should be followed closely.
- Fabrication and delivery of precast fascia panels - No samples have been yet submitted and since precast work tends to have long lead times, I strongly suggest that shop drawings and samples be prepared very early.
- Kitchen rough-in - This matter was mentioned above.

The electrical contractor has suggested his major suppliers provide drawings for review only on long lead time equipment. This will allow them to acquire material and miscellaneous component equipment while waiting for approval of shop drawings. Mr. Stiles feels there is a chance of saving 8 to 10 weeks in delivery times on electrical equipment by following this procedure. I suggest it be seriously considered. Mr. Koentopper asked about shop drawings for penthouse air handling equipment. These are large pieces of equipment and close coordination is required for setting this equipment while constructing the structure. Major mechanical/electrical equipment at the penthouse is currently due to be set on December 6, 1973 (working day 239) and it will be necessary to get shop drawings in work soon to meet this date.

The rough network diagram, Issue P1, dated June 18, 1973 is now being drafted into final form and when the interior work has been completely diagrammed, it will be re-issued in computerized form. The next diagramming session will be Tuesday, July 17, 1973 starting at 8 A.M. in the basement classroom of the nurses dormitory. At this session we will concentrate heavily on diagramming interior work which follows erection of structural frame and close-in of the building. The goal will be to completely diagram the entire interior installation for construction phase 1.

Monitoring Report #3  
Hurley Hospital Phase One  
Flint, Michigan  
July 13, 1973  
Page four

RALPH J. STEPHENSON, P. E.  
CONSULTING ENGINEER

It should be noted that many building materials today are in short supply, one of which is quarry tile. I recommend that any quarry tile requirements be evaluated early and commitments made so that deliveries can be reasonably assured.

  
Ralph J. Stephenson, P. E.

RJS/m

To: Mr. Edward Evans  
Mr. Les Smith  
Mr. Jim Stiles  
Mr. John Data  
Mr. John R. Fugard, Jr.  
Mr. Curt Koentopper  
Mr. Austin Gilbert  
Mr. Richard C. McCormick  
Mr. Sid Israel  
Mr. Donald Eitnearn

August 9, 1973

**Subject:** Monitoring Report #4  
Hurley Hospital Phase One  
Flint, Michigan

**Project:** 73:23

**Starting Date:** May 24, 1973 (working day 103)

**Completion Date:** January 11, 1975 (working day 518 approx.)

**Actions taken:**

- Inspected project
- Continued diagramming interior work
- Evaluated job progress

**General Summary**

Work in the field is currently 7 to 11 working days behind the present plan of work in Issue #1 dated July 9, 1973. The lag is primarily in preparing for the slab on grade at ground level. It was originally intended to begin filling and fine grading for the slab on grade at the south third of the building on July 27, 1973 (working day 147). As of August 7, 1973 (working day 154) this work has not yet begun. Several reasons account for the delay, among which are encountering of unanticipated underground obstructions and some delays to installing deeper underground mechanical and electrical utilities. After a brief discussion of the lag, it was decided to shift the initial slab on grade pour from the south third to the north half of the area. This, because the north half is generally ready to receive final granular backfill, fine grading and the slab on grade with little additional work. Mr. Evans feels he will make the area ready for pouring and attempt to get a slab poured there within the next week to two week period. Thus, in our plan of work, the south and north thirds at the slab on grade and at the first floor supported deck will be interchanged.

The ground floor slab on grade was due to be poured out at the middle third by August 24, 1973 (working day 168). The first floor supported deck was due to be poured out by September 10, 1973 (working day 178). It is the intent of the contractor to try and maintain this first floor target.

Monitoring Report #4  
Hurley Hospital Phase One  
Flint, Michigan  
August 9, 1973  
Page two

**RALPH J. STEPHENSON, P. E.**  
CONSULTING ENGINEER

Very critical to work at the first supported deck is accurate location of all plumbing and kitchen rough-in openings, thimbles, sleeves and inserts. The kitchen contractor has not yet provided this detail information. At the diagramming conference he promised it would be in the mail by the end of the day. This information is vital to unimpeded progress at the first supported deck. The contractors also requested the kitchen contractor provide buy-out brochures showing characteristics of all equipment purchased.

Another matter of concern revolved around issuance and reception of bulletin work. There apparently is some confusion about where bulletins have been sent and who is processing these once they leave the architect/engineer's office. I suggest an early resolution of this matter be made since prompt processing, particularly of early bulletins is critical to the job.

In our diagramming work we concentrated upon completing interior finish work for the first floor (kitchen area) in the new addition and in the area immediately adjoining at the existing cafeteria. We also rechecked the ground floor network and interrelated it to the first floor diagram. Presently rough mechanical and electrical work is intended to move up from the ground floor to the first floor while finish work starting with prime painting moves from the first floor down and out at the ground floor. Our planning work concentrated on tying together the general, mechanical, and electrical trades into the kitchen equipment installation. We also worked at coordinating the move out of the cafeteria for remodeling of the D wing at the first floor. Date of evacuation at the cafeteria was not determined but will be sometime near the latter interior finishing stage on the first floor at the kitchen area.

As a part of our diagramming work we rechecked the ground floor diagram and made selected revisions over the Issue P2 network. I have mailed copies of the revised diagrams for the ground floor and first floor to all concerned for their review. Meanwhile, I shall start drafting these networks into final form for issue.

At this meeting we distributed to all of the contractors, the architect/engineer and owner copies of the Issue #1 network plan dated July 9, 1973. Issued with each network diagram was a computer printout with complete listings of all tasks by node, early start, late start, late finish and total float sequence. Also distributed was the first issue of the project schedule status as of August 6, 1973 (working day 153), and projected work for each responsibility code over the next four week period through August 31, 1973 (working day 173). This data will be issued generally every two to four weeks.

Monitoring Report #4  
Hurley Hospital Phase One  
Flint, Michigan  
August 9, 1973  
Page three

**RALPH J. STEPHENSON, P. E.**  
**CONSULTING ENGINEER**

I explained in detail the use of each of these issued documents and from here on shall prepare project analyses and reports using these networks and printouts. If there is any clarification required or questions, please call or write me.

It should be noted that the small diagram for the locker room and toilet room in the existing building (Code GED) is shown on the top of drawing two but because it was a late diagram was not included in the computer printout. However, the pertinent schedule information for this network plan is given directly on the diagram.

The current network is complete up through close-in of the building and we will tie in the remainder of the interior finish work for stages one and two as soon as we have completed our network diagramming work. The next diagramming session has been set for Tuesday, August 28, 1973 at the site.

Ralph J. Stephenson, P.E.

RJS  
m

To: Mr. Edward Evans  
Mr. Les Smith  
Mr. Jim Stiles  
Mr. John Data  
Mr. John R. Fugard, Jr.  
Mr. Curt Koentopper  
Mr. Austin Gilbert  
Mr. Richard C. McCormich  
Mr. Sid Israel  
Mr. Donald Eitniear

August 16, 1973

Subject:       Monitoring Report #5  
                  Hurley Hospital Phase One  
                  Flint, Michigan

Project:       73:23

Starting Date: May 24, 1973 (working day 103)

Completion Date: January 11, 1975 (working day 518 approx.)

Monitored from Issue #1 on August 14, 1973

Actions taken:

- Inspected project
- Participated in construction conference
- Evaluated job progress
- Color coded networks

General Summary

The projected lag on the project as of August 14, 1973 is about ten working days primarily in construction of the ground floor slab on grade. It is now intended to pour out the north third floor slab on grade first rather than the south third as was originally intended. Reasons for this were outlined in the previous monitoring report. At the north third columns to the first floor have been poured and filling and fine grading are well in work. Mr. Evans estimates that this area will be ready for a slab pour by the end of the week which means by August 20, 1973 (working day 163), the north slab on grade will be ready to erect first floor form work off from. It is presently the intent as Mr. Evans discussed in the construction meeting, to recapture the present lag by increasing manpower on forming and setting in-floor work for the first floor. The target date for pouring out the first floor supported deck is September 10, 1973 (working day 178). It will be difficult to meet this date but every effort should be exerted trying.

During the construction conference we reviewed the four week project schedule status taking each item for each party on the project in turn. Also as part of the meeting we reviewed quarry tile delivery with the tile sub contractor. He said that presently there is a three and one half to four month delivery on quarry

Monitoring Report #5  
Hurley Hospital Phase One  
Flint, Michigan  
August 16, 1973  
Page two

RALPH J. STEPHENSON, P. E.  
CONSULTING ENGINEER

tile following approval. Presently we will need quarry tile on the job approximately February 5, 1973 (working day 280). Therefore, it is critical we select a color and approve a sample as soon as possible. This will be done immediately. Ceramic tile is less of a problem and should pose no delivery difficulties.

Reviewing precast concrete, we probably will need fascia panels on the job in mid to late October. However, there are other precast members, namely plinthes, which will be needed for exterior masonry areas on the ground level. It would be wise to give attention to this matter very early so these early units are on the job on time.

Rough-in layouts for the first floor from the kitchen supplier were received today and this should provide adequate information to start laying out form work at the first floor. However, it was pointed out by the electrical contractor that there are apparently some differences in the scope of work called for in the kitchen rough-in drawings as opposed to the contract documents. This matter should be checked immediately since delays to this work must be avoided.

There was considerable discussion about the continuing need for buy-out brochures. The kitchen equipment contractor said he would have these to all concerned parties by next Wednesday, August 22, 1973. They are critical and every effort must be made to get them in the hands of the affected contractors, primarily electrical and mechanical.

The bulletin issuing process was discussed at some length since it is beginning to affect progress by virtue of some contractors not having full sets upon which to quote additional work. This matter is being taken care of.

An item mentioned later in the conference dealt with the inclusion of disposal sleeves in slabs for future installation of the pneumatic disposal system. I suggest this matter be considered now so if sleeves are necessary they be provided now.

Work in the D wing over the women's locker room is in progress with the floor coring complete as of today. Temporary entry to the locker room has been arranged and work there will proceed on an as-needed basis, until it is installed complete. Presently there is no problem in this work.

Exterior masonry on the job has been approved and tests made of the masonry units. These tests have not yet been forwarded to the contractors. Masonry units should be available with little if any wait.



Monitoring Report #5  
Hurley Hospital Phase One  
Flint, Michigan  
August 16, 1973  
Page three

RALPH J. STEPHENSON, P. E.  
CONSULTING ENGINEER

In summary, the project is moving relatively well although it lags from 7 to 10 working days at the first floor slab on grade. Mr. Evans feels they can pick up a portion or all of this time in the construction of the remaining slabs on grade and installation of the first floor supported deck. This will take careful coordination in the field and constant attention to expediting all critical areas of the project.

The next diagramming session is at the site on 8 A.M. Tuesday, August 28, 1973. The place will be set when we get to the job. Planning work to be concentrated on at this meeting will be a review of phases one and two already diagrammed and a start on diagramming continuing work in phases three and four.



Ralph J. Stephenson, P.E.

RJS/m

To: Mr. Edward Evans  
Mr. Les Smith  
Mr. Jim Stiles  
Mr. John Data  
Mr. John R. Fugard, Jr.  
Mr. Kurt Koentopp  
Mr. Austin Gilbert  
Mr. Richard C. McCormick  
Mr. Sid Israel  
Mr. Donald Eitniear

August 30, 1973

Subject: Monitoring Report #6  
Hurley Hospital Phase One  
Flint, Michigan

Project: 73:23

Starting Date: May 24, 1973 (working day 103)

Completion Date: January 11, 1975 (working day 518 approx.)

Monitored from Issue #1 dated July 9, 1973

Actions taken:

- Inspected project
- Continued diagramming interior work moves
- Evaluated job progress
- Color coded network
- Prepared four week work project schedule status report

General Summary

Current work includes pouring out the ground floor slab on grade and forming the first floor supported deck. Slab on grade has been completed at the north third, a portion of the middle third and a small section at the south third. Form work for the first supported deck is being erected on the slab as it becomes available.

A current evaluation of forming and setting in-floor work for the first floor supported deck indicates the lag ranges from 10 - 15 working days currently. This deck was due to be poured out the evening of September 10, 1973 (working day 178). The general contractor indicates he still intends to use this as a target although presently his feelings are he will be poured out by September 17, 1973 (working day 183) which means that the lag, if he meets this date, will be only five working days. I suggest every effort be exerted to accomplish this since construction of the concrete frame is critical prior to the onset of winter weather. Any time that can be picked up now will be saved in cold weather construction.

We still do not have complete buy-out brochures from the kitchen equipment supplier. This matter is becoming increasingly critical. Location of rough-in items at the first floor must not be allowed to delay construction work.

Planning in the diagramming session concentrated primarily on establishing transition points in construction of stages one, two and three at the first floor kitchen and cafeteria. It is the intent presently to bring new building construction as far along as possible before vacating the southwest portion of the D wing containing the present dining area. The present preliminary schedule of dates for various moves as established at our diagramming session are as follows:

(Note: Partition numbers are being indicated on a key drawing presently being prepared by Mr. Kurt Koentopp.)

- Vacate northwest portion of dining area and erect temporary partition #1 - about January 9, 1974 (working day 261)
- Vacate southwest portion of dining room and erect temporary partition #3a - about February 27, 1974 (working day 296)
- Erect temporary partition #2 - about March 1, 1974 (working day 298)
- Reoccupy dining and kitchen area - about May 10, 1974 (working day 348)
- Erect temporary partition #3b (now called #4) - about May 14, 1974 (working day 350)
- Erect temporary partition #4 (now called #5) - about May 21, 1974 (working day 355)

The above dates are presently preliminary and subject to review. It is the feeling of the hospital staff that ways must be found to considerably reduce the down time of the dining area since it is the only space presently available for seating. I suggest an intensive review be made of the areas available for

Monitoring Report #6  
Hurley Hospital Phase One  
Flint, Michigan  
August 30, 1973  
Page three

RALPH J. STEPHENSON, P. E.  
CONSULTING ENGINEER

interim use. One possible solution is to shift the location of meals for the some 300 student nurses that presently utilize the hospital cafeteria and dining area. Mr. McCormick and Mr. Gilbert will review this matter.

So far as deliveries to the job are concerned, it appears that presently most work is reasonably well in hand. I again caution that we will need precast units early for the base coursing of exterior masonry. This precast work should be watched carefully so it can be released in time to go up with exterior masonry at the ground floor. Also, we are planning to set major equipment at the penthouse subsequent to removal of shoring and prior to completion of exterior masonry. This work is shown on sheet 2 of the Issue #1 network diagram and should be watched carefully since it is a critical point in the job.

Exterior masonry at the ground floor is due to start at an early date of October 4, 1973 (working day 209). Interior masonry partitions at the electrical area are due for an early start of September 20, 1973 (working day 185). However, these early dates may be missed due to the current lag on forming of the supported first floor deck.

Overall, the project is still running from two to three weeks behind the current schedule. This lag may be picked up by expediting construction of the first supported deck and it is presently the intent of the general contractor to pour out that deck on September 17, 1973 (working day 183) which will reduce the lag to five working days. I suggest that continuing heavy efforts be made to hit this target date.



Ralph J. Stephenson, P. E.

RJS/m

To: Mr. Edward Evans  
Mr. Les Smith  
Mr. Jim Stiles  
Mr. John Data  
Mr. John R. Fugard, Jr.  
Mr. Kurt Koentopp  
Mr. Austin Gilbert  
Mr. Richard C. McCormick  
Mr. Sid Israel  
Mr. Donald Fitniar

October 4, 1973

Subject: Monitoring Report #7  
Hurley Hospital Phase One  
Flint, Michigan

Project: 73:23

Date of Monitoring: October 2, 1973 (working day 193)

Starting Date: May 24, 1973 (working day 103)

Completion Date: January 11, 1973 (working day 518 approximately)

Monitored from Issue #1 dated July 9, 1973

Actions taken:

- Inspected project
- Continued diagramming interior work at remodeled areas
- Evaluated job progress
- Color coded network
- Prepared four week work project schedule status report

General Summary

Current work is concentrated on forming the penthouse floor and low roof deck. The floor slab on grade has been completed and the first floor poured out. The supported deck was poured on September 17, 1973 (working day 182). It was scheduled to be poured out on September 10, 1973 (working day 177), giving a five day lag as of that point in time. This represents an improvement in the job status and it is to be hoped that continuing reduction of the current lag can be maintained.

The penthouse floor and low roof are due to be poured out on October 16, 1973 (working day 203). In conversations with the general contractor, he feels that the date should still be maintained as a target.

Inspecting the project in the field the current status of work at the penthouse floor and low roof indicates this date could be met provided we maintain current work progress and that heavy fall weather does not interfere.

Monitoring Report #7  
Hurley Hospital, Phase One  
Flint, Michigan  
October 4, 1973  
Page two

RALPH J. STEPHENSON, P. E.  
CONSULTING ENGINEER

It is the present intent to strip the first floor completely and then to start interior masonry partitions at the electrical room. Total stripping of the deck will be permitted when concrete tests indicate the slab has achieved its design strength.

Current items that require attention include delivery of hollow metal frames and delivery of precast fascia panels. However, this work is presently well in hand and should pose no major problems. Brick is in the city and the supplier can provide the job at any time it is ready to start.

Preliminary diagrams prepared in previous sessions indicate that the schedule of vacation for the northwest and southwest portions of the dining rooms and erection of temporary partitions as outlined in monitoring report #6, is still to be maintained. A review of our previous work on planning the new addition interior work for the ground and first floor permits this network to be completed and issued for field use. Presently the computer input is being prepared and will be checked, the drawings dated and this work issued soon.

There was some discussion as to whether a key plan showing the temporary partition locations was needed. It was decided at the meeting that Mr. Koentopp should still proceed preparing this drawing since it would be of great help to all concerned.

Our diagramming activities at this session concentrated on preparing the logic plan for remodeling the first floor of the existing building. The intent is presently to vacate this area about early May of 1974 and to concurrently clear the ground floor prior to the start of full work at the existing building. Current planning indicates that the present target completion date of January 11, 1975 (working day 518 approximately) can still be maintained. It appears the first floor will be finished sometime about mid-December with the ground level following several days later.

The intent is generally to work on finish trades from the first floor to the ground floor and out of the building. The first floor area is critical to the hospital operation and they desire to have it as early as possible.

Special attention was given in this diagramming session to construction of finish work at the swing area. The swing area is in the vicinity of corridor D100 and to the northwest extending to the location of the overhead tray conveyor. It is the intent to begin finishing this area as soon as a portion of the rough work has been completed so that the traffic pattern which is entering the new kitchen area during this time is moved from under the tray conveyor back to corridor D100. This will allow the tray conveyor to be installed overhead and ceiling work to start in the remodeled area. This shift is quite critical at the present time and careful attention must be paid to starting mechanical work early enough so walls, particularly masonry walls at the first floor, can be installed in accordance with our present schedule.

Monitoring Report #7  
Hurley Hospital, Phase One  
Flint, Michigan  
October 4, 1973  
Page three

RALPH J. STEPHENSON, P. E.  
CONSULTING ENGINEER

The entire project was reviewed in detail and the current plan of work was generally approved by all at the meeting. I shall distribute prints of this rough diagram sheets P9 and P10 to the regular distribution list, meanwhile drafting it into final form.

In summary, the project currently is moving much better in the field than it has in the past and the current lag on the job appears to be from 0 to 5 working days. Present targets are to complete pouring out the penthouse floor and roof on the Issue 1 target date of October 16, 1973 (working day 203). If this can be accomplished, the job will have been brought substantially on the schedule.

We are assuming in the planning of interior finish work in the new addition that by the time the job is poured out and ready to close in, it will have been brought back into substantial alignment with the Issue #1 network diagram. Presently this appears to be possible of achievement.

The improvement in the job made certainly is due to careful attention on the part of all concerned - contractors, the owner and the design staff. They are all to be complimented for regaining lost time and realigning of the job in general agreement with the current work schedule.

As a part of this session the work schedule status report for the upcoming four week period was prepared and will be issued concurrent with this report.

  
Ralph J. Stephenson, P. E.

RJS/m

To: Mr. Edward Evans  
Mr. Les Smith  
Mr. Jim Stiles  
Mr. John Data  
Mr. John R. Fugard, Jr.  
Mr. Kurt Koentopp  
Mr. Austin Gilbert  
Mr. Richard C. McCormick  
Mr. Sid Israel  
Mr. Donald Eitniar

October 11, 1973

Subject: Monitoring Report #8  
Hurley Hospital Phase One  
Flint, Michigan

Project: 73:23

Date of Monitoring: October 9, 1973 (working day 198)

Starting Date: May 24, 1973 (working day 103)

Completion Date: January 11, 1973 (working day 518 approximately)

Monitored from Issue #1 dated July 9, 1973

Actions taken:

- Participated in construction conference
- Evaluated job progress

General Summary

Work is now well along on forming and setting in-floor work for the low roof and penthouse floor. It is expected this level will be ready for pouring concrete on or about Friday, October 12, 1973 (working day 201). The area is due, in our Issue #1 network, for a pour on October 16, 1973 (working day 203) so this would put construction approximately two working days ahead of our current schedule. The performance on construction of floor decks has been good and hopefully will be continued.

It is expected that erection of exterior masonry will proceed slightly faster than shown on our current network. This also should help pick up some time.

It should be noted by our preliminary diagrams that general above floor rough mechanical and electrical work was due for an early start of September 20, 1973 (working day 185). This work will begin as soon as general debris from casting the first floor is cleared from the job within one or two working days. The delay in starting work has been due to the lag in pouring the floor of approximately five working days, plus an additional delay in stripping and reshoring caused by the need for structural tests on the concrete. Everyone is well aware of the need for expediting above floor rough work and it is the intent to proceed with mechanical piping, sheet metal and feeders as soon as the space is available.



Monitoring Report #8  
Hurley Hospital, Phase One  
Flint, Michigan  
October 11, 1973  
Page two

RALPH J. STEPHENSON, P. E.  
CONSULTING ENGINEER

Reviewing materials that will be needed in the very near future, we find that most of these are either available on the job or nearby. Masonry is in town, precast units are available and mechanical equipment will probably be on the job about November 15, 1973 (working day 225). This equipment delivery date should mesh well with erection of masonry and allow equipment to be set prior to close-in of the penthouse. Switchgear is in part available now and will be brought onto the job as needed. There should be no delays to setting this equipment. Some concern has been evident about hollow metal frames and there is a continuous expediting check being made on this material. If essential, masonry will be started and toothed out for the frames.

Our next diagramming session has been set for Tuesday, October 23, 1973 at 8:45 A. M. with the place to be set by Mr. Gilbert. It probably will be in the nurses' classroom area. At this session we should plan to complete diagramming the interior of the ground floor for the remodeling work and any miscellaneous equipment installation which should be put in our plan. Mr. Fugard will arrange to have a representative of McDonald - the interior designer - at this meeting to allow us to tie in any color decisions or interior finish operations critical to general building work.

In summary, structural work on the project continues to improve and is now moving very well. It will be essential that rough mechanical and electrical installation start at the ground floor as soon as space is available. The general contractor intends to make this area ready by late in the week. Particularly critical is installation of above-floor piping and sheet metal work.

  
Ralph J. Stephenson, P. E.

RJS/m

To: Mr. Edward Evans  
Mr. Les Smith  
Mr. Jim Stiles  
Mr. John Data  
Mr. John R. Fugard, Jr.  
Mr. Kurt Koentopp  
Mr. Austin Gilbert  
Mr. Richard C. McCormick  
Mr. Sid Israel  
Mr. Donald Eitnrear

October 25, 1973

Subject: Monitoring Report #9  
Hurley Hospital Phase One  
Flint, Michigan

Project: 73:23

Date of Monitoring: October 23, 1973 (working day 208)

Starting Date: May 24, 1973 (working day 103)

Completion Date: January 11, 1975 (working day 518 approximately)

Monitored from Issue #1 and Issue #2 dated July 9 and September 26, 1973  
respectively

Actions taken:

- Inspected project
- Completed rough diagramming major project work
- Evaluated job progress
- Prepared project status report for four week period from  
October 24, 1973

General Summary

The main roof and penthouse floor has now been poured out and the project currently is meeting major late start/late finish dates. There is a question about the roof and penthouse perimeter beam which involves analysis of a partial cold joint at the roof level of the main building. It is urged that any matters of structural importance to the job be resolved rapidly since forming work on the project continues and at present the roof of the penthouse is being built. If there are problems, these matters must be studied immediately and a resolution made quickly.

At the ground floor switchgear is being set and interior masonry at the electrical equipment room is underway. Overhead storm and sanitary lines are also being installed and this work is currently in line with late start/late finish dates.

Monitoring Report #9  
Hurley Hospital, Phase One  
Flint, Michigan  
October 25, 1973  
Page two

Overall the project has, in relation to the schedule, been pulled back substantially in line with our current plan of work. Columns supporting the roof at the penthouse show as lagging slightly but it is now the intent to cast these columns concurrently with the penthouse roof. Therefore, if the roof deck meets its target date of November 6, 1973 (working day 218), the job will remain on schedule structurally. Masonry at the ground floor also shows as lagging slightly since it was originally the intent to use part of the masonry interior walls as an element of the penthouse floor slab reshoring. This is not now the case so this masonry actually is not behind.

Our major work at the diagramming session was to complete planning the existing building ground floor remodeling and diagramming the Unit C remodeling. Our present target completion date for cleanup and move-out at the ground floor of the existing building has been held at January 11, 1975 (working day 518). It appears presently this target is realistic.

As a part of this diagramming session we distributed Issue #2 dated September 26, 1973 which includes sheets 2, 3, 4, 5, 6 and 7. This work encompasses close-in of the new building, installation of all ground floor interior work and installation of all first floor interior work at the addition. It also includes site work which is scheduled to be completed by May 15, 1974.

Attention is called to a dating error on sheet four of the Issue #2 diagram, task 308 - 309, install interior folding wall. This task should show an early start and late start of 5/7, with an early and late finish of 5/8.

Reviewing the entire network diagram, I feel we presently have a logical and reasonable plan of work. To this point the project has moved relatively well and the erection of the structural frame is now back on schedule provided work can proceed normally from here on out. It will be critical, however, to watch each intermediate point of importance in the job such as vacation of the southwest portion of dining room, erection of temporary partitions 1 through 5 and turn-over of the ground and first floor in the addition so work can begin at the existing building. These points have all been highlighted in our various meetings and are shown in the network diagram.

Monitoring of the project will be on a periodic basis, probably each two to four weeks. I urge that if there are any questions about the various elements of the plan as it is now issued that these be discussed with me at an early date.

We have now issued sheets 2, 3, 4, 5, 6 and 7 which include the work noted above. Remaining areas have all been diagrammed and the rough networks

RALPH J. STEPHENSON, P. E.  
CONSULTING ENGINEER

Monitoring Report #9  
Hurley Hospital, Phase One  
Flint, Michigan  
October 25, 1973  
Page three

distributed to all on the mailing list. This ends the initial formal network diagramming meeting series, although it may be necessary from time to time to have special conferences regarding problems that may arise on the job. I shall proceed to process the entire diagram and issue it sometime in the near future. Meanwhile, we have adequate network planning guidance through next May in final form and through to the end of the job for all areas in rough form. All diagrams have been issued to the field, to the owner and to the architect/engineer.



Ralph J. Stephenson, P.E.

RJS/m

To: Mr. Edward Evans  
Mr. Les Smith  
Mr. Jim Stiles  
Mr. John Data  
Mr. John R. Fugard, Jr.  
Mr. Kurt Koentopp  
Mr. Austin Gilbert  
Mr. Richard C. McCormick  
Mr. Sid Israel  
Mr. Donald Eitniear

June 17, 1973

Subject: Monitoring Report #10  
Phase One, Hurley Hospital, Flint, Michigan  
Project: 73:23  
Date of Monitoring: November 12, 1973, (working day 222)  
Starting Date: May 24, 1973, (working day 103)  
Completion Date: January 11, 1973, (working day 518)  
Monitored from Issue #2 dated September 26, 1973

Actions taken:

- Inspected project
- Evaluated job progress
- Participated in construction conference
- Prepared project status report for four week period from November 12, 1973.

General Summary

The penthouse roof was poured out on November 7, 1973, one day behind the projected late finish of November 6, 1973. Exterior masonry at the ground floor is proceeding. Interior masonry at the electric equipment rooms is substantially complete. Pre-cast work is underway and rough interior work is starting at the ground and first floor. A decision has not yet been made on disposition of the cold joint at the roof level of the main building. Apparently a decision will be made on this Wednesday, November 13, 1973. I urge that whatever action is to be taken, if any, be expedited to the greatest extent possible.

At the ground floor interior rough piping and electrical installation is well in work. However, sheet metal duct work which was due to start at a late date of October 24, 1973, (working day 209) has not as yet begun. There are some miscellaneous sheet metal sections on the job but the

main work is still to begin. Thus the current lag as of November 12, 1973, (working day 222) is approximately 13 working days.

It was reported at the construction meeting that sheet metal will begin tomorrow, November 13, 1973. I recommend that careful expediting attention be given this trade since it is a critical installation to allow domestic piping and other pipe work to continue. The problem was discussed in some detail at the construction meeting and all who must be involved are aware of the problem.

Looking ahead over the next four week period, we find the following work is schedule to start, continue, or be completed:

#### Ground Floor

- Continue installation of rough piping and electrical work
- Continue installation of above floor sheet metal duct work
- Continue erection of exterior masonry
- Complete erection of interior masonry
- Begin installation of overhead storm, sanitary and surgical piping

#### First Floor

- Erect exterior masonry to roof
- Install rough above floor mechanical piping, electrical and sheet metal work
- Complete stripping supported deck

#### Penthouse

- Complete stripping penthouse roof
- Install equipment bases
- Begin erection of exterior masonry
- Start installing roof fill and roofing

(Note: It is the present intent to move on the job with roofing as early as possible, possibly by the middle of December. This would help since an early close-in on the building would allow all trades to work under optimum conditions over the winter).

At the construction meeting each outstanding bulletin was reviewed and expediting steps discussed. So far bulletin work has not seriously inconvenienced the job and I suggest we continue the good record since processing of change orders are extremely critical on a project of this tight nature.

The remodeling of the C area was covered and it is the intent to begin work in the C area on December 5, 1973. This work will be done in phases starting with remodeling rooms C138 through C143. When this work is complete, rooms C136 and C137 will be remodeled, followed by remodeling of rooms C144 and C145. Work is tentatively scheduled to be done by April 15, 1974, (working day 329). This network diagram is shown on Sheets P-11 and P-12, dated October 23, 1973, which has been distributed to all concerned parties.

At the meeting we also reviewed setting mechanical equipment at the penthouse. This equipment is due on the job between late December and mid January. Presently it appears that equipment can be set through wall openings at the penthouse. Therefore, it is the intent to proceed upon penthouse exterior masonry without leaving any special access panels. This is critical since it will allow us to close the building, possibly ahead of schedule.

A selection of the garbage disposal system is now near. Apparently with some disposal systems it will be necessary to use heavy duty piping with the proper couplings. Mr. Johnson indicated delivery on pipe of this type might be as much as 12 to 16 weeks. Since we are schedule to begin installation of garbage piping at the first floor on a late start of early February and an early start of November, it is apparent this is a very critical delivery item. It was further pointed out that we could use this pipe on the job presently for lead in work at the ground floor. Immediate attention should be given selection and approval of a system so that ordering can proceed immediately.

In summary, the project has moved back on schedule so far as

Monitoring Report #10  
Phase One, Hurley Hospital  
Flint, Michigan  
Page four

RALPH J. STEPHENSON, P. E.  
CONSULTING ENGINEER

the structure and closing work is concerned. Interior rough work is moving fairly well with the exception of sheet metal duct work at the ground floor. Presently the lag on this item is 13 working days. Most other critical items appear to be well under control.

Attention should be given to the garbage disposal pipe system due to probable long lead times on heavy duty disposal piping and couplings.

The next construction meeting will be on December 11, 1973, and following the meeting it is the intent to meet with the interior design consultant to review integration of their work with the overall construction schedule.

Ralph J. Stephenson, P.E.

RJS/dv

To: Mr. Edward Evans  
Mr. Les Smith  
Mr. Jim Stiles  
Mr. John Data  
Mr. John R. Fugard, Jr.  
Mr. Curt Koentopp  
Mr. Augustin Gilbert  
Mr. Richard C. McCormick  
Mr. Sid Israel  
Mr. Donald Eitnear



**RALPH J. STEPHENSON, P.E.**  
CONSULTING ENGINEER

December 18, 1973

**Subject: Monitoring Report #11**

**Phase One, Hurley Hospital, Flint, Michigan**

**Project: 73:23**

**Date of Monitoring: December 11, 1973 (working day 242)**

**Starting Date: May 24, 1973 (working day 103)**

**Completion Date: January 11, 1975 (approximately working day 518)**

**Monitored from Issue #2 dated September 26, 1973**

**Actions taken:**

- Inspected project
- Evaluated job progress
- Participated in construction conference
- Prepared project status report for four week period from December 12, 1973

**General Summary**

Exterior masonry at the ground and first floors is complete and close-in work has started at the penthouse. The job is in good condition on most major operations and presently is adhering to the network schedule. There may be some delay in laying the full roof. However, as soon as penthouse masonry is complete, it is expected a base sheet will be laid which should put the entire project in the dry. Temporary heat has been hooked up on the first floor and there should be no problem in providing generally good working conditions inside the entire building over the coming months.

So far as interior work is concerned, the major current lag is on sheet metal work, both at the ground and first floor. At the ground floor the sheet metal lag is 13 to 15 working days. At the second floor sheet metal has just started. It was due to start on December 7, 1973 so the lag there is 2 or 3 days. This behind situation can be corrected quickly by resolution of certain field problems, the major of which is a decision on fire dampers. This matter is expected to be resolved immediately and the mechanical contractor feels that sheet metal will be no delay to other work on the project.

Monitoring Report #11  
Hurley Hospital, Phase One  
Flint, Michigan  
December 18, 1973  
Page two

**RALPH J. STEPHENSON, P.E.**  
CONSULTING ENGINEER

There are some changes pending at the storage area. I urge that these be resolved just as quickly as possible so that minimal delays are imposed upon the project. Overall, material and equipment deliveries have been good and it is expected this will continue. Mechanical equipment should start arriving on the job December 20, 1973 (working day 249). It may be, due to the Christmas holidays, that this will be delayed slightly but apparently is no major problem at present. Major mechanical/electrical equipment at the penthouse was scheduled to be on the job at a late date of December 19, 1973 (working day 248) with ten days allowed for setting this equipment. If the equipment can arrive the latter part of December, it should be able to be set on time. Of importance here is to complete construction of equipment bases and whatever waterproofing might be necessary in order to set this equipment without double handling.

The kitchen equipment supplier says that some kitchen equipment will be in transit shortly and will be arriving on the job sometime near the end of the month.

So far as the structural roof cold joint problem is concerned, it has been decided that a load test will be conducted on this area. I suggest it be expedited to the greatest extent possible since we are already well into interior work at the first floor and the load test should be completed so that this work can proceed without additional delay.

In further discussions regarding food service, there is some consideration of changing the tray conveyor. This matter should be resolved promptly. Another very serious problem regards delivery of garbage disposal piping. Presently the mechanical contractor says that deliveries on this pipe are running about six months. This, of course, would make it very difficult to meet our current schedule since some of this piping is above ceiling levels. Immediate checks are to be made on obtaining better dates for this piping.

In summary, the project currently is moving relatively well but some difficulties are beginning to show up in revisions to certain areas, changes to food service equipment and in long lead time deliveries on garbage disposal piping. Sheet metal work at the ground and first floor also continues to lag and should be given special attention over the next two or three weeks.

A projection of work to be accomplished over the next four week period is contained in the project schedule status sheets issued concurrently with this monitoring report.

*Ralph J. Stephenson*  
Ralph J. Stephenson, P.E.

RJS/m

To: Messrs. Evans, Smith, Stiles, Data,  
Fugard, Koentopp, Gilbert, McCormick  
Israel and Eitniear

January 10, 1974

**Subject:** Monitoring Report #12

Phase One, Hurley Hospital, Flint, Michigan

**Project:** 73:23

**Date of Monitoring:** January 8, 1974 (working day 260)

**Starting Date:** May 24, 1973 (working day 103)

**Completion Date:** January 11, 1975 (approximately working day 518)

**Monitored from Issue #2 dated September 26, 1973**

**Actions taken:**

- Inspected project
- Reviewed job progress with Mr. Data, Mr. Gilbert and the general contractor superintendent
- Prepared project status report for four week period from January 9, 1974

**General Summary**

The building is substantially closed so far as masonry and decks are concerned, however, some coping remains to be set and scaffolding removed before roofing can start. I strongly urge that roofing be completed just as quickly as possible since any warm weather will cause thaw water on the horizontal surfaces. Thus, although the building is now relatively dry, it could become very wet with the onset of above freezing temperatures or sun exposure.

Sheet metal ductwork installation has picked up considerably since the last monitoring and presently is almost back in line with late start/late finish dates. We are still being held by fire damper delivery and this matter is being checked now.

Another delivery item posing problems is hollow metal frames. The general contractor reports these were supposed to have been shipped on January 8, 1974 (working day 260). Continuous followup should be initiated to insure that frames are delivered promptly. Masonry at the ground floor has already begun and it is anticipated that erection of steel studs for interior partitions will begin in the very near future. Frames will be needed for both soon.

Monitoring Report #12  
Hurley Hospital, Phase One  
Flint, Michigan  
January 10, 1974  
Page two

RALPH J. STEPHENSON, P. E.  
CONSULTING ENGINEER

There is consideration being given a change in ceramic tile finishes. This is an important matter since we are at a point where the surfaces receiving ceramic must be properly field dimensioned. A decision on this matter is needed now.

Kitchen equipment has not yet arrived on the job but is expected momentarily.

It is important to remember that items such as rolling steel shutter hangers and folding door supports are integral parts of the above ceiling construction. I suggest a careful review of this type item and its location be made to avoid future interference and relocation.

As part of this monitoring, a four week projection of work by each major contractor is being issued concurrently.

Ralph J. Stephenson, P. E.

RJS/m

To: Mr. Edward Evans  
Mr. Les Smith  
Mr. Jim Stiles  
Mr. John Data  
Mr. John R. Fugard, Jr.  
Mr. Kurt Koentopp  
Mr. Austin Gilbert  
Mr. Richard C. McCormick  
Mr. Sid Israel  
Mr. Donald Eitnear

✓ Add to monitoring  
list only

Mr. Warner  
2320 Radcliffe Ave  
Flint, Michigan 48503

January 22, 1974

Subject: Monitoring Report #13

Phase One, Hurley Hospital, Flint, Michigan

Project: 73:23

Date of Monitoring: January 15, 1974 (working day 265)

Starting Date: May 24, 1973 (working day 103)

Completion Date: January 11, 1975 (approximately working day 518)

Monitored from Issue #2 dated September 26, 1973

Actions taken:

- Participated in job conference

General Summary

An inspection of the project was made on January 8, 1974 (working day 260) and reviewed in Monitoring Report #12. This report #13 deals with the construction conference on Tuesday, January 15, 1974.

Generally the project is moving well with most items meeting dates between early and late starts. Lags are reported in the project schedule status for the period from January 9, 1974 to February 5, 1974, issued with Monitoring Report #12. In it the major lagging item shows as setting mechanical and electrical equipment at the penthouse. This is currently 13 to 18 working days late, however, equipment is due on the job the latter part of this month and it is expected there will be no major problem meeting the current scheduled completion date for the equipment room.

An important discussion item concerned transfer of power connections subsequent to installation of all switchgear and cable. A decision will be made at the February construction meeting as to the exact date on which this power connection transfer will be made. Also to be decided at an early date is the disposition of the old switchgear.

Fire dampers which have been a major delay to installation of sheet metal ductwork were reported as being shipped from Georgia on January 11, 1974. These items should be followed carefully to insure that there is no additional delay in their delivery - they are needed badly on the job.

It was also reported at the meeting that enough heavy duty garbage system piping has been obtained to prevent delays to the first floor ceiling installation. This is a critical delivery item and should be given continuing attention.

Monitoring Report #13  
Hurley Hospital, Phase One  
Flint, Michigan  
January 22, 1974  
Page two

RALPH J. STEPHENSON, P. E.  
CONSULTING ENGINEER

Exterior scaffolding is now being dismantled on the job and the roof will be cleaned and roofing work started in the very near future. It is important to get this roof on so as to be able to start interior finish work at an early date.

Door frames were shipped today and all 120 frames should be on the job site shortly. These are being followed continuously. Kitchen equipment has begun arriving on the job site today and is being stored in trailers at the site.

The structural load test results were discussed; visual observations proved satisfactory and the structure was accepted. Several other discussion items were on the agenda which dealt with various items delivery. These were covered in some detail and at present, none seems to pose unusually difficult problems.

We reviewed the sequence of finish trades and it should be remembered that these start with priming of painted surfaces on the first floor and move down to the ground floor whereas rough work moves from the ground floor up to the first floor. It will be quite important that all finish trades follow the sequence as defined in our present plan of work.

In summary, it appears that the project presently is moving reasonably well and that job problems are being solved promptly enough to avoid major difficulties. I urge that continuous expediting and careful attention to deliveries be maintained since one of the major problems that construction projects are having today is the sudden extreme shortage of material and lack of firm commitments on deliveries. This difficulty can be overcome in part by the continuing good attention that is being given these matters by the Hurley project construction team.

*Ralph J. Stephenson*  
Ralph J. Stephenson, P. E.

RJS/m

To: Mr. Edward Evans  
Mr. Les Smith  
Mr. Jim Stiles  
Mr. John Data  
Mr. John R. Fugard, Jr.  
Mr. Kurt Koentopp  
Mr. Austin Gilbert  
Mr. Richard C. McCormick  
Mr. Sid Israel  
Mr. Donald Eitniar

February 20, 1974

Subject: Monitoring Report #14

Phase One, Hurley Hospital, Flint, Michigan

Project: 73:23

Dates of Monitoring: February 12, 1974 (working day 285) and  
February 19, 1974 (working day 290)

Starting Date: May 24, 1973 (working day 103)

Completion Date: January 11, 1975 (approximately working day 518)

Monitored from Issue #2 dated September 26, 1973

Actions taken:

- Inspected project
- Participated in construction conferences
- Evaluated job progress
- Prepared and issued project status report for four week period from February 12, 1974

General Summary

As of February 12, 1974 (working day 285) the general progress on the job was fair. Fan room equipment still was not on the job and at that point was 37 working days late. Miscellaneous architectural elements at the ground and first floor were beginning to slow down and showed signs of lagging. The primary reason for much of the current lag can be traced to the cramped working space in which many different trades are presently working together. However, this is the nature of the project and the condition will continue throughout the life of the program. Therefore, I urge a high level of continuous, careful field supervision be maintained by each of the prime contractors to assure that he does not hold up another contractor's work. The construction process has moved well so far and all are to be commended for their efforts to work as a team. This will be critical for continued progress on the project.

On February 19, 1974 (working day 290) an analysis of job progress shows that the general contract, mechanical and electrical contract work is still in fair position with minor exceptions. However, a major problem has developed over the last week on deliveries of kitchen equipment, walk-in coolers and serving equipment. Shipping dates have been reset by the food equipment contractor and now pose an immediate and extremely critical delay.

The following comparisons show the problem:

	Original Required Date	New Delivery Date by Great Lakes
Kitchen Equipment	April 3, 1974 (working day 321)	April 22, 1974 (working day 334)
Walk-in Coolers	March 4, 1974 (working day 299)	April 25, 1974 (working day 337)
Serving Foupiment	April 3, 1974 (working day 321)	May 28, 1974 (working day 359)

The new dates established by Great Lakes are basically due to late fabrication in shops under subcontract to them. An extensive discussion was had with the Great Lakes representative and it was decided that the delays are not acceptable since extensive interfacing of this contractor with other prime contractors has been made and the current valid target for all work outside of Great Lakes has been firmly set at May 10, 1974 (working day 349). Thus, it becomes imperative that Great Lakes initiate immediate steps to bring deliveries back in line so they can complete the work on or before May 10, 1974.

To help accomplish this, the owner and the architect will cooperate in every manner to assist in expediting the work. This will be done on a day to day basis as required and extensive discussions were held regarding the best way to go about this. The first thing that will be done is to make a detailed analysis of the status of each piece of equipment and to determine exactly what the problem of fabrication and delivery is. Attention will then be focused on each trouble area and its delivery managed to the highest degree possible in accordance with our original target.

This matter is of the utmost importance since it has now been decided to close down the southwest portion of the present dining room on February 27, 1974 (working day 296) and to construct temporary partition #2 so as to begin demolition in this area on schedule. Therefore, to keep dining room down time to a minimum, we must schedule opening of the entire facility but particularly the remodeled dining room on May 10, 1974. Any discrepancy between completion of the dining room and completion of the food service area could cause difficult problems for all other prime contractors and the owner.

Other potential problem areas include hard tile, the main mechanical equipment room installation and installation of communications systems. Hard tile will be able to start within the next week and a half. There has been some time trimmed off the projected duration of this task which should allow it to be



Monitoring Report #14  
Hurley Hospital, Phase One  
Flint, Michigan  
February 20, 1974  
Page three

RALPH J. STEPHENSON, P. E.  
CONSULTING ENGINEER

completed fairly well on schedule. Quarry tile at the walk-in coolers must wait for completion of the installation of the floor system at the coolers. There should be no major problem here.

Main penthouse mechanical room equipment began arriving on the job this morning and the mechanical contractor still expects that he can finish his work in the equipment room by May 10, 1974 to service the new areas.

So far as the communications system is concerned, there is an increasing need to have this contractor represented on the job and at the construction meeting. Considerable concern was voiced by other contractors at the meeting regarding installation of communications, wiring and conduit. I suggest this contractor be requested to be represented at all succeeding job meetings.

A four week projection of the project was run and issued concurrently with the preparation of this monitoring report.

  
Ralph J. Stephenson, P.E.

RJS/m

To: Mr. Edward Evans  
Mr. Les Smith  
Mr. Jim Stiles  
Mr. John Data  
Mr. John R. Fugard, Jr.  
Mr. Kurt Koentopp  
Mr. Austin Gilbert  
Mr. Richard C. McCormick  
Mr. Sid Israel  
Mr. Donald Eitniear

March 28, 1974

Subject: Monitoring Report #15

Phase One, Hurley Hospital, Flint, Michigan

Project: 73:23

Date of Monitoring: March 25, 1974 (working day 314)

Starting Date: May 24, 1973 (working day 103)

Completion Date for Phase One: May 10, 1974 (working day 348)

Completion Date: January 11, 1975 (approximately working day 518)

Monitored from Issue #2 dated September 26, 1973

Actions taken:

- Inspected project
- Evaluated job progress
- Revised progress with Mr. Fugard and Mr. Data
- Prepared and issued project status report for four week period from March 25, 1974

First Floor

Work at the first floor has slowed considerably and I strongly recommend a high concentration of managerial attention be given all trades but most particularly to readying the area for ceiling suspension. Prime painting at the first floor was due to begin on March 5, 1974 (working day 300). As of March 25, 1974 (working day 314) it had not yet begun to the point where it would release acoustic ceiling suspension, grid and conduit. Acoustic ceiling work was due to start on March 11, 1974 (working day 304) and the lag in the main first floor area can be measured from this point. In addition, work at the remodeled area is moving very slowly with above floor rough work due to have been installed by March 28, 1974 (working day 360). Installation of fan room equipment at the first floor was due to have been completed on March 18, 1974 (working day 309) to the point where the new masonry wall at the fan room could be erected. Fan room work has not yet started.

Kitchen equipment and walk-in coolers are still causes for concern although day by day expediting is being done on each piece of equipment and present indications are that we will meet our target date of May 10, 1974 (working day 348) for activation of kitchen equipment.

Monitoring Report #15  
Hurley Hospital, Phase One  
Flint, Michigan  
March 28, 1974  
Page two

RALPH J. STEPHENSON, P. E.  
CONSULTING ENGINEER

This is an absolutely critical date.

### Ground Floor

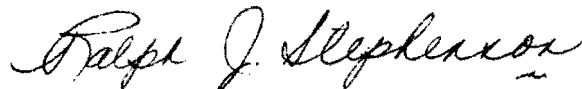
Ground floor work is in fair condition with ceiling grid there started and moving fairly well. It will be very important to keep present progress at the first floor as it is now since there is considerable finish trade work to be completed in the area over the next month and a half.

### General Summary

Work at the ground floor is in relatively good condition and for the most part, meeting late start/late finish dates. However, there is a strong tendency to bunch up the work at this floor and in order for finish trade to be installed, sequencing of the rough trades out of the area must be done almost immediately.

At the first floor the lag has increased considerably due to late start on the ceiling work. It is imperative that priming and ceiling work start immediately if this time is to be picked up.

Presently I feel we can meet our target date of May 10, 1974 with most trades and if kitchen equipment installation maintains the schedule proposed presently, the floor will be completely ready by the May 10, 1974 date.



Ralph J. Stephenson, P. E.

RJS/m

To: Mr. Edward Evans  
Mr. Les Smith  
Mr. Jim Stiles  
Mr. John R. Fugard, Jr.  
Mr. Kurt Koentopp  
Mr. Austin Gilbert  
Mr. Richard C. McCormick  
Mr. Sid Israel  
Mr. Donald Eitniear

April 9, 1974

Subject: Monitoring Report #16

Phase One, Hurley Hospital, Flint, Michigan

Project: 73:23

Date of Monitoring: April 9, 1974 (working day 325)

Starting Date: May 24, 1973 (working day 103)

Completion Date for Stage One, Phase One: May 10, 1974  
(working day 348)

Completion Date for all of Phase One: January 11, 1975  
(approximately working day 518)

Monitored from Issue #2 dated September 26, 1973

Actions taken:

- Inspected project
- Conferred with Dennis Wheaton, superintendent re job progress
- Evaluated job progress
- Participated in construction conference
- Prepared and issued project status report for four week period from April 10, 1974

First Floor

Presently most finish trades are working at the first floor with kitchen equipment installation just getting well underway. Ceiling work is also just starting with quarry tile floor well along. The lag at the first floor is primarily in ceiling suspension work which was restrained by completion of walls and priming. The lag on ceiling and suspension presently is about 15 working days. However, it is expected that ceiling installation will go more rapidly than presently scheduled. The installation will also be concurrent with portions of the kitchen equipment installation and thus, the entire lag should be able to be picked up.

A detailed review was made of the kitchen equipment status at the construction meeting, and the contractor reports that the May 10, 1974, (working day 348) completion date is still being held with the exception of one kitchen serving counter, which will arrive on the job May 13, 1974 (working day 349), and will take five working days to install.

Monitoring Report #16  
Hurley Hospital, Phase One  
Flint, Michigan  
April 9, 1974  
Page two

It was decided that an immediate investigation would be made to see if either the delivery date could be improved, and if not, what adequate substitute could be provided so that kitchen equipment could be turned over complete in a workable system by May 10, 1974.

Installation of the new mechanical equipment room at the D wing of the first floor also shows as lagging, and it will be critical to expedite delivery and installation of equipment so the masonry walls around this equipment room can be completed and plastered. Although this is a relatively small installation, it does restrain erection of the ceiling grid, and at this point in time ceiling grid is very critical at the first floor. There was considerable discussion about means by which this work could be moved along rapidly and there appears to be no major problem with completing it in time to complete ceiling and finish work by May 10.

Each contractor was questioned about the May 10, 1974 finish date, and all agree that presently it is a feasible date to use as the target.

#### Ground Floor

Work at the ground floor is in good condition lagging the network by one to five working days. However, there should be no difficulty in recapturing this lag and it is not at present serious.

On Friday, April 12, 1974 (working day 328), the existing transformer will be removed from the building and at that time patching of the floor slab at the transformer area can begin. Generally, work at the first floor looks in good condition.

#### Main Mechanical Room

There is some problem with completing work on schedule at the main mechanical room. However, the mechanical contractor is prepared to expedite all deliveries and installation so that the equipment needed for the May 10, 1974 operation will be available.

A discussion was held of the waterproofing on the penthouse floor, and it was decided this would be best held until all mechanical equipment is completely installed.

Monitoring Report #16  
Hurley Hospital, Phase One  
Flint, Michigan  
April 9, 1974  
Page three

### Site Work

Site work is expected to get underway immediately with installation of catch basins, curbs, sub-base and other following work to be carried through as rapidly as possible. Presently there appears to be no major difficulty completing the site work on our present target.

### General

At the meeting I distributed copies of the Stage Two, Phase One rough diagram, which was prepared on October 2 and October 23, 1973. This plan of action anticipated a completion date of January 11, 1975. I requested all parties to the contract review this network diagram and convey any revisions or changes they have to me within the next two and one half weeks, (by April 26, 1974). If I do not hear from anyone within this period, I shall generally assume that the logic plan and the durations are suitable.

Two minor changes were made to the diagram, and were reviewed with the general and mechanical contractor at the meeting. On sheet P11 at the left hand side of the sheet in the third sequence of tasks in from the left, there are two mechanical items:  
Complete install above floor sheet metal duct work, and  
Complete install above floor mechanical piping (not partitions).  
Originally each of these were shown as restraining the completion of interior metal studs. However, I requested because of an arithmetical error in the manual computations, permission to run these task completions to the start of Complete install in wall mechanical and electrical at the studs. This was reviewed briefly by the two contractors involved and there appears to be no major difficulty. Essentially this means that concurrent with latter installation of mechanical piping and duct work at the ground floor that the general contractor will be installing metal studs. However, it also says that completion of in wall mechanical and electrical work at the studs will be restrained by the completion of above floor sheet metal and piping.

I shall make a preliminary computer run on the Stage Two, Phase One network and be ready to issue this as soon as this work begins.

One major item of concern is in respect to contract expiration dates for the trades. Most contracts expire on May 1, 1974 and feelings are presently mixed about whether there will be a major work shut down. It is impossible to tell at this time the extent of feeling for or against going on strike, and we will have to wait and see.

RALPH J. STEPHENSON, P.E.  
CONSULTING ENGINEER

Monitoring Report #16  
Hurley Hospital, Phase One  
Flint, Michigan  
April 9, 1974  
Page four

In light of the contract expiration point being so close to our target completion, I strongly suggest that all contractors make every effort to finish as much work as possible prior to May 1, 1974.

Ralph J. Stephenson, P.E.

RJS/pw

To: Mr. Edward Evans  
Mr. Les Smith  
Mr. Jim Stiles  
Mr. John B. Fugard, Jr.  
Mr. Kurt Koentopp  
Mr. Austin Gilbert  
Mr. Richard C. McCormick  
Mr. Sid Israel  
Mr. Donald Eitnlear

June 18, 1974

Subject: Monitoring Report #17

Phase One, Hurley Hospital, Flint, Michigan

Project: 73:23

Date of Monitoring: June 13, 1974 (working day 371)

Start Date: May 24, 1973 (working day 103)

Target Completion Date for Stage One, Phase One was May 10, 1974  
(working day 348)

Completion Date for all of Phase One was January 11, 1975 (working day 518)

Monitored from Issue #2 dated September 26, 1973

Actions taken:

- Conferred with Mr. McCormick and Mr. Gilbert re job progress
- Inspected project
- Conferred with mechanical and architectural contractors re job progress
- Evaluated project status

General Summary

As of June 13, 1974 (working day 371) the project is just getting back into work after a long series of strikes. The approximate strike history is as follows:

- Plumbers - Out May 1, 1974, back June 4, 1974
- Laborers - Out May 7, 1974, back on interim agreement May 14, 1974 with Midwest; not back yet for other trades (reported back on June 14, 1974)
- Painters - Out about May 13, 1974, back June 10, 1974  
Some painters worked for Midwest on interim agreement



Monitoring Report #17  
Hurley Hospital, Phase One  
Flint, Michigan  
June 18, 1974  
Page two

RALPH J. STEPHENSON, P. E.  
CONSULTING ENGINEER

- Operating Engineers - Out about May 7, 1974, back about  
June 10, 1974
- Masons - Out May 7, 1974, back about June 6, 1974
- Cement finishers - Out May 1, 1974, not back to work as yet

The strikes have caused serious delays to the job and although some settlements, both permanent and interim, were obtained, the net effect of the strikes has been to shut the job down essentially from early May through early June. Of course, the staggering of strikes caused even more disruption and because of ongoing work stoppages, the job has still not returned to full production. The interim agreements were not of great help since the trades affected, particularly laborers, were also involved in trade work other than Midwest's.

It appears that laborers are on the verge of settling but as of June 14, 1974, I have no information on the cement finishers.

A brief resume of the current status of each area of the stage one work follows:

#### Ground Floor

Major elements remaining to be completed are:

- The corridor to the elevator - this includes some mechanical and electrical work, along with a new ceiling. If necessary, this work could be done possibly while the corridor is in use.
- Completion of compressor hookup and making operational the sliding door of the emergency entrance.
- Installation of reception area sliding windows.
- Installation of speakers and grills.
- Installation of a faucet on the case work.
- Provision of a temporary oxygen system.
- Cleaning of materials.
- Preparation and completion of punch list.

Monitoring Report #17  
Hurley Hospital, Phase One  
Flint, Michigan  
June 18, 1974  
Page three

RALPH J. STEPHENSON, P. E.  
CONSULTING ENGINEER

All of these are relatively minor and if approached aggressively now, the area could be occupied very quickly. I strongly recommend that this area be aggressively punched out, cleaned up, checked by the fire authorities and turned over. It does not appear from my conversations with responsible job management and my inspection of the job itself that there is any major delay to moving into this area.

The blacktop paving base has been laid and it is expected to put the blacktop finish coat on on June 14, 1974 (working day 372). Thus the area could be ready for move-in as early as the end of next week if careful attention is given it now.

The fan room at the penthouse was reported to be in such shape that it could service the emergency area immediately without any difficulties, particularly with the present weather. This fan room will be totally in operation by July 1 according to the mechanical contractor.

### First Floor

Items to be completed at the first floor include:

- Equipment room at the D wing - Block is presently being erected there and the area is to be drywalled rather than plastered. There is some piping and sheet metal remaining to be completed at the mechanical equipment room but the mechanical contractor reports that this should not delay occupancy of the area.
- Carpet - This is to be provided by the owner and apparently has not been selected.
- Speakers and grills.
- Salad bar pass-through - This piece of equipment is a delayed order item although probably the kitchen could be put into operation without having the pass-through.
- Painting and block replacement.
- Replacement of sheet metal duct system where fireproofing is required (the major delay element)
- Cleaning materials.
- Punching out the floor and kitchen equipment.

Monitoring Report #17  
Hurley Hospital, Phase One  
Flint, Michigan  
June 18, 1974  
Page four

RALPH J. STEPHENSON, P. E.  
CONSULTING ENGINEER

The most critical of all of the remaining items is reworking of the ventilation system where fireproofing of sheet metal ductwork is required. This is a critical item since it will take between two and four weeks, according to the contractors to complete the revision. It appears presently that the kitchen cannot be put into operation until this work is finished. Again, I suggest that the other elements at the first floor be completed just as quickly as possible and that punching out the floor, other than the sheet metal ductwork, along with the kitchen equipment proceed immediately. Thus, when the other work is completed, the floor can be occupied without delay.

Mr. Gilbert mentioned that Mr. Koentopp has prepared a revised detailed plan of shifting over traffic circulation at the swing area. This should be reviewed in detail since the shunting of traffic at the swing area is a critical part of the area occupancy.

#### General

The project has been seriously delayed by a series of strikes and now by a requirement that the sheet metal systems at the kitchen be reworked. However, the ground floor could be available almost immediately for occupancy and I suggest that strong, intensive and aggressive efforts be made now to prepare the punch list for the ground floor and get the area in operation. It is substantially complete and except for some minor items which could be cleaned up quite quickly, is ready for move-in.

We shall hold off determining the starting date for Stage 2 work until the strike situation has been clarified and the sheet metal fireproofing situation has been resolved.

I shall be in touch with the parties to the project to arrange subsequent decision-making meetings on these matters as soon as it is appropriate.



Ralph J. Stephenson, P. E.

RJS/m

To: Mr. Edward Evans  
Mr. Less Smith  
Mr. Jim Stiles  
Mr. John R. Fugard, Jr.  
Mr. Kurt Koentopp  
Mr. Austin Gilbert  
Mr. Richard C. McCormick  
Mr. Sid Israel  
Mr. Donald Eitniar

June 21, 1974

Subject: Monitoring Report #18  
Phase One, Stage One, Hurley Hospital, Flint, Michigan  
Project: 73:23  
Date of Monitoring: June 18, 1974 (working day 374)  
Starting Date: May 24, 1973 (working day 103)  
Target Completion Date for Stage One, Phase One was May 10, 1974  
(working day 348)  
Completion Date for all of Phase One was January 11, 1975  
(working day 518)  
Monitored from Issue #2 dated September 26, 1973

Actions taken:

- Conferred with Mr. Gilbert and Mr. Koentopp  
re punching out procedure
- Inspected ground floor

General Summary

The major purpose of this trip was to determine the current strike situation at the job, to review current status of the ductwork provisions at the second floor and to discuss a ground floor occupancy date. Mr. Koentopp and Mr. Gilbert were just about to begin their detailed inspection of the ground floor to punch out the area for corrective action. This work will go ahead continuously until complete, with occupancy presently targeted for about one week from June 18, 1974 or about June 25, 1974 (working day 379). I strongly suggest that everyone work to this target despite the various elements that still remain to be done as outlined in Monitoring Report #17 dated June 18, 1974. It will be very desirable to give the job continuing attention so that occupancy at the ground floor can be obtained as quickly as possible.

At the first floor, kitchen equipment demonstration was due to start on June 19, 1974 (working day 375), and this

Monitoring Report #18  
Hurley Hospital, Phase One  
Flint, Michigan  
June 21, 1974  
Page two

RALPH J. STEPHENSON, P.E.  
CONSULTING ENGINEER

demonstration work will cover the full range of kitchen equipment.

As of June 18, 1974 (working day 374) the plasterers have gone on strike and thus work on the first floor duct revisions will be held until an alternate fireproofing solution can be found. Again, I suggest that as much punching out and inspection be done concurrently with installation of the duct fireproofing as is possible so that immediately upon completion of this work, the area can be turned over.

Apparently there is some consideration of turning over the dining area prior to completion of the kitchen.

Another area now up for attention is the swing area, as mentioned in the Monitoring Report #17. Circulation of traffic is critical and the transition to the new cafeteria will have to be carried out carefully.

Ralph J. Stephenson, P.E.

RJS/m

To: Mr. Edward Evans  
Mr. Les Smith  
Mr. Jim Stiles  
Mr. John Data  
Mr. John R. Fugard, Jr.  
Mr. Kurt Koentopp  
Mr. Austin Gilbert  
Mr. Richard C. McCormick  
Mr. Sid Israel  
Mr. Donald Eitnearn