

January 26, 1987

**Subject: Monitoring Report #226**

**City of Flint Improvement Program**

**Flint, Michigan**

**Project: 83:14**

**Date of Monitoring: January 12, 1987 (working day 772)**

**Actions taken:**

- Monitored and evaluated progress on EDA grant and design work for Oak Park Industrial Park
- Revised project PASER with DCD and City administrative staff
- Reviewed and evaluated progress on city garage addition
- Reviewed and evaluated current status of Bishop Airport CFR building
- Reviewed and evaluated current status of senior citizen center (Hasselbring Park)

**City of Flint Oak Park Industrial District**

**Those attending were:**

Ray Vyvyan - Building inspection  
George Ursuy - DCD  
Don Berry - DPW  
Don Sewel - Consumers Power  
Marv Rouseel - DPW  
Ralph J. Stephenson - Consultant

At this session we concentrated our efforts on identifying the method by which public area site improvement (PASI) documents were to be prepared and utilized in relation to the grant funding for the program. Presently the city is completing preparation of a full EDA application and expects to submit it on January 19, 1987 (working day 777). Processing the application is expected to continue through to late April, probably April 27, 1987 (working day 847), when project funds could be released. We assumed there will be a council meeting on April 27, 1987 (working day 847) and worked back to determine the time table for preparation for contract documents. This indicated that these documents should be completed by early March, 1987, then reviewed with the Michigan Transportation for approval, after which they will be submitted to the EDA regional office for final approval.

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Advertising for proposals is expected to be done by March 23, 1987 (working day 822). Proposals will be received by April 22, 1987 (working day 844), and after a review and selection period, the council is to be asked for approval and authorization of an award of contract at the council meeting of April 27, 1987 (working day 847). Construction should be able to start in early May, 1987 and be complete within one year.

Contract documents are to be assembled generally in packages outlined in Monitoring Report #225 dated December 27, 1986 on pages 2 and 3. The refurbishing of Saginaw Street from Parkland to Leith shown in that package #5 will be moved to package #2. There were some discussions about how the drawings should be issued for proposals, and later in the day it was mentioned by Mr. Roussel that probably two separate packages of drawings would be prepared for contractor proposals. There was not time to evaluate this matter further and we should plan to closely monitor progress on these packages at our subsequent meetings.

A critical element is to insure that all agencies that must review the documents, are provided the necessary information in a timely manner so no delays are encountered once the grant has been approved.

Presently the network model being followed for release of this work is shown on sheet #164A issue #8 dated January 12, 1987 (working day 772). We shall continue to monitor and update this network at subsequent sessions.

Of extreme importance also is the detailed planning of individual construction programs. To review there are 6 of these:

- Package #1 - Clearing and grubbing
- Package #2 - Dartmouth Street
- Package #3 - Baker Street
- Package #4 - Newall Street
- Package #5 - Leith Street
- Package #6 - Landscaping work for 1987

As noted earlier these may be consolidated into a fewer number of contract document releases.

Flint Area Economic Development Program

At the morning session I met with the representatives of the DCD, the DPW, and the administrative officers of the city to review methods by which citizen and business involvement in economic development for the Flint area could be encouraged.

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This is a separate program and therefore, will not be reported on here in detail.

The work on this project is of a task force nature and consists of a holding a limited number of working sessions with members of the business and public community in Flint and Genesee County. These sessions will be aimed at identifying specific projects which are to be encouraged that will lead to improved area economic health. It was stressed during this session today that the role of government in the Flint area is best considered as to provide a predictable public governmental environment within which the private enterprise, as well as other sectors in the economy, can develop and grow in a healthy and positive manner.

I shall continue to work on this program as the staff sees fit. However, due to its temporary nature and because of time commitments, my role will primarily be that of an intermittent project advisor. I shall, however, remain in touch with the DCD and the DPW to determine what future involvement is desired of me.

Detroit Street Fire Station

No monitoring or planning was done on this project at this session.

Repair Garage Addition

Those attending were:

Glenn Shock - DPW  
Ray Vyvyan - Building inspection  
Les Beales - Project manager - Rhodes and Johnson  
Roy Albert - Architect  
Ralph J. Stephenson - Consultant

Monitored from sheet 169 issue #5 dated November 24, 1986 (working day 740).

Progress on the project has been fairly good and in general the building is now closed in with work proceeding on interior trades. The project was in such condition as to warrant an updating of the network model. Therefore, sheet 169 was updated to issue #6 dated January 12, 1987 (working day 772). In the updated network model the completion date is shown at March 11, 1987 (working day 814), a slippage over the date in the previous issue of February 27, 1987 (working day 806). This is a lag of about 8 working days. However, it does not appear to be critical and it is possible that some compression of interior work activities could bring the project back into the late February, 1987 completion range.

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The slab on grade at the interior is to be poured out in the near future and will proceed concurrently with installation of interior work at other areas including studs, rough plumbing and electrical, HVAC work and interior gyp board installation. The updated network model was provided to those present. Additional copies are available as needed.

Crash Fire Rescue and Snow Removal Equipment Building

Those attending were:

Robert Hindley - Director of Aeronautics  
Ray Vyvyan - Building Inspection  
Marvin Roussel - DPW  
Nancy Cady - Forester Construction  
Ralph J. Stephenson - Consultant

Currently substructure concrete work is nearly complete with the last substructure pour to be made January 12, 1987 (working day 772). Structural steel is to be delivered February 16, 1987 (working day 797) and erection is to start on March 2, 1987 (working day 807). No authentic information was available on the exterior skin of the building.

The handicapped provisions are still in work with a letter having been written by the City of Flint to the state. However, there has been no response to this letter.

We further reviewed the operational requirements outlined in the previous Monitoring Report #225 dated December 27, 1986. There has been no discussion of these since the previous meeting on December 8, 1986 (working day 749). Mr. Hindley feels these are still important and intends to meet with the architect/engineer, City of Flint DPW contractor, and others involved to make a check as to whether the building satisfies the operational needs of the airport and its users. This meeting is to be held on Tuesday, January 20, 1987 (working day 778).

We also reviewed procurement in some detail. Full information was not totally available. However, Ms. Nancy Cady of Forester Construction did provide data about several items. A brief review of the information given the project team at this session is outlined below.

- Structural steel - delivery to begin on February 16, 1987 (working day 797). Erection to start March 2, 1987 (working day 807).
- Steel joists - joist shop drawings have been submitted but not yet approved. These were submitted on November 17, 1986.

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(working day 735). Delivery may be in April, 1987.  
This is not yet confirmed.

- Precast concrete - some shop drawings are submitted. No approvals as yet. This is an important item and materials could be delivered by early April if approvals are given promptly.
- Ground face block - color selection for the block and mortar has apparently not yet been made. This should be followed since masonry will be a critical item for closing in the building.
- Hardware - no current word on delivery or status of revisions.
- Hollow metal frames and doors - delivery of frames scheduled for April, 1987. This will be affected by hardware revisions and so hardware becomes a critical item in fabrication of the hollow metal. Door delivery is planned for July, 1987.
- Ceramic tile - delivery still set for August 3, 1987 (working day 915). NOTE: If the building is to be completed by the present target date of September 3, 1987 (working day 938), it appears that delivery of ceramic tile is somewhat later than it should be.
- Color selections - the contractor must still provide material samples to the architect/engineer. The color board has not yet been prepared.
- Toilet partitions - no shop drawings submitted as yet. These should be watched.
- Acoustic materials - no submittals provided as yet.
- Terazzo tile - to be delivered August 3, 1987 (working day 915).
- Hose dryers - shop drawings submitted and approved. No word on delivery.
- Overhead doors - due to be delivered June 1, 1987 (working day 871).
- Fire alarm annunciator and fire alarm control panel - shop drawings not yet submitted.

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- Vehicle repair hoist - shop drawings not yet submitted.
- Exterior sash and glass - shop drawings not yet submitted.
- Lockers - shop drawings not yet submitted.
- Roof top units - shop drawings have been submitted and approved. No current word on delivery.
- Switchgear - no submittals provided as yet.
- Fuel tanks - shop drawings submitted January 7, 1987 (working day 769).
- Appliances - submittals not yet approved.
- Flagpole - no submittals made as yet.
- Resilient tile - no submittals made as yet.

Overall, it appears that procurement of critical items on the project is lagging. I strongly recommend that at a near future meeting we prepare a network model of this project to get a better handle on the construction sequence and completion dates. There is apparently enough information available to complete the diagram for the job and it must be determined by the project team when and how this is best done. I strongly recommend a plan of work be prepared if the project is to be tracked as it should be. Present monitoring of a project is difficult from the information available since there is no well defined schedule that can be used with confidence.

We briefly discussed the definition of a resident engineer and apparently Mr. Miller of the architect's office has concurred with the definition provided by Mr. Hindley. This matter is now being handled between Mr. Hindley and the architect/engineer.

Hasselbring Community Center

Those attending:

Rudy Hozak - Parks Department  
Ray Vyvyan - Building Inspection  
Ralph J. Stephenson - Consultant

Monitored from sheet 170 issue #4 dated October 2, 1986 (working day 703).

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The project is moving reasonably well with most of the super-structure and close in complete and the interior of the building now protected from weather. Interior partitions are in work although no ceilings have been installed and no painting has begun.

The current lag over the network model is about 14 working days. Therefore, it was decided to update the network diagram. This was done resulting in sheet 170 issue #5 dated January 12, 1987 (working day 772). In this network model it appears now that the completion date is February 17, 1987 (working day 798) for contractor work and two weeks later, or on March 3, 1987 (working day 808) for owner installation. Apparently this is satisfactory to the owner.

Site work yet to be installed includes:

- post and cable work
- concrete drive approach
- new sidewalk at west end of building (some questions exists as to whether this sidewalk is included or not).
- pipe entrance gate
- handicapped signs
- woven wire fencing modifications at the entrance drive.

There still is some building and site work not yet funded. Funding is being made available as it is acquired. There is also some revisions in work at present and these are being issued as they are available.

#### General

There is some question as to the date of our next session. I shall be in touch with Mr. Vyvyan in the near future to establish this. Meanwhile, he will prepare a tentative agenda and distribute it when the date as been set.

Ralph J. Stephenson, P.E.

RJS:gmy  
TO: Mr. Ray Vyvyan

March 11, 1987

Subject: Monitoring Report #227

City of Flint Improvement Program

Flint, Michigan

Project: 83:14

Date of Monitoring: March 5, 1987 (working day 810)

Actions taken:

- Monitored and evaluated progress on EDA grant and design work for East Oak Park Industrial Park (EOPI)
- Updated EDA funding network for East Oak Park Industrial Park
- Monitored current status of Detroit Street Fire Station
- Reviewed and evaluated progress on city garage addition
- Reviewed and evaluated current status of Bishop Airport CFR Building
- Briefly reviewed current status of senior citizen center (Hasselbring Park)
- Inspected Detroit Street Fire Station

City of Flint Oak Park Industrial District

Those attending:

Ray Vyvyan - City of Flint DPW  
Marv Roussel - DPW  
Kathy Stoughton - DCD  
Rudy Hozak - Parks and Recreation  
Don Sowle - Consumers Power  
Denise Hopkins - DCD  
Ralph J. Stephenson - Consultant

The EDA application has been submitted and is currently being reviewed by EDA. Minor revisions were made necessary by a re-allocation of scope of work items. However, this should not delay processing and the Washington office of EDA is expected to provide approval at an early finish of April 1, 1987 (working day 829).



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Part of the scope changes concern division of the project into two sections; EOIP #1 and EOIP #2.

EOIP #1 includes work on Leith, Taylor, and Saginaw. It does not require EDA approval.

EOIP #2 includes work on Baker, Dartmouth, Parkland, Dayton, Warren, and Newell. EOIP #2 contract documents must be approved by EDA. Our updated network model reflects sequencing for both EOIP #1 and EOIP #2.

For #1 it is expected that contract documents will be issued for proposals on March 12, 1987 (working day 815). Proposals are to be received by April 2, 1987 (working day 830) and submitted to council on April 13, 1987 (working day 837). This should allow construction to start on EOIP #1 PASI (public area site improvements) by May 4, 1987 (working day 852). Completion is targeted for September 1, 1987 (working day 936).

Contract documents for EOIP #2 will be submitted to the EDA regional office on March 13, 1987 (working day 816). It is expected that they can be issued for proposals on March 25, 1987 (working day 824). Proposals will be due in April 23, 1987 (working day 845). Council's approval of proposals will be at their meeting on May 11, 1987 (working day 857). This should allow construction to begin by June 2, 1987 (working day 872). Current projected completion of construction is in early October, 1987.

However, Mr. Rouseel would like to finish earlier and has set an informal target of September 1, 1987 (working day 936), the same as for work under EOIP #1. The logic plan is shown on sheet 164A, issue #9, dated March 5, 1987 (working day 810).

It should be noted that there is still some further definition of scope of work needed, particularly with landscaping and berm items. These apparently have not yet been fully clarified to all parties on the project. Notes were taken at the session concerning the scope of work, general progress, and the projected schedule of dates. These notes were made available to those involved. Some were distributed at the meeting. Those who have not received them may have them by request to Mr. Vyvyan.

#### Detroit Street Fire Station

Those attending:

Phil Masson - Flint Fire Department Maintenance Supervisor  
Ray Vyvyan - Building Inspection  
Ralph J. Stephenson - Consultant

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(Evaluated from network model for possible plan of work sheet FS2-1, issue #2, dated November 24, 1986 (working day 740). It should be noted that this is not an official monitoring document and was prepared primarily to guide evaluation of the project for the City of Flint. It is not intended to represent a plan of work to guide or direct the contractors or the construction manager in their work.)

The network model on sheet FS2 showed a clean up and move out date for the contractor on base building work, by February 13, 1987 (working day 796). Currently the work as noted in our meeting and in the field, appears to lag by about 20 to 22 working days. This would put projected completion of base building work at about March 17, 1987 (working day 818). Owner's work will probably extend about another 10 working days past this point to give a gull completion and occupancy date by March 31, 1987 (working day 828).

It was not possible to review these status figures with those on the project since they were not present at the session. In a later visit to the job Mr. Vyvyan and I had a brief conversation with the contractor's superintendent. However, he was relatively new on the job and was not able to provide authentic information about projected completion dates.

At present the parking lot leveling course has been installed, however, no wearing course has yet placed. There is no landscaping yet installed, nor is the parking lot striping in place. Fuel tanks are installed but apparently the fuel pumps are not.

The building is generally closed to weather although there still is a fair amount of caulking and sealing to do around frames and other exterior openings.

Interior work is complete except for

- plumbing fixtures
- lockers
- toilet partitions
- ceramic tile
- carpet
- mechanical and electrical trim
- resilient tile
- painting touch up
- clean up

Owner work has not yet begun, although some preliminary steps have been taken to get this into the field.

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Vacation of the existing fire station #2 was to have been February 28, 1987 (working day 807). There was no word available on what the status of the turnover of this station to the new occupant is. This matter should be checked carefully.

There has been a request, informally, for a final inspection by the building department about mid March, 1987. Again, there was no further data on the project than that provided by those attending the meeting.

#### Repair Garage Addition

Those attending:

Glenn Shock - DPW in charge of garage  
Ray Vyvyan - Building Inspection Director  
Les Beales - Project Manager R/J  
David VanWagnen - Superintendent for R/J  
Ralph J. Stephenson - Consultant

The building is fully closed to the weather and is now moving into its closing work phase. Final inspection of the project will probably be by March 11, 1987 (working day 821).

There are still some contractor items to be completed. These include:

- outside roof conductors
- miscellaneous painting
- hook up of air lines to hoist
- lockers
- plumbing fixtures
- toilet partitions

Owner work is also in progress but there is expected to be no difficulty in completing it by the move-in date.

Overall, the project has moved well, and reasonably close adherence to the current network models has been maintained through the project.

#### Crash Fire Rescue and Snow Removal Equipment Building

Those attending:

Ray Vyvyan - Building Inspection  
Robert Root - Forester Construction

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Marvin Roussel - DPW

Evelyn Peterson - Bishop International Airport

Ralph J. Stephenson - Consultant

Currently structure steel is completed, plumbed, and bolted. Metal deck is being erected.

Exterior skin work, including twin Ts, has not yet begun. The project was shut down about February 20, 1987 due to difficulty of access to the site. There is no current word on when work will resume at the project.

The discussion at our meeting primarily revolved around present projected target end dates and the validity of current schedules. Because of the difficulty of maintaining close contact with project progress and because of the site access problems, I suggest we seriously consider preparing a network model of the project.

The contractor has prepared a schedule of what he anticipates will be done. However, this document does not provide the full information needed for close monitoring required on critical projects of this type. A major consideration relative to additional planning should be the actual need for the building. If the facility is critical an accurate plan of work is necessary to properly evaluate and gauge performance.

We discussed the matter of additional planning and scheduling briefly at our session, and it was generally agreed it might be best for Mr. Vyvyan and me to prepare a network model by which progress could be tracked, and to review it regularly with the contractor. This network would not be for directing or indicating to the contractor a plan of work that he was required to follow. However, there is definitely a need for some type of document against which progress can be evaluated and delays simulated to determine their impact.

Some time ago it was decided that the operational requirements of the project should be checked carefully. A meeting was held by Mr. Hindley in mid January with the architect/engineer and the architect was to review the operational discussion and prepare bulletins for pricing in case revisions might be necessary. There is, as yet, no word on this matter from the architect/engineer. I suggest that this matter be followed carefully since the building has a specific and essential operational role to play at the airport. It must be operationally sound.

In our notes for this meeting a list of those items that deal with the operational characteristics of the project was provided.

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We also discussed procurement in detail since there seems to be major concerns about delays, poor communication, and other potential difficulties in procurement. A full review of this matter is contained in the notes of the meeting under item 3.6 on page 2.

The items discussed under procurement are briefly summarized below.

- Precast concrete - all shop drawings submitted and approved. Material being fabricated. To be delivered April 1, 1987 (working day 829). Need access to the site.
- Ground faced block - no approvals on block submittals have been provided as yet. Glazed block and ground block delivery is 8 to 10 weeks after approval.
- Hardware - contractor requested a bulletin for hardware revisions on January 7, 1987 (working day 769). There is no current word on where this matter stands.
- Hollow metal frames and doors - shop drawings are not yet approved. This item is a critical item, and the hardware problems attendant to hollow metal must be resolved quickly. Frames will be needed as soon as masonry starts in mid or late April, 1987.
- Ceramic tile - no colors have been selected as yet. There have been some very serious difficulties in getting approvals on colors.
- Toilet partitions - have been approved. No color selection as yet.
- Acoustic materials - submittals in. No approvals yet.
- Terazzo tile - has been submitted. Not yet approved.
- Hose dryers - no current word on delivery.
- Overhead doors - shop drawings were submitted on December 10, 1986 (working day 751). Were returned, not approved. The contractor is now presently trying to find another supplier. Changes may be made to the operational system for the doors. This is part of the discussions that are so critical as noted above.
- Fire alarm annunciator and fire alarm control panel - shop drawings have been submitted to the architect/engineer, however, it may be that they will have to be also submitted to the Flint Fire Department. Mr. Roussel will follow this matter.
- Air compressor - existing air compressor is to be relocated. No problems.

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- Vehicle repair hoist - shop drawings were submitted just recently.
- Exterior sash and glass - submittals were provided to the architect/engineer early in March, 1987. No approval as yet.
- Lockers - not submitted as yet. Should check to determine lead times required.
- Roof top units - shop drawings have been submitted and approved. No word on delivery.
- Switchgear - shop drawings have been submitted. No approval as yet.
- Fuel tanks - shop drawings were submitted January 7, 1987 (working day 769). Were disapproved and are to be resubmitted.
- Appliances - submittals are in. Need color selection.
- Flagpole - submittals are in. No approval as yet.
- Resilient tile - samples are submitted. No approvals as yet.

The discussion indicated today that there has been somewhat of a slow response on revisions and color selections. This matter should be taken under consideration just as quickly as possible.

We also reviewed possible methods of gaining construction access to the site including graveling a temporary road. However, cost seems to be a major factor here and careful thinking of this matter is to be done by all parties involved to see if it is worth the additional costs that will be required to gain early access.

We also reviewed briefly the phasing in conjunction with other work and it appears that probably the new parking areas that were hoped to be gained by construction of the new building, and vacation of the old will not be achieved this year.

Hasselbring Community Center

No formal meeting was held re this project at our session. However, informal discussions with Mr. Rudy Hozak of the Department of Parks and Recreation indicates that the building is very nearly complete and that move in is expected in the immediate future. We probably will not have to monitor this project any further.

General

Mr. Vyvyan will prepare and distribute the agenda for our next meeting.

April 10, 1987

Subject: Monitoring Report #228

City of Flint Improvement Program

Flint, Michigan

Project: 83:14

Date of Monitoring: March 23, 1987 (working day 822)

Actions taken:

- Reviewed current status of Bishop Airport CFR-SRE Building
- Monitored and evaluated progress on East Oak Park Industrial Park
- Field inspected Hasselbring Community Center
- Field inspected Detroit Street Fire Station #2

Crash Fire Rescue and Snow Removal Equipment Building at Bishop Airport

Monitored from: Close in diagram, issue #1, dated January 12, 1987 (working day 772), sheet 173.

Those attending:

Steve Hill - Deputy City Administrator - in meeting part time  
Ken Collard - DPW Director - in meeting part time  
Don Berry - City Engineer  
Robert Hidley - Director of Aeronautics, Bishop Airport -  
in meeting part time  
Ray Vyvyan - Building Inspection  
Marvin L. Roussel - DPW  
Tom MacCullum - Michigan Bell Telephone  
Ralph J. Stephenson - Consultant

The stop work order which was put on the job about mid February, 1987 is still in effect and there has been no major field progress since our previous meeting. There seems to still be some problem with access to the site. However, Mr. Hidley says this is not totally true since the site has been accessible for about 2 weeks. In any event, attention must be given in the very near future to officially releasing this project so that construction can resume.

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The network model for close in work, sheet #173, issue #1, dated January 12, 1987 (working day 772) showed that the twin T exterior panels were to be started by May 1, 1987 (working day 851) and that the building was to be substantially closed to weather and the slab on grade completed no later than June 1, 1987 (working day 871). This is a fairly late date to close the building in if occupancy is desired in early September, 1987. However, since there is no current schedule or network plan that will allow us to make an accurate evaluation of work, any progress analysis is very difficult.

If this project is a high priority program and is to be monitored carefully, I strongly recommend that a network model be prepared of the total project with the participation of all concerned. A judgment on this should be made soon by those responsible for bringing the project on line.

The present characteristics of the project indicate that some strong directive staffing at the ownership level would be of help in clarifying needs and progress expected on the job. Since there are many organizations involved, this may be somewhat difficult. A list of those connected with the job currently include:

- Michigan Department of Transportation
- Michigan Aeronautics Commission
- Flint Department of Aeronautics
- Federal Aviation Administration
- Flint Department of Public Works-on a technical testing and involvement only
- Madison & Madison - Architects and engineers of record
- Rowe Engineering - retained by Madison & Madison for field administration
- Forrester Construction  
(Contractors retained by the City of Flint and the Michigan Department of Transportation)

It can be seen that there are a multitude of different organizations each having a portion of the job, and it is apparent now that some strong direction must be given by the most affected of this group, probably the ultimate decision makers, relative to how the work is to proceed in the near future. I emphasized this point with all attending the meeting and there is some evidence that a management structure will be provided soon to allow better official direction and attention to be given than may be possible at present. I recommend this matter be followed to its conclusion now since any construction that does not proceed at this time is



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lost. Our weather has been exceptionally good this spring and full advantage must be taken to move construction ahead in the field.

Meanwhile, there are some problems with procurement and also with field administration. In the field administration area the field administrator is currently reconsidering their involvement in the project and a decision on involvement will be made by them in the near future.

A procurement difficulty presently is in preparation of a color board. Apparently this was not included in the architect's agreement with the contract parties. However, the city has consented to pay the architect for preparing this color board and it will be put into work in the very near future. The contractor has apparently provided all samples required for this color board to be prepared. There have been some delays in getting underway with the color board and I was not able to identify what the cause of these were but suggest they be cleared away just as soon as possible.

Operational requirement of the project have been cleared and at present the status of these are as follows:

- Door controls - will be designed by architect
- Alarm systems - part of the door control installation
- Traffic patterns - have been resolved
- Compressed air supply - will use existing compressor
- Hose drying - hose dryer has been deleted
- Exhaust from trucks in fire station - no additional ventilation will be provided
- Water supply for filling trucks - not to be installed
- Emergency power - not to be installed
- Emergency lighting - no additional - will use currently specified battery operated
- Emergency heat for keeping trucks operational - not to be installed
- Portable generators - not to be used

It appears that operating characteristics problems have been cleared, although there still seems to be some difficulties in getting the paper work needed for processing and movement into the field. These types of items must be expedited if the project is to continue moving in the field.

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I again recommend that at a future meeting we consider preparing a network model for the job, dependent upon the needs, feelings, and attitudes of the various parties to the project. If this is to be done, it will be essential that those attending the meeting come prepared to provide a sequence of activities, and a scope of work to be diagrammed so that the information can be molded together into a network model.

Those elements needed to prepared a network model include:

1. a full list of the procurement status of all materials and equipment.
2. a definition either in writing or in the minds of those attending (preferably in writing) of the activity items needed to complete the job. These would encompass those activities needed for close in, underground work inside the building, slab on grade installation, rough interior work that can be installed and exposed to the weather, finish interior work that must be protected from the weather, systems work including equipment and connections, exterior work which allows the building to function with its surroundings, and a list of the owner's installation that must be accomplished once the building is ready for owner occupancy.

If this information is not available from those involved in directing and constructing the project, it is possible we could do a network plan based only upon the city staff's knowledge of the job. However, this is not a desirable process nor is it one that can be considered official on a project of this type. Therefore, I urge serious consideration of having the owner, the architect/engineer, and the contractor at a future meeting if it is the intent to do a network model for this project.

Subsequent to the meeting on March 23, 1987 (working day 822), I was provided a copy of a letter from the Department of Labor, State of Michigan from Ms. Kathleen Jo Steele, Chief of the Barrier Free Design Division, dated March 17, 1987 (working day 818) that said the project will be required to comply with all barrier free code sections including interior accessibility between floor levels and parking. Apparently this means that the building does not qualify under exemptions and must be brought into compliance or an exemption obtained from the Barrier Free Design Board. From the distribution by Mr. Vyvyan, it appears this letter has been sent to Mr. Rob Collier, Mr. Steven Hill, Mr. Ken Collard, Mr. Marvin Roussel, in addition to myself.

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East Oak Park Industrial Park Public Area Site Improvement (PASI)

Those attending:

Kathy Stoughton - DCD  
Denise Hopkins - DCD  
Tony Kublilek - DCD  
Ray Vyvyan - DPW  
Marvin Roussel - DPW  
Don Sowle - Consumers Power  
Ralph J. Stephenson - Consultant

Progress on the EDA application has been fairly good and at present the application is in Washington, being reviewed by the federal EDA office. It is presently expected the city council will be able to authorize, and the mayor execute the grant agreement, by their April 27, 1987 (working day 847) council meeting. Once that is done, the grant agreement will be the basis for releasing funds which hopefully will be available by the early part of May, 1987, with the council approving and authorizing the award of the EOIP #2 PASI contract at their meeting on May 11, 1987 (working day 857).

Meanwhile, EOIP #2 contract documents have been submitted to the EDA regional office and are being reviewed there now. It is hoped to advertise and receive proposals for a bid opening on April 23, 1987 (working day 845). An evaluation can then be made of the proposals, and a contractor recommended in time for the council meeting on May 11, 1987 (working day 857). This would allow a preconstruction meeting to be held, the contracts to be executed, and the notice to proceed on the work by June 2, 1987 (working day 872).

The contract documents for EOIP unit #1, which do not require EDA approval, have been prepared and issued and proposals are due back on April 2, 1987 (working day 830). These are expected to be evaluated and submitted with recommendations to the council for their meeting on April 13, 1987 (working day 837). A notice to proceed could be issued for EOIP work unit #1 and the contractor could be on the site by May 4, 1987 (working day 852).

Using these approximate dates as a base of further evaluation, we prepared construction network models for work on each of the major projects both for EOIP #1 and EOIP #2. To review, the content of each of these is as follows:

Contract documents for EOIP PASI unit #1 includes:

Leith Street  
Taylor Street  
Saginaw Street

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(NOTE - Unit #1 does not have to be approved by EDA)

Contract documents for unit #2 EOIP PASI work includes:

Baker Street  
Dartmouth  
Parkland  
Dayton  
Rankin  
Warren  
Newell

(NOTE - Unit #2 PASI work must be approved by EDA)

We prepared a detailed list of the activities under each of the street renovations in packages 1 and 2. These were put into a summary network model sheet 174, issue #1, dated March 23, 1987 (working day 822). This network model issue shows the logic plan generally desired by the DPW. The network was distributed to those currently concerned with the project. In it, is shown the major work items and the sequence of movement from street to street. In PASI unit #1, operations will start at Leith Street and is presently planned to be initiated May 4, 1987 (working day 852). This work will proceed through relocation of power poles, removal of curbs, gutters, and installation of underground utilities, after which work will move to Taylor.

Taylor Street is also a part of unit #1 work. Saginaw Street, also a part of unit #1, cannot be completed until after work on demolition is completed on Dartmouth. Therefore, the work on Saginaw will be one of the later items to be done.

In unit #2, operations will start at Baker Street, hopefully by June 2, 1987 (working day 872). This will follow work at Taylor Street on the major initiating operations. From Baker Street work will move to Newell and from Newell to Warren, and then from Warren to Dartmouth. The sequence of work has been reasonably well set and will be indicated as a sequence to be followed by the contractor involved.

As noted above, this summary network model was not quantified. At our next session I recommend we apply durations to this network and if any contracts have been let by that time, to involve the contractor in evaluating his sequence of work, the activity scope, and to indicate what durations are required for the activities involved. It is important that the network model become a document prepared and agreed to in conjunction with the contractor, recognizing his needs and desires.

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Presently, it appears that most of PASI work can be successfully completed in 1987, probably by late fall or early winter. This will then provide the city the East Oak Park Industrial Park area for disposition to developers and other potential users.

I suggest that an aggressive marketing effort be initiated, as quickly as possible to help knit together installation of public area site improvements, acquisition and vacation of the land, and further development of properties available. This should be initiated now so the property can be built upon just as quickly after PASI improvements are installed as possible.

#### Wasselbring Community Center

No formal meeting was held on the community center. However, Mr. Vyvyan and I inspected the project and walked the building. The project is at a point where the facility will be occupiable in a very short period of time. Probably 2 or 3 good days of work will bring the building to a point where it could be opened. However, there is no fine grading, subbase or paved parking areas available yet at the outside of the building.

There are other major elements of site work that also must be completed before the building is made accessible to pedestrian and vehicular traffic. The warm spring we have had has made it probable that site work could be constructed at a fairly early date, probably installed and completed by as early as mid or late April, 1987. There was no staff input to this monitoring, so therefore, the observations above are merely the results of the field inspection made by Mr. Vyvyan and myself.

#### Detroit Street Fire Station #2

No formal meeting was held re this project and the monitoring below was done from a field inspection of the facility by Mr. Vyvyan and myself. The project in the field is substantially at the general position as reported in the previous monitoring. There has been some additional interior finish work completed but there still remains enough work so that it will require from 5 to 10 working days (based upon past rates of field work) to bring the job to completion by the contracting forces.

There still remains the owner's installation to complete, and there is no accurate projection presently available on how long this might require. However, it appears that within the next few days, the project should be at a point where the owner could begin his installation.

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A major element yet to be completed in the larger locker room space and this may take a fair amount of time if materials for it are not available.

Again, the project is close enough to being done so that any major planning must now be done on a day by day basis. We did not have the opportunity to confer with any supervisory staff on the job.

General

Mr. Vyvyan will prepare and circulate the agenda for our next session. I highly recommend we continue intensive evaluation of the Bishop Airport CFR Building, depending on its importance and relative criticality. The project is not in good predictable plan form at present and in my opinion needs careful management attention from the ownership group.

I also recommend that we continue our planning on the Oak Park Industrial Park work, quantifying the PASI units 1 and 2 network models and identifying a detailed plan of operational work to be followed this summer by the contractors and DPW.

Ralph J. Stephenson, P.E.

RJS:gmy  
TO: Mr. Ray Vyvyan

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

May 7, 1987

Subject: Monitoring Report #229

City of Flint Improvement Program

Flint, Michigan

Project: 83:14

Date of Monitoring: April 21, 1987 (working day 843)

Actions taken:

- Reviewed current status of East Oak Park Industrial Park
- Updated EDA grant network for East Oak Park Industrial Park
- Completed network model for construction of PASI work at East Oak Park Industrial Park
- Briefly inspected DPW garage
- Reviewed Bishop Airport CFR-SRE building progress
- Evaluated current CFR-SRE status

East Oak Park Industrial Park

Those attending:

Kathy Stoughton - DCD  
Denise Hopkins - DCD  
Ray Vyvyan - DPW  
Mike Mansfield - DFW  
Don Sowle - Consumers Power  
Ralph J. Stephenson - Consultant

The EDA application for PASI #2 work is still being reviewed by the Washington EDA office. There is no authentic word on when this review and approval will be complete. In our updating of the network model, we assumed that approval will be received in Flint in time for the council meeting on May 11, 1987 (working day 857).

There is some float time in this network model due to the need to wait for subsequent council meeting to approve award of contracts. However, it would be preferable to have city approval of the grant agreement in hand just as quickly as possible.

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Present planning is to have the funds available about May 21, 1987. Meanwhile, contract documents for PASI #2 are being reviewed and when the grant is approved, and when any minor changes needed are made, they can be issued for advertisement and proposals. Present expectations are that bids will be received by June 11, 1987 (working day 879) and that the council will be able to approve, authorize, and award a PASI #2 contract for East Oak Park Industrial Park at their June 22, 1987 meeting (working day 886). This should allow construction to begin by mid June, 1987 on phase 2 work.

Phase #2 work includes:

- Baker Street
- Dartmouth
- Parkland
- Dayton
- Rankin
- Warren
- Newell

Contract documents for PASI phase 1 work have been issued, proposals have been received, the contractor selected, and construction is expected to begin by May 11, 1987 (working day 857). Work included in PASI 1 contract documents is for the following:

- Leith Street
- Taylor Street
- Saginaw Street

It should be noted that the Saginaw Street work cannot be started in production until much of the phase 2 work has proceeded through removal of curbs and gutters and installation of some underground utility work. This phasing must be watched carefully in the contract administration.

In the PASI phase 2, three of the programs, Parkland, Rankin, and Dayton have been repackaged and put into a set-aside group.

The network model for taking the work to the point where construction could begin on both packages is shown on sheet #164A, issue #10, dated April 21, 1987 (working day 843). A copy of this network is enclosed with the monitoring report for additional distribution as might be required. Some copies were distributed at the meeting.

We also at this meeting completed the network model for construction of PASI phases 1 and 2 construction. This network is shown on sheet 174, issue #2, dated April 21, 1987 (working day 843). With the assistance of the DPW and the DCD, durations were assigned to the logic plan and the network was printed and distributed to those re-



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quiring copies at the meeting.

The dates, taken from the network model, indicate the following starting and completion points for each major element of the program.

<u>Street</u>	<u>Early Start</u>	<u>Late Finish</u>
Leith Street	May 4, 1987 (working day 852)	July 9, 1987 (working day 898)
Taylor Street	May 18, 1987 (working day 862)	September 1, 1987 (working day 936)
Baker Street	July 14, 1987 (working day 901)	August 27, 1987 (working day 933)
Newell Street	August 4, 1987 (working day 916)	October 1, 1987 (working day 957)
Warren Street	August 25, 1987 (working day 931)	October 8, 1987 (working day 962)
Dartmouth Street	September 1, 1987 (working day 936)	October 29, 1987 (working day 977)

The clean up and move out of Dartmouth activity duration was inadvertently left off the diagram activity. The completion date should be 1 working day later than the date shown. The actual plan completion date is October 29, 1987 (working day 977).

Saginaw Street	September 23, 1987 (working day 951)	October 22, 1987 (working day 972)
Parkland	September 23, 1987 (working day 951)	October 2, 1987 (working day 958)
Rankin	September 28, 1987 (working day 954)	October 6, 1987 (working day 960)
Dayton	October 1, 1987 (working day 957)	October 8, 1987 (working day 962)

The above are planned dates and still must be reviewed with the contractors involved. Also please note that the dates shown for starting are those for removal of curbs and gutters, excavation, and installation of underground utility work. Some public utility work such as for power poles may be started earlier.

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I suggest that care be taken in the planning of the construction with the various contractors to insure that the necessary sequencing is adhered to so that utility service and traffic flow is maintained as desired throughout the project.

Crash Fire Rescue and Snow Removal Equipment Building at Bishop Airport

Those attending:

Rob Collier - Administrative Assistant - in meeting part time  
Ray Vyvyan - Building Inspection  
Nancy Cady - Forester Construction  
David Miller - Madison & Madison  
Ralph J. Stephenson - Consultant

The stop work order for field operations has not yet been lifted officially. However, work has restarted on the project as of April 21, 1987 (working day 843). Work had been stopped on February 16, 1987 (working day 797). So there was a total of 46 working days in which a stop work order was in effect. The addition of these 46 days to the current completion date, projected at September 3, 1987 (working day 938), now brings contract finish to November 9, 1987 (working day 984). These stop work orders for field operations must be watched carefully since the project is now extended out into another winter season and being faced with the same type of access problems that have delayed progress on the job to date.

The difficulty appears to be lack of an access road by which contractors can maintain a flow of work to and from a project site. There was no major discussion of this at our session today. However, it is an important item and should be given ongoing attention by all concerned.

Currently, there is a construction crane on the site and exterior precast panels began arriving on the job as of April 21, 1987 (working day 843). Panel erection will take approximately 22 working days, or less.

We had a major discussion about material and color selection, and procurement. The items were reviewed thoroughly in the temporary note file, printed at the session and distributed to those concerned. A brief review is given below.

- ground face block - color selection has been made but not submitted formally to the contractor. The color of the block has not yet been approved. The project should be ready for start of block in about 10 working days.
- soffits - soffit color submitted by the contractor was not available. It was resubmitted April 7, 1987 (working day

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833) and a color should be selected soon.

- Copings - Color and material selected. It is not yet approved by the owner. (The owner when referred to in this discussion is the Flint Department of Aeronautics.)
- Sash and glass - Sash color has been selected. Not yet approved by the owner. Glass color has not been selected.
- Roofing systems - all approved.
- Doors - Paint colors have been selected.
- Exterior skin colors - can be made after block approval. Probably will be ready in about 5 working days.

We also spent considerable time discussing the status of procurement and a brief review of this matter is given below.

- Overhead doors - shop drawings submitted and rejected. Delivery 40 working days after approval.
- Hoist at SRE - shop drawings not submitted. Delivery 40 working days after approval.
- Ground face block - delivery 20 working days after approval.
- Sash and glass - shop drawings submitted but not approved. Delivery 60 working days after approval.
- Roofing - submitted and approved. Materials will be on job by May 1, 1987 (working day 851).
- Hollow metal frames - hardware schedule submitted but not approved. Delivery of frames is 40 working days after approval of hardware.
- Sheet metal ductwork - no information as to whether shop drawings are required or not.
- Fire protection piping - need in SRE apparatus room. Should study code review dated October 31, 1986 (working day 724). This code review was shown to Mr. Miller today and apparently he has never seen the document. It, however, was dated several months ago and is a very important document and should be given immediate attention by all concerned.

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- Alarm system - has been submitted to Madison for approval. This must be approved by the Fire Marshal.
- Mechanical equipment - all submitted and approved. Delivery 40 working days after approval.
- Ceramic tile - was submitted about February 3, 1987. Not approved as yet. Need color selection. Delivery 40 working days after approval.
- Terrazzo tile - was submitted about February 3, 1987. Not approved as yet. Need color selection. Delivery about 10 working days after approval.
- Resilient tile - was submitted about February 3, 1987. Not approved as yet. Need color selection. Delivery about 10 working days after approval.
- Toilet partitions - submitted but not approved. Need color selection. Delivery about 30 working days after approval.
- Plastic laminate - colors and caps not submitted as yet. Need color selection. Delivery about 30 working days after approval.
- Lockers - shop drawings have been submitted. No approval as yet. Need color selection. Delivery about 50 working days from approval.
- Switchgear - submitted and partially approved. Delivery approximately 30 working days after approval.
- Fuel tanks - shop drawings submitted but not approved. Are being prepared for resubmission. Will be resubmitted in 30 working days to record on delivery times.
- Signage - submitted about December 1986. No approvals as yet. Color selection needed.
- Appliances - submitted about November 1986. Held for color selection. Delivery about 50 working days after approval.
- Flagpole - submitted and approved. Delivery about 40 working days after approval.
- Acoustic materials - no submittals as yet.

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The above information  
fully confirmed to be  
items carefully at each  
obtained and being used

deliveries of materials and must be  
considered authorized. We should follow these  
instructions to insure that full information is  
forwarded properly.

The procurement of the  
must be given a high priority  
brought on line by the

the items is critical and absolutely  
priority of attention in this project is to be  
of the year.

Another difficulty that  
summer, is the possibility  
strikes. The contracts  
of the trades potentially  
session that may be affected

present in later this spring and  
of trade contracts expiration related  
all provided Mr. Vyvyan with a full list  
affected. As discussed briefly at our  
and include:

- roofers
- carpenters
- laborers
- masons
- electricians
- plumbers
- sheet metal workers

All of these are involved  
adversely affect work progress

remaining on the job and could  
cess if there are strikes.

The next major operation  
cast and to get the roof  
slab on grade area completed,  
plete, and it appears that  
The building is essentially  
cept for hoist work which  
ground services are not  
building and it is possible  
before the hoist is completed.

the field to complete the pre-  
the slab to be installed. At the  
sewer is complete, storm sewer is com-  
most other trades are nearly complete.  
ready for fine grading, ex-  
is not yet installed. Hoist under-  
called. The hoist is located in the SRE  
that work proceeded at other areas  
d.

The roofing system has  
probably will not begin  
could possibly start by

approved and is up. However, it  
all exterior work is up. Roofing  
y June, 1968

No diagramming was done  
that a plan of work be  
performance for the job.

on the part of however, I recommend  
ed and be discussed as a measure of

General

Mr. Vyvyan will prepare and circulate to agenda for our next

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

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session. I suggest we continue to monitor the East Oak Park Industrial Park work along with the Bishop Airport work. The Bishop Airport project is extending out long and it should and needs additional careful management attention.

Ralph J. Stephenson, P. E.

RJS:gmj

TO: Mr. Ray Vyvyan

May 21, 1987

**Subject: Monitoring Report #230**

City of Flint Improvement Program

Flint, Michigan

**Project: 83:14**

**Date of Monitoring: May 21, 1987 (working day 860)**

**Actions taken:**

- Reviewed current status of East Oak Park Industrial Park
- Updated EDA grant network for East Oak Park Industrial Park
- Inspected Bishop Airport CFR/SRE building progress
- Began preparing inventory list for Bishop Airport CFR/SRE Building network model
- Began preparation of network diagram for CFR/SRE Building
- Discussed current project progress on the CFR/SRE Building with Mr. Root of Chester Construction Company.

**East Oak Park Industrial Park**

**Those attending:**

Kathy Stoughton -  
Denise Hopkins -  
Ray Vyvyan - DPW  
Mike Mansfield -  
Marvin Roussel -  
Don Sowle - Consultant Power  
Ralph J. Stephenson - Consultant

The EDA application has not yet been approved by the Washington office and there is no recent word on when this will occur. A change has been made in the program and the grant type is to be revised. The original grant was designed for permanent job creation guidelines grant under the order of the state of Michigan to hire unemployed and under employed City of Flint union labor. These conditions, which are different than the original conditions of the grant, must be inserted in the specifications prior to issuance of these for package #2 proposals.

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So far as the PASI package document #2 was concerned, we updated the network model, issue #10, dated May 10, 1987 (working day 843) to issue #11, dated May 14, 1987 (working day 860). In this diagram we showed the grant approval as being available on May 14, 1987 (working day 860). This grant, once it was forwarded to the City of Flint, allows revisions to be made to the drawings and the drawings to be issued for advertising and proposals. The evaluation and recommendation of a contractor could be completed by late June or early July, 1987 with council approval and authorization of award of the EOIP (East Oak Park Industrial Park) public area site improvement package #2 on July 8, 1987 (working day 897). This would permit field work to begin by August 1987 (working day 915), about 2 weeks later than had been anticipated in the issue #10 network model.

The problem with this project is that it is being moved close to a start which would put a portion of the work into winter construction. This could cause serious problems and delays to full completion of the project under the terms of the grant. However, there does not appear to be much that can be done to expedite the approval presently pending in Washington, and the DCD staff is following the project carefully.

(Please note that in the updated version of drawing 164A the activities showing council approval, the preconstruction meeting, and execution of contracts for the package #1 are labeled for package #1. Please revise this package #2 on your networks.)

We shall continue to evaluate the EDA grant and its delay impact upon the project at subsequent meetings.

The EOIP PASI package #1 has been issued and bid. A notice to proceed was provided to the contractor on May 12, 1987 (working day 858) and construction is expected to start by May 20, 1987 (working day 864). Revising the current network model on sheet 174, issue #2, dated April 21, 1987 (working day 843) construction on Leith Street, which is the first project in the #1 package, was due to begin on May 4, 1987 (working day 852). The lag over this diagram is projected at 12 working days.

The project can proceed through to the Baker Street program, which is a part of the PASI package #2. At present, it appears that the Baker Street will not be able to start until sometime in August, 1987 at the earliest. Therefore, it is possible that the logic of the program will have to be revised to consider a later start. Because of the uncertainty of the program, it was decided at this session to defer updating until our next meeting.



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Crash Fire Rescue and Snow Removal Equipment Building at Bishop  
Airport (CFR/SRE)

Those attending:

Ray Vyvyan - Building Inspection  
Robert Root - Former Construction  
Marvin L. Roussel - CPW  
Ralph J. Stephenson - Consultant

Mr. Vyvyan and I made a full field inspection of the project. At present, structural steel is erected for most of the facility, and has been plumbed and trimmed. Metal roof deck is erected at the snow removal equipment area but not at the crash fire rescue building. Exterior precast panels have been installed and welded at the snow removal equipment building and exterior masonry is being erected at the crash fire rescue building.

There is considerable discussion of the quality and appearance of the precast skin as well as about other workmanship on the project. However, our main efforts at this session were concentrated on planning and scheduling these rather than the quality of the product work.

Trench drains at both the snow removal equipment building and the crash fire rescue building are in progress and underground utility installation is also in progress or complete.

Exterior work on the snow removal equipment building has moved very slowly due to several very complex factors. It is very critical that this work be initiated in the very near future. A portion of our discussion focused on what could be done during the on-site and off-site work to a satisfactory point. This matter will be discussed in more detail in the future. Mr. Vyvyan and Mr. Roussel in the near future. Mr. Vyvyan has been asked to provide his assistance on the project by the city administration and will be focusing considerable attention its progress and scheduling in the very near future.

We prepared a network model for project work from now through late June, 1987. This network model, sheet 175, issue #1, dated May 14, 1987 (working sheet #60) was prepared and given to Mr. Vyvyan for his use in upcoming meetings. Critical early items include resolution of exterior precast panel problems, completion of the trench drain installation, and the slab on grade, and the start of roof framing and curing to allow insulation and roofing to be installed.

It was also suggested that work begin soon on the fuel tank and fuel tank piping installation and to tie it closely to the off-site work that still must be accomplished.

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Mr. Root of Forrester Construction has provided the city with a schedule of his anticipated building needs and it will now be necessary to concentrate on a resolution of the schedule over the next several months so as to permit the current target completion date of November 9, 1987 (working day 984) to be achieved.

At our next session, Mr. Vyvyan and Mr. Root will undoubtedly have a clearer picture of the needs of the project and we shall, at that time, try to complete the network model for the entire building.

Of critical importance to the project is the trade expiration dates of contract groups in the Flint area. These were provided by Forrester to the city on April 29, 1987 (working day 849). The information is listed below for reference.

Trade	Expiration Date of Contract
Bricklayers	April 30, 1987
Plasterers	April 30, 1987
Cement finishers	April 30, 1987
Carpenters	July 31, 1987
Electricians	May 31, 1987
Operating Engineer	April 30, 1987
Iron Workers	May 31, 1987
Laborers	April 30, 1987
Lathers	April 30, 1987
Millwrights	May 31, 1987
Painters	April 30, 1987
Plumbers	April 30, 1987
Riggers	May 31, 1987
Roofers	June 30, 1987
Sheet Metal	April 30, 1987
Teamsters	April 30, 1987

There is no current word as to whether or not construction strikes are likely in the Flint area. However, it is well to be aware of the potential for the strikes resulting at the expiration of contracts. Many of the trades which have contract expirations shown in the list are critical to the project.

General

Mr. Vyvyan will prepare the agenda for our next session and distribute it to those concerned.

RALPH J. STEPHENSON, P.E., P.O.  
CONSULTING ENGINEER  
June 26, 1987

Subject: Monitoring Report #231  
City of Flint Improvement Project  
Flint, Michigan

Project: 83:14

Date of Monitoring: June 8, 1987 (working day 884)

Actions taken:

- Reviewed current status of East Oak Park Industrial Park grant work
- Updated EDA grant work for East Oak Park Industrial Park
- Reviewed current status of East Oak Park Industrial Park public area site improvements
- Updated East Oak Park Industrial Park network
- Reviewed current status of CFR/SRE facility at Bishop Airport
- Updated network map of CFR/SRE facility at Bishop Airport

East Oak Park Industrial Park

Those attending:

Denise Heath - DC (formerly Denise Hopkins)  
Ray Vyvyan - DPW  
Mike Mansfield -  
Don Sowle - Consultant Power  
Tom McCulla - Michigan Bell  
Ralph J. Stephenson - Consultant

Approval of the EDA grant for Oak Park project yet been released by the Washington office. The office has given permission to advertise for proposals. The City of Flint has decided it would prefer to hold advertising until after grant approval has been formally released.

In light of this, we updated the EDA funding network sheet 164A to issue #12, dated June 18, 1987 (working day 884). In this diagram we now show approval and authorization of award of con-

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tract on EOIP #2 by the morning of August 21, 1987 (working day 921). This will generally permit field work on EOIP PASI work to begin September 3, 1987 (working day 948) for package 2. This is a later date than has been previously considered desirable so we next updated the network model for this work to determine the impact of the later than expected release of funding.

At present, work is proceeding on the Leith installation with Leith Street demolition having started about May 20, 1987. Demolition work there has been substantially complete and present efforts are focused on getting underground utilities located at the street so curbs, gutters, sidewalks, and drive ways can be installed.

Consumers Power mains in and lead wires being installed. The lag over the issue #2 network model, dated April 21, 1987 (working day 843) is about 18 working days.

The updated network model issue #3, dated June 18, 1987 (working day 884) shows clean up and move out of Leith at August 5, 1987 (working day 917).

At Taylor Street, demolition has begun and a portion is complete. The north side of Taylor must be maintained so as to provide access to the incubator building. Present progress evaluation indicates that Taylor street work is meeting targets between early and late starts and finishes.

A revised sequence was prepared in which Leith will be done first, followed by work at Taylor, then at Park, and then at Dartmouth, Rankin, Dayton, and Park and concurrently. Warren Street will follow Dartmouth, and Saginaw will be the last section of facility to be completed. Sequencing of the work is done through demolition work and installation of underground utility work.

Due to the late start of field work for package 2, it will probably be necessary to construct the Saginaw and Newell Street improvements in 1988. These two sections of the project are shown being completed by about mid June, 1988. This is later than desired but the demands of weather on outside construction make it necessary to generally close down public areas for the improvement work in early or mid November, 1987. However, some difficulty is anticipated in completing work with grant requirements dates.

The network models updated for the Capital project were issued to those concerned.

### Crash Fire Rescue and Snow Removal Equipment Building at Bishop Airport

Those attending:



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- There has been considerable discussion about firemen alerts in the event of a fire. There was a meeting on June 16, 1987 (working day 882) regarding this matter. Apparently, it was decided that there should be a red light installed on the SRE building that would be tied to the alarm so when the alarm goes off the red light goes on. Alarm horns will also be added to the inside of the building. Presently, the decibel level is being set for the inside system.
- It is desirable to have emergency lighting at the facility. This must be done under code, probably about 60 minutes of lighting in the office, living and apparatus areas will be installed.
- Madison & Madison formally discontinued the services of Rowe per letter dated June 12, 1987 (working day 880).
- The airport has satisfied the sprinkler system requirements for the SRE building.
- The airport needs a response from Madison & Madison re fire code compliance and the sleeping quarters for the HVAC system.
- Mr. Hidley asked about road paving work going along. This work is being done by the city. Apparently, paving will be started on Monday, June 22, 1987 (working day 886). It is important that the airport be notified at least 30 days in advance so they are able to close down the parallel runways. The main runway, east and west, must be used for airlines in bad weather. Mr. Vyvyan said that the paving plans were sent to Mr. John Gross at the FAA for paving review.
- Overall, Mr. Hidley feels that job communications have improved considerably over the last few weeks.

So far as the current status of the project is concerned, work on the buildings is proceeding and precast panel differences have been resolved adequately to allow following work to be released. Structural crack grouting is still to be discussed and a decision made.

At the CFR, about 50% of the metal deck is installed. Mr. Miller mentioned that there might be some possible difficulties with the joist bridging.

At the SRE roof, some bridging is installed and roofing will probably begin at SRE about June 24, 1987. Bridging will probably start on the CFR building about July 1, 1987.

On the site, fuel tanks for the tank farm will be delivered about July 2, 1987 and will take about 10 working days to install. Guard rails at the tanks will be installed with the work.

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Access road paving from  
June 22, 1987 (working  
east-west runway 927 f  
was noted that install  
started about Monday,

runways in progress at 7 AM, Monday,  
1987). It may be necessary to close  
days to provide runway access. It  
of road access to the project will be  
29, 1987.

Main apron paving at the  
are poured. This will

buildings will start after building floors  
probably be installed late July, 1987.

So far as trade contracts  
now. There is no word  
tinue working and in a  
impact on corrective work

are concerned. Most trades are working  
whether structural ironworkers will con-  
sent, it was felt that they would  
at the exterior panels of the building.

As part of our planning  
model for the CFR/SRE  
issue #2, dated June 1987,  
we completed the close  
possibly projected at the  
facility could be completed  
have to be checked very

May, we completed work on the network  
drawing, sheet 175. This was updated to  
1987 (working sheet 174). In this network,  
work and sheet interior installation as  
CFR building. Presently, it appears this  
by mid October, 1987, however, it will  
definitely be completed.

Of importance here is  
has been prepared for  
certainly be used by the  
ference but it is not  
struction of the project  
strong efforts to get  
and it is available for

Note that the network model on sheet 175  
and analyzed by the owner. It can  
contractor and field forces for re-  
ded to be a guide for the actual con-  
the contractor. However, we have made  
contractor into this plan of work  
for use as they desire.

Overall, it appears that  
better than it has in the  
a reasonably good chance  
1987.

Work on the project is beginning to move  
past, and there now appears to be  
complete the project by mid October,  
1987.

General

I shall be in touch with  
session. Meanwhile, he  
session.

Mr. Vyvyan should confirm the next  
distributed agenda for the next

Ralph J. Stephenson, P.E.

RJS:gmj  
To: Mr. Ray Vyvyan

July 19, 1987

**Subject: Monitoring Report #232**

**City of Flint Improvement Program**

**Flint, Michigan**

**Project: 83:14**

**Date of Monitoring: July 17, 1987 (working day 904)**

**Actions taken:**

- Reviewed current status of East Oak Park Industrial Park grant
- Updated EDA grant network for East Oak Park Industrial Park
- Reviewed current status of East Oak Park Industrial Park public area site improvements
- Updated East Oak Park Industrial Park PASI network
- Inspected Bishop Airport CFR/SRF facility
- Reviewed current status of CFR/SRF Bishop Airport facility
- Updated network model for CFR/SRF facility at Bishop Airport

**East Oak Park Industrial Park**

**Those attending:**

Denise Heath - DCD

Ray Vyvyan - DPW

Mike Mansfield - DPW

Don Sowle - Consumers Power (in meeting part time)

Marv Roussel - DPW

Ralph J. Stephenson - Consultant

EDA grant approval has been given by Washington and the agreement is in the hands of the City of Flint to be presented at a special meeting of the council on July 17, 1987 (working day 904). There have been some additional conditions to be considered to obtain the grant and in order for the city to advertise for proposals, and for these proposals to be prepared, Flint must obtain EPA approval on the sewer installation, and have EDA approval to go ahead without having marketable title to all properties in the



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area. It is expected that these two areas can be cleared relatively soon. We have made the assumption that within the next 10 working days, or by July 31, 1987 (working day 914), both approvals will have been obtained and advertising and along with submittal of proposals can proceed.

We updated the network model, issue 12, dated June 18, 1987 (working day 884), sheet 164 to issue 13, dated July 17, 1987 (working day 904) sheet 164A. In this revised network, we now show city council approving and authorizing award of the EOIP PASI #2 contract on September 9, 1987 (working day 941). This should allow field work to begin by October 5, 1987 (working day 959) or possibly a few days earlier. The slippage over the previous network model, which shows a release of field work operations on September 3, 1987 (working day 938), is about 21 working days. This revision prompted an updating of the network model for field construction of the public area site improvement (PASI) work.

At present, in the field Leith Street work is moving well and is in accordance with the network model, shown on sheet 174, issue 3, dated June 18, 1987 (working day 884). Most curbs, gutters, sidewalks, and drive aprons are complete and the asphalt base course is in. The leveling course will be installed next week.

At Taylor Street, work is lagging slightly. Curbs, gutters, sidewalks, and drive aprons are nearly complete and the asphalt base course is being placed. Adjustment of the structures was due to begin on July 7, 1987 (working day 896). It has not yet started.

Work in Baker Street, Dartmouth Street, Rankin, Dayton, Parkland, Warren, Saginaw, and Newell will now have to wait on start of construction under PASI field operations contract 2. As noted above, this work date is presently projected at October 5, 1987 (working day 959). We updated the network model, issue 3, dated June 18, 1987 (working day 884), sheet 174 to issue 4, dated July 17, 1987 (working day 904) and also showed the new sequence of work as desired under the revised plan. In this scheme of work, field operations will begin on Dartmouth and proceed from Dartmouth to Baker with work being started at Parkland concurrently with Baker. From Baker Street the work will move to Rankin and then to Dayton. Work in Newell, Warren, and Saginaw will all be done in 1988 with starts between April 1, 1988 and May 10, 1988.

Thus, overall, PASI installation has been moved to a later date in the network model. The major difficulty in this later start is that Dartmouth, Baker, Rankin, Dayton, and Parkland are all finishing up in a time span between mid November, 1987 and mid December, 1987. It might not be possible to maintain a full plan of work throughout these winter months but it is the intent of the

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city to continue as much of the public area site improvement work to as late a point in the year as possible.

Copies of the network models, as prepared at this planning and monitoring session, have been distributed to those involved in the program.

We shall continue to monitor this project closely since now the problem with late year construction may impose additional restrictions on the plan of operations.

Crash Fire Rescue and Removal Equipment Building - Bishop International Airport

Monitored from sheet 1 Issue 2, dated June 18, 1987 (working day 884).

Those attending:

Ray Vyvyan - DFW

Robert Root - Forrester Construction

Ralph J. Stephenson - Consultant

The project has moved slowly over the past month and the lag over issue 2 network model is currently about 9 working days. However, the projected lag is about 24 to 26 working days. The reason for the sizable projected lag is that most interior work at the CFR portion of the project, particularly in the living quarters and office areas is now on hold. This hold has been imposed for a variety of internal reasons and is just now being resolved. It is expected that the City Council will release additional funding to make design revisions on July 22, 1987 (working day 907). Final pricing of the design revisions will be submitted and change orders issued for the revisions. The contractor feels that there will be very little time, if any, spent in pricing design revisions since most of them have been reviewed in detail previously. Therefore, in our network we have given this a zero duration.

What this all means is that work will not start again at the CFR office area until about August 7, 1987 (working day 919). At that time the underground mechanical and electrical work will probably have to be reinstalled to some degree and from there work can proceed on the CFR office floor slab on grade and on into interior work. Meanwhile, however, plans are to complete the garage floor slab on grade at the CFR area so that work will be ongoing in any event.

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At the snow removal equipment building the floor slab on grade is about 80% complete. The remaining floor slab will be installed by the end of the month. From there the project area will be closed in to weather and any interior finish work needed will be completed.

There has been some discussion about how the CFR facility might be occupied at an earlier date than now projected. The reason is that current indications show the entire facility will not be available until mid or late November, 1987. Occupation of the facility frees up work to be done at the main airport terminal complex parking areas. If facilities at the main airport complex could be vacated sooner, work there could probably proceed this year during reasonably good weather.

One possible solution would be to provide temporary living quarters for the staff at the crash fire rescue station and to use the snow removal equipment garage or the crash fire rescue garage area, for vehicle servicing and storage. This matter should be given careful thought since it will be essential to vacate the present CFR facilities sometime in late summer or early fall if parking lot work is to be completed this year.

Meanwhile, work on the surrounding site, outside the building itself, is moving ahead, although still slowly. Aprons and access roads are in progress, although no paving has been done directly adjoining the building.

One deterrent to this work is installation of fuel tanks, which is now in progress. The fuel tanks are on the job, the bases have been poured, and the fuel tanks are being installed currently. It is very critical that the adjoining site work be completed just as quickly as possible so that if a decision is made to make interim use of the facilities, by providing temporary living quarters nearby, access roads and drives to the building must be available for use.

I highly recommend that every effort be made to free up the hold presently on the crash fire rescue area. This is a major bottleneck to completing the work and must be resolved as quickly as possible.

As part of our work today we updated the network model on sheet 175 to issue 3, dated July 7, 1987 (work day 904). This network was provided to those at the meeting.

It should be noted that a diagram has been prepared for analysis of the project by the owner. It is not intended to present a construction network for the contractor. We shall continue to

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monitor from it so long as there is no objection to such monitoring from the parties involved. I recommend that those involved in the airport administration be requested to attend these planning and monitoring meetings. It is difficult to conduct a meaningful evaluation of the project when those who must make the basic decisions are not available. The project is now at a very critical point in its progress toward completion and attention must be given by all decision makers who are concerned with the job.

General

Mr. Vyvyan will prepare an agenda for next meeting and distribute it to those concerned.

Ralph J. Stephenson, P.E.

RJS:gmj

To: Mr. Ray Vyvyan

August 12, 1987

Subject: Monitoring Report #233

City of Flint Improvement Program

Flint, Michigan

Project: 83:14

Date of Monitoring: August 5, 1987 (working day 917)

Actions taken:

- Reviewed current status of Bishop Airport CFR/SRE facility
- Updated network model for Bishop Airport CFR/SRE facility to issue 4, dated August 5, 1987 (working day 917)
- Began preliminary review of Flint MTA facilities, design and construction with owner and with architect/engineer

Crash Fire Rescue and Snow Removal Building - Bishop International Airport

Monitored from: issue 3, dated July 17, 1987 (working day 904).

Those attending:

Ray Vyvyan - DPW

Robert Root - Forrester Construction

Robert Hidley - Bishop Airport

Phil Masson - Flint Fire Department

Sam Dixon - Flint Fire Department (in meeting part time)

Ralph J. Stephenson - Consultant

A limited amount of work has been done on the project since our previous monitoring on July 17, 1987 (working day 904). The problem that still remains is release of work at the crash fire rescue living quarters and the office area. At present, it will be essential to prepare and issue the CFR design revisions, and then to request and receive FAA approval on funding of the revised layouts. Concurrently, final price and time estimates for the project will be prepared and issued. This should lead to a change order for design revisions.

(Note: In the network model currently being used by the City of Flint for monitoring, sheet 175, issue 4, dated August 5, 1987 (working day 917), the preparation and issuance of CFR design

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revisions was shown at 7 working days. This time should be 5 working days and an appropriate adjustment in the total duration of the project should be noted. A copy of the corrected network is attached to this report for distribution.)

With the updated network model, the current completion of the project for FAA inspection and acceptance of the total facility is in late December, 1987. There appears to be very little compression possible on the current plan of work and in all likelihood, the network model now being utilized by the city for study and analyses of the project, will be that to be actually followed in the field. This is a plan of work that finishes much later than had been anticipated, and I recommend that the project team continue to make reviews of the job that may allow some compression of the plan of work.

There were several items added to the network model as it was updated at our session. These dealt mainly with completion of the interior work at the snow removal equipment area of the project.

In addition, Mr. Vyvyan provided additional information on construction of outside area site work related to the project. I shall incorporate this information into a final network model and transmit it to Mr. Vyvyan shortly. It should be noted that the outside work will be put on a separate network model.

MTA - Intermodal Bus Station and Train Station

Those attending:

Ray Shull - Ray Shull & Associates  
Charles Williams - Ray Shull & Associates  
Robert Foye - MTA  
Terry Gurrens - MTA  
Edward Bohlen - MTA  
Ray Vyvyan - DPW  
Ralph J. Stephenson - Consultant

This meeting was to make a preliminary review of the design and construction process for the MTA Intermodal Bus Station and Train Station to be constructed on two sites, one in downtown Flint, the other at the MTA facility on Dort Highway and the east/west expressway.

The projects have critical time frames and therefore, it was felt by the architect/engineer, Ray Shull & Associates, that it would be well to prepare network models for the design period and possibly,

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at a later date, for actual construction itself. Total completion of the project is presently planned for late August, 1988, with contract documents to be prepared and completed by November 30, 1987 (working day 998).

The project is to be delivered by use of a fixed money construction bidding process from completed contract documents. Either one or two general contractors will be used and the contractors proposing on the project can propose on one, or the other, or both of the jobs.

Although the project is relatively small, it is a very critical project for MTA and is being given careful attention.

At our session, we prepared a design laundry list for both projects and this design laundry list will be used at subsequent meetings to complete preparation of a network model of the design process. There was no major network planning done at the short session today. However, planning will resume at our next Flint meeting, and subsequent sessions for planning the project will be set then if necessary.

#### General

Mr. Vyvyan is retiring in mid August, 1987 and this session was the final meeting in which Mr. Vyvyan is acting as the major Flint representative. I wish to compliment the City of Flint in their selection of Mr. Vyvyan to act as their spokesman in these meetings over the past several years. He has performed extremely well, has contributed a great deal to the success of all of the projects, and has at all times performed professionally and objectively in carrying out his responsibilities.

It has been a pleasure working with him, as well as the other members of the DPW, DCD, and administrative staff of the city. However, I should like to, at this time, single out Mr. Vyvyan for special recognition, and thank him for his help.

I would also like to wish him a very pleasant and highly satisfying retirement.

Ralph J. Stephenson, P.E.

RJS:gmj  
TO: Mr. Ray Vyvyan

August 31, 1987

Subject: Monitoring Report #234

City of Flint Improvement Program

Flint, Michigan

Project: 83:14

Date of Monitoring: August 27, 1987 (working day 933)

Actions taken:

- Reviewed current status of East Oak Park Industrial Park grant work
- Reviewed current status of East Oak Park Industrial Park field work
- Updated East Oak Park Industrial Park grant network
- Reviewed Bishop Airport CFR/SRE facility status
- Inspected CFR/SRE project
- Prepared design network model for MTA facilities (This project is now being worked upon on a professional arrangement with Mr. Ray Schull. Work on this project will be charged directly to Mr. Schull.)

East Oak Park Industrial Park

Those attending:

Denise Heath - DPW

Don Berry - DPW

Mike Mansfield - DPW (in meeting part time)

Don Sowle - Consumers Power (in meeting part time)

Ralph J. Stephenson - Consultant

Approval on sewer work has still not been obtained by the EDA and is holding up advertising and solicitation of proposals on East Oak Park Industrial Park, phase 2 work. Also, the EDA requirement for clear title has not yet been resolved and also restrains advertising and submission of proposals. The grant agreement has been executed by the City of Flint and returned to the EDA Regional and Washington office.

We discussed the matter of clear title in great detail, going through the properties yet to be totally acquired. Mr. Charles White, attorney for Flint, wrote a letter on August 26, 1987



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(working day 932) outlining the status of the 6 parcels in question. A summary of this letter was made and provided to those at the meeting.

It presently appears that the grantee borrower, the City of Flint, can provide satisfactory evidence that it has obtained all land, rights of way, and easements necessary to the completion of the project. This matter is being pursued vigorously by the DCD and must be followed very carefully.

The major problem is that there is a limitation on the grant that construction must start within 90 calendar days from signing the grant acceptance. Thus, Oak Park Industrial Park field work must start by mid October, 1987, or there is a possibility of losing the grant funding.

Following through on the network model being used to evaluate current status, it presently appears that if we can obtain the necessary approvals on the sewer work and waiver of clear title within the next 5 days, that we still might have difficulty in meeting the start of field work by mid October, 1987.

At our session we updated sheet 164A, issue 13 to issue 14, dated August 27, 1987 (working day 933). This network is for obtaining the RDA funding, and applying the current conditions it appears that we may have to wait until October 12, 1987 (working day 964) for a council meeting to approve an authorized award of the contract. This would mean that field work would not be able to start until about November 5, 1987. The key to this program is to get it out into the market place for proposals and we must do this immediately if we are to be able to start field work at the required 90 calendar day point from execution of the agreement.

The network model showing this current difficulty and the sequence of work to be done is attached to the report. I suggest it be studied very carefully by all concerned, since it is of critical importance that this grant be utilized just as quickly as possible.

Probably not much field work can be done on the project this year since the start in the field is so late. However, it is essential that the work be put into the field just as quickly as possible.

So far as the construction work status of phase 1, all public area site improvements have been made for phase 1. No further field work can be accomplished on this project until phase 2 is released.

Accompanying this report is a set of notes taken at the meeting on August 27, 1987 (working day 933).

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Crash Fire Rescue and Snow Removal Building - Bishop International  
Airport

Monitored from: issue #4, dated August 5, 1987 (working day 917).

Those attending:

Robert Hidley - Bishop Airport  
Don Berry - DPW  
Fred D. Ebel - Bishop Airport  
Mike Joliat - City attorney (in meeting part time)  
Ralph J. Stephenson, P.E. - Consultant

The project is still at somewhat of a standstill at the crash fire rescue area due to a delay in issuing the CFR design revisions. These revisions were authorized by the Flint Council some time ago and have been promised by the architect/engineer for a period of time. However, it now appears that they will not be issued for another 5 working days. This puts the building project about 16 working days behind the issue 4 network model, dated August 5, 1987 (working day 917). This is the model on sheet 175 that is being used by the city for study and analyses. (It should be again pointed out that this network is not intended to be a network model for the actual construction of the project. It is to be used for monitoring and evaluation only.) According to this network, the completion date now has been moved to a later point, possibly as late as January 14, 1988. This is a considerable slippage and is far more than desirable.

During the past few months, the project has continuously lost ground and is now actually in some danger of not being fully closed in by cold weather. At present, there is no sash installed in the building, nor are there any overhead doors, or man doors installed. Thus, the entire facility is still open to weather at all openings in the vertical surfaces.

The contractor is beginning to send letters regarding additional costs to Mr. Hidley and at this session we reviewed methods by which the costs of the project revisions could be minimized. This evaluation was not done in detail since the meeting was primarily for an evaluation of the current status of the job. However, we did have considerable discussions on how the project could be once again moved forward since progress on it over the past few weeks has been negligible.

Mr. Hidley and Mr. Joliat will review the situation on the project with Mr. Rob Collier in the very near future. With the retirement of Mr. Ray Vyvyan, who was acting as the temporary project manager on the job, no one now is on the job in an active role, representing the technical interest of the city and the airport. I strongly recommend someone be appointed to this position

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so that the problems that currently are being encountered on the job can be resolved in a timely and effective manner.

I provided Mr. Joliat with a full set of the meeting notes that have been taken on the job since September, 1986. In addition, Mr. Berry will provide Mr. Joliat with a set of monitoring reports from September, 1986 for his review and orientation.

On our site visit we briefly inspected the building and the surrounding site work. There appears to have been very little progress made on site work over the past few weeks. However, there was no authoritative source available to properly monitor ramp site work, runway access site work, and access road site work. It would be well at our next session to make a full review of this with the city's field forces. I shall bring this up at our next session with Mr. Berry.

In brief, the project needs strong immediate attention if it is still the intent to complete and occupy this facility in 1987.

General

Mr. Berry is preparing and distributing an agenda for our next meeting. Meanwhile, as has been the custom in the past, he will duplicate and circulate this report and attachments to those on the circulation list.

Ralph J. Stephenson, P.E.

RJS:gmj

To: Mr. Don Berry

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

October 7, 1987

Subject: Monitoring Report #235

City of Flint Improvement Program

Flint, Michigan

Project: 83:14

Date of Monitoring: October 1, 1987 (working day 192 - from 1987 base calendar,  
or working day 957 - 1984 base calendar)

Actions taken:

- Reviewed current status of East Oak Park Industrial Park grant work
- Reviewed current status of East Oak Park Industrial Park field work
- Reviewed Bishop Airport CFR/SRE facility status
- Inspected CFR/SRE project

East Oak Park Industrial Park

Those attending:

Denise Heath - DCD

Don Berry - DPW

Tom McCullum - Michigan Bell

Ralph J. Stephenson, P.E. - Consultant

EPA approvals on sewer work have been obtained. The EPA has apparently granted a waiver of clear title and advertising for Oak Park #2 proposals has been done. Proposals are due at the city offices by 3 P.M., October 1, 1987 (working day 192). Council authorization of award of contract #2 is expected by October 12, 1987 (working day 199), and work is to move into the field just as quickly after that as possible. It should be mentioned that the contract must be executed before field work is able to be started. Construction must be started by October 19, 1987 (working day 969) so the grant conditions can be fulfilled.

I strongly recommend the contract be walked through the various city approving departments. The city administration should be made fully aware of this matter so that there is no delay whatsoever in processing the contract.

Field work on the East Oak Park Industrial Park improvements has been completed for phase 1 work at Leith Street and at Taylor Street.

Work on the phase 2 projects will begin in the near future. These phase 2 projects include the following:

- Dartmouth Street
- Parkland

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- Baker Street
- Rankin
- Dayton
- Newell
- Warren
- Saginaw

Some of this work can be completed this fall but much of it will probably be deferred until next spring, probably with rehabilitation occurring in early April, 1988. There should be little, if any, difficulty in completing the project within the current grant limitations. However, to re-emphasize, it is imperative that work in the field begin prior to October 19, 1987 (working day 969).

I recommend to those at the meeting that at our next session, we begin to focus on planning for occupant improvement of the industrial area. This is a sizable amount of land that will come on the market within the next 9 months to 1 year. Its tenant development and improvement, along with the marketing process itself, should be given special attention in the immediate future. I shall discuss this in more detail at our next planning and monitoring meeting.

Crash Fire Rescue and Snow Removal Building - Bishop Airport (CFR/SRE)

Monitored from building network, issue 4, dated August 5, 1987 (working day 917), sheet 175 and site work, issue 1, dated August 11, 1987 (working day 921), sheet 126.

Those attending:

- Don Berry - DPW
- Phil Masson - Flint Fire Department
- Robert Hidley - Bishop Airport
- Tom Chastine - Airport consultant
- Tom McCallum - Michigan Bell
- Dave Miller - Madison & Madison
- Marv Roussel - DPW
- Ralph J. Stephenson, P.E. - Consultant

The building is still not closed to weather and work on floor slab on grade at the CFR office and sleeping quarter area has not yet begun. At present, SRE precast cracks are being patched and should be completed in about 8 working days.

Efforts are being made to pave the 2 to 4' strip around the building. However, there apparently is some debate about the interference between grouting, and compacting the sub-base, and installing the concrete work. It is a small matter

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and should be simple to complete. However, it must be resolved as soon as possible so that the total outside work of the project can be cleaned up prior to beginning of cold weather. This matter will be followed by the project team.

The FAA approval of revisions to the building use has not been cleared as yet and there still is considerable confusion about who is to do this. The questions that must be answered include:

What approval is needed?

Who is to provide this approval?

Who is to solicit the approval and obtain it from the appropriate parties?

What is required to gain acceptance of the new building plan?

Currently, Mr. Miller of Madison & Madison is hold on the revisions change order until all prices are firmed up. It also should be determined whether or not pricing of revisions must be released before formal approval of the FAA can be obtained, if needed. This matter should be investigated and cleared just as quickly as possible.

At the building proper, there is some interference of a man door, by bracing on the SRE building. This matter is currently in Mr. Rob Collier's hands for resolution. In addition, the matter of door control installation is to be resolved and approved.

All building aprons are installed and some owner equipment is beginning to arrive in Flint. It will soon be necessary to install this equipment and a plan should be prepared in the near future for receipt of such material and equipment, its storage, placement, hooking up, and acceptance. Mr. Masson will follow through on this matter.

A point brought up by Mr. Roussel concerns installation of sidewalks outside the 5' construction boundary for the building. This matter apparently is not yet resolved and someone must install these walks. The question is who is to do it?

We discussed, at some length, the matter of liquidated damages on the project. In order to properly and accurately identify the liquidated damages to be assessed, a specific liquidated damages date must be established. Mr. Miller, of Madison & Madison, was asked to establish this date based upon the starting point of the job, the stop work orders issued, the number of days worked by the contractor, and the time extensions that might be appropriate for the city to grant to the contractor. This matter should be checked carefully on an ongoing bases to insure that liquidated damage assessments are being evaluated properly.

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The current lag on the project over the issue 4 network model, dated August 5, 1987 (working day 917) is about 24 working days primarily in installation of underground utilities and construction of the floor slab on grade at the CFR office and sleeping area. This now puts the projected completion date of the project in late January, 1988.

So far as site work progress is concerned, the base course at ramp areas has been nearly completed and work is now moving into the finishing and landscaping work for surrounding site areas. There has been some questions as to whether the wearing course should be installed on the paved areas, particularly at the ramp this year. The DPW has recommended that this wearing course be deferred until next spring to keep from damaging the wearing course. This matter should be checked carefully to insure that correct approvals have been given. Marv Roussel will obtain unit costs to be expected if it is decided to follow this sequence of action.

On the building itself, overhead doors are being hung at the CFR vehicular storage area and work on the project at interiors has progressed slightly. However, the general progress is very slow and continuing attention will have to be paid the program if it is to finish within a reasonable time from today's monitoring date.

There is no strong managing or directing force representing the city on the project, at present, and this matter should be resolved just as quickly as possible since the program is complex enough in its entirety to warrant constant, capable management by a member of the owner's team.

#### General

At our next session we will plan to review the East Oak Park Industrial Park network and hopefully prepare some long range planning for marketing and occupancy of the space. We also should plan to again review the airport work and concentrate on completing the network model for remaining work.

I shall be in touch with Mr. Berry shortly to confirm the date of the next meeting. Meanwhile, attached to this report is a copy of meeting minutes taken during the sessions.

Ralph J. Stephenson, P.E.

RJS:gay

To: Mr. Don Berry

November 1, 1987

Subject: Monitoring Report #236

City of Flint Improvement Program

Flint, Michigan

Project: 83:14

Date of Monitoring: October 22, 1987 (working day 207)-from 1987 base calendar  
or working day 972-from 1984 base calendar)

Actions taken:

- Reviewed current status of East Oak Park Industrial Park grant work
- Reviewed current status of East Oak Park Industrial Park field work
- Reviewed Bishop Airport CFR/SRE facility status

East Oak Park Industrial Park

Those attending:

Denise Heath - DCD

Don Berry - DPW

Ralph J. Stephenson, P.E. - Consultant

The grant was approved and accepted by the City Council on October 12, 1987 (working day 964). A preconstruction meeting was held and the contract was partially executed by the city. However, the signing process was interrupted by an injunction filed by the union local. This injunction was based upon a lack of a 14 day union notification prior to contract award. This notification has now been given. However, there is no word on when the contract execution process will resume. It probably will have to be started through the signature cycle upon release since the contract award date will have to be revised.

Efforts will be made to take the contract back to council for approval on November 9, 1987 (working day 984). A one month grant extension on the required start date of October 19, 1987 (working day 969) was formally submitted to the EDA on Friday, October 16, 1987 (working day 968).

There is a possibility that utility construction, which might be able to proceed independently of the injunction, could begin, thus, signaling start of construction. However, it may not be advisable to do this, particularly if an extension of time is granted by the EDA. In any event, the project team will investigate the possibility of starting work early on other activities related to the project.

So far as field work is concerned, there is no change from the previous meeting. The field work on the East Oak Park Industrial Park improvements for phase 1 at Leith and Taylor have been completed. Work on phase 2 projects will not be



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able to begin until the injunction is removed. Further details on the process of contractor selection and partial execution of the contract for phase 2 work is shown in the meeting notes attached to this monitoring report.

Efforts were initiated to update the current network model for PASI field work in phase 2. This updating process was started on issue 5, dated October 22, 1987 (working day 972), sheet 174. However, because of lack of information and the need to make decisions relative to the sequencing of work, we were not able to complete the updating at this session. The work model, however, should be revised and reissued at our next planning and monitoring session. It is very important to give careful attention to the timing of the project since there are restrictions on the use of the grant funds. I suggest that all applicable restraints be examined in detail and identified clearly and thoroughly.

Crash Fire Rescue and Snow Removal Equipment Building - Bishop Airport (CFR/SRE)

Monitored from building network, issue 4, dated August 5, 1987 (working day 917), sheet 175.

Those attending:

Rob Collier - Mayor's office  
Don Berry - DPW  
Robert Hidley - Bishop Airport  
Robert Root - Forrester Construction  
Ralph J. Stephenson, P.E. - Consultant

Work is continuing on close in of the full structure. Precast crack patching is about 75% complete. Exterior site work adjoining the building is partially complete. However, the wearing course on site paving asphalt will be deferred until next spring.

There is as yet no word on what FAA approval might be required for revisions to the building use. Mr. Hidley will check on the usage with the FAA.

Of major importance is that there is no current word on processing of the change order to the CFR portion of the building. Apparently, the original estimate of cost, approved by council was about \$17,000. A second estimate was made of the cost at about \$54,000 when the extent of the changes were more clearly identified. A revised cost estimate based upon the issued drawings, with changes recommended by Forrester, is now about \$41,000. These costs do not include additional expenses for extended general requirements and for other items that might be cost items not part of the actual work under this changed scope.

The changes that have now been made to the drawings must be processed and released to the field. As of October 22, 1987 (working day 972), the change order has not been submitted. Mr. Root estimated it would take Forrester about 4 months to complete the CFR building from the point where the change order was approved and released to the field for work.

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So far as the building is concerned, window openings are the only major openings unclosed at present. Windows will be on the job November 9, 1987 (working day 984) and will take about 9 working days to install. Heating units are hung and are presently being piped. However, there are no gas meters installed as yet. Forrester says that Consumers Power is to install these.

The interference of bracing with man doors is yet to be worked out between the architect and contractor. Apparently, a letter is needed to release the corrective measures. Door controls are not yet released. The cost and release conditions will be resolved by the city in the near future.

There has been a request made of Madison & Madison to provide the current date, including all official time extensions and hold impacts, for start of liquidated damages. Madison & Madison were not represented at this meeting and there was no current information on this liquidated damages date.

I, again, recommend that this matter be investigated and kept current with the various time extensions officially granted to the project. This is an important item and should be given careful attention.

Site work outside of the building boundaries, has generally been slowed or stopped until next spring. Mr. Hidley said that the road to the east floods and has mud washing on it after heavy rains. The DPW will check into this matter and determine how the difficulty might be resolved.

Overall, the current projection of completion on the project, according to Forrester, is approximately 4 months after the interior change order revisions are released. Of prime importance is the method by which temporary heat is to be made available at the interior of the building. Probably the SRE portion of the project need only be maintained in a nominal above freezing range. However, at the CFR area it may be necessary to maintain a higher temperature due to the need to protect finishes.

#### General

At our next session we should update the East Oak Park Industrial Park network for construction of PASI work, taking into account the delays to it caused by the injunction. In addition, it is now possible to do some planning relative to the marketing of this program and we shall discuss this with the DCD. We shall also plan to update the guidance network being used currently for city evaluation of the CFR/SRE project.

I shall be in touch with Mr. Berry to confirm the date of our next meeting. As noted above, attached to this report is a copy of the meeting minutes taken during the planning session.

Ralph J. Stephenson, P.E.

RJS:gay  
To: Don Berry

• CRITICAL PATH PLANNING

• LAND PLANNING

• MANAGEMENT CONSULTING

• PLANT LOCATION

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

15064 WARWICK ROAD  
DETROIT, MICHIGAN 48223  
PHONE 273-5026

November 30, 1987

Subject: Monitoring Report #237

City of Flint Improvement Program - Flint, Michigan

Project: 83:14

Date of Monitoring: November 23, 1987 (working day 229 from 1987  
base calendar, or working day 994 from 1984 base calendar).

Note: Dates will be indicated by working days referring to the 1987  
base calendar in this and subsequent monitoring reports.

Actions taken:

- Reviewed current status of East Oak Industrial Park grant work
- Reviewed current status of East Oak Industrial Park field work
- Reviewed status of Bishop Airport CFR/SRE facility

East Oak Park Industrial Park

Ken Collard - DPW (in meeting part time)

Don Berry - DPW (in meeting part time)

Richard King - DCD

Denise Heath - DCD

Linda Olivieri - City of Flint Legal Staff (in meeting part time)

Marv Roussel - DPW (in meeting part time)

Chris Knudstrup - Consumers Power - Distribution Engineer

Dick Brilhart - Ace Asphalt - Project Manager

Ralph J. Stephenson, P.E. - Consultant

The union injunction restraining start of field work is apparently still in effect, although, there is some question as to the current status of the injunction.

A notification concerning the contract letting from the city was submitted to the union in a meeting held on October 20, 1987 (working day 205). This meeting was summarized in a letter of October 30, 1987

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(working day 213) written by the city to the union's representative. The letter stated the intent of the city, the understandings relative to grant procedures, and noted that the city was to present the contract to council on November 4, 1987 (working day 216).

The contract is not yet fully executed, although, a contractor, Ace Asphalt, has been selected. There is no authoritative information yet as to whether the contract must be restarted through the signature process. This matter is being investigated by Denise Heath.

There also is some confusion as to whether or not construction can be started until the injunction is legally cleared. There was some discussion of getting a letter from the EDA which would permit work in the field to begin. This letter apparently exists, at present, although no one seems to know for certain that it is available. Construction start now will probably be no earlier than December 21, 1987 (working day 248).

The city is going to request a 120 calendar day extension to the contract after the union matter has been cleared. Denise Heath is also checking on this matter.

A brief review was made of the time frame of the project and key dates are given below.

- Grant award - July 21, 1987 (working day 141)
- Construction to have started - October 19, 1987 (working day 204)
- From October 19, 1987 (working day 204) had 6 months to complete construction with no clock stop for weather.
- Complete construction - April 19, 1988 (working day 332)

This particular time framework is now difficult, if not impossible to meet. Therefore, a time extension will have to be granted to maintain feasibility of performance. If the city obtains a 120 calendar day extension, it would put completion of the project at mid August, 1988. This appears to be an achievable completion date.

Ms. Olivieri was at a portion of our meeting and she mentioned that the union apparently wants a letter from the EDA re conditions of employment under the PWIP. EDA said they cannot furnish such a letter. In addition, it is somewhat doubtful that it is truly needed since PWIP conditions are already a part of the contract. Ms. Olivieri was present primarily to gain background on the project.

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In all likelihood, the job will move ahead in the near future, based upon the contract award approval by the city council given on November 6, 1987 (working day 218). I strongly recommend that this entire matter be pursued vigorously. We are nearly out of construction time in 1987. This puts much of the construction into either winter weather or into 1988 spring and early summer. Thus, it is critical to begin work just as quickly as possible.

In light of this and in response to a request from EDA, we updated the network model shown on sheet 174 for the publish area site improvement work in units 1 and 2. This new network model is called issue 6, dated November 23, 1987 (working day 229). In it, work on Dartmouth and Parkland is shown starting on December 21, 1987 (working day 248) and continuing on through demolition of curbs and gutters, and installation of underground utilities this winter. Work there will then resume next spring in 1988. Work at Baker Street is shown as starting next year on April 15, 1988 (working day 330) due to the need to resolve additional relocation issues. These must be cleared before any field work can begin at Baker. Demolition at Baker is followed by demolition at Rankin, and Dayton.

Work at Newell, Warren, and Saginaw is all due to start in the spring, 1988 and continue on through with a late finish of August 16, 1988 (working day 415). It should be noted in the network model, distributed to the group, that the late finish date set for one of the sequences, was referred to as 1987 date. This late finish date at Saginaw, Newell, and Warren should be August 16, 1988 (working day 415). Please correct that notation on your network model.

A copy of the meeting notes from our session is attached to this report.

Crash fire Rescue and Snow Removal Equipment Building - Bishop Airport (CFR/SRE)

Monitored from building network, issue 4, dated August 5, 1987 (working day 152).

Those attending:

Robert Hidley - Bishop Airport  
Fred D. Ebel - Airport Foreman - Bishop Airport  
Archie Campbell - Consultant owner representative  
Don Berry - DPW  
Marv Roussel - DPW  
Linda Olivieri - Attorney with City of Flint

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Ralph J. Stephenson, P.E. - Consultant

Precast wall crack patching has been substantially completed and the 4 foot concrete strip around the building exterior has been installed by the city's contractor. This strip work was originally considered to be part of the building contractor's work and matter is still to be resolved relative to its cost.

The change order for revisions to the interior was approved by the city council on October 26, 1987 (working day 209) and the contractor was notified of the approval by Mr. Hidley on October 27, 1987 (working day 210). Work has proceeded under this change order with revisions to the underground mechanical and electrical work being complete, and the slab on grade at the office area poured out. Work is now ready to begin on CFR interior work.

It was estimated by Forrester Construction that remaining work would take about 4 months from the date of approval of the work. This would bring completion to late February, 1988. No formal approval has been given to this time extension as yet and the matter should be checked into carefully to determine the new target finish date required under the contract.

FAA approval of revisions to the building use have not been fully cleared as yet and there, apparently, has been no action since our previous meeting. Mr. Hidley will check on the usage with FAA.

The gas meter at the site apparently is installed but may not yet be hooked up. This should be checked immediately so as not to delay provision of temporary heat.

Snow removal equipment building structural bracing has been relocated and shortened and this, apparently, clear door interferences.

Door controls have been approved for installation. No field installation has yet begun.

The question again came up about the date of official start of liquidated damages. There is no current word on this. Mr. Marv Roussel will obtain the official date from the Michigan Aeronautics Commission. This date should be determined to establish the bench mark from which subsequent time points are determined.

At this meeting Mr. Archie Campbell, who is a consultant to the owner and is the owner's project representative, reviewed the progress to date and what is intended for near future operations. He will be deeply involved in the project and maintaining contact with it on a week to week basis.

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

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A point of interest is that the Airport Authority takes over the airport management from the city of January 1, 1988 (working day 256). No major discussion of the implementations of this was conducted at our session. However, the project and its administration should be examined closely to determine if there is any operational change required under the new airport management structure.

We did not update the network model on sheet 175, issue 4, dated August 5, 1987 (working day 152). This network model is presently being used for study and analysis by the owner. It is to be pointed out that the network plan is preliminary and for the owner's use only. It is not intended to represent a network for the actual construction of the project. The contractor will provide a schedule of his work from now until completion of the project. Mr. Campbell will obtain this schedule.

General

At our next session we should again review the Oak Park Industrial Park Program and the Bishop Airport CFR/SRE work. In addition, it would be wise to look at the marketing aspects of the Oak Park Industrial Park Program. We were not able to cover this work at our session today due to the press of time. Therefore, it is planned at our next session to cover all aspects of the Oak Park program.

I shall confirm the date of our next session with Mr. Berry in the near future.

Ralph J. Stephenson, P.E.

RJS:gmy

To: Mr. Don Berry

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

January 7, 1988

Subject: Monitoring Report #238

City of Flint Improvement Program - Flint, Michigan

Project: 83:14

Date of Monitoring: December 21, 1987 (working day 248)

Actions taken:

- Reviewed current status of East Oak Industrial Park grant work
- Reviewed current status of East Oak Industrial Park field work
- Inspected Bishop Airport CFR/SRE facility
- Reviewed current status of Bishop Airport CFR/SRE facility

East Oak Park Industrial Park

Those attending:

Kathy Stoughton - Director DCD (in meeting part time)

Don Berry, P.E. - DPW (in meeting part time)

Denise Heath - DCD

Marv Roussel - DPW

Ralph J. Stephenson, P.E. - Consultant

The union injunction on the project was lifted December 10, 1987 (working day 241). The contract was fully executed with Ace Asphalt on December 18, 1987 (working day 247) and work has started in the field.

The grant start of work has been extended by the EDA to December 18, 1987 (working day 247); completion has been extended officially by the EDA to August 16, 1988 (working day 416). Thus, the project is now cleared for full work, except for local problems that are proving to be difficult.

On Baker Street, three properties still have not vacated. The city owns the properties but there have been severe difficulties in obtaining vacation of the properties. It may be that a visiting judge will have to sign the notices to allow these properties to become fully available for demolition. There is no word currently on a resolution to this problem. However, all agree that the properties should be fully vacated before starting any Baker Street PASI work.



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This problem has some technical ramifications in that plans for the sanitary sewer service in the area of Saginaw and Baker Streets were to manifold the Rankin sewer to the south into the new Baker sewer to serve two major industrial parcels.

The Baker line runs from Saginaw to North. If work cannot begin in the Baker parcel, then work will be delayed on manifolding the Rankin sewer to the south into this new line. The problem is further compounded by the fact that there apparently are some difficulties with the Rankin sewer at Saginaw. There has been settlement at the sewer at location and there is some thought that possibly the sanitary sewer is damaged. There was no authentic word on this matter at our session but it is being checked by the DPW project staff.

A desired deadline has been set on vacation of Baker Street properties to shortly after the first of the year, 1988. If this is not possible then it would be wise to consider some contingency plans. We discussed some of these briefly at our session and the plans that evolved from that session were:

- Install sewer in a Rankin right of way between Saginaw and North. This, however, would place undesirable restrictions on marketing the property.
- Make a temporary repair to the Rankin and Saginaw sewer. Doing temporary work is an added cost that might not be covered by the grant.
- Build Rankin to Baker manifold and connect to the existing sewer in Baker. However, it is not currently clear whether or not the existing Baker sewer would have enough capacity to handle the manifolded line.
- Construct new Baker Street sewer while maintaining the street. This solution is one that has been used many times in the past, however, it is obviously better to build in an unrestricted right of way than to build in one that must be maintained.

Mr. Rouseel will examine the several alternatives available and make his recommendations in the near future.

The status of actual construction work was evaluated from sheet 174, issue 6, dated November 25, 1987 (working day 231). Gas and electric work have been removed at the following streets.

Parkland

Rankin

Dartmouth

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Dayton

Warren

Newell

The contractor removed guard rail at Dartmouth on December 18, 1987 (working day 247) and some pipe and sand backfill has been brought to the site. Expectations are that work on the sewer at Dartmouth will begin on December 21, 1987 (working day 248).

Full construction is expected to proceed substantially in accordance with the current network model being used. However, again, the need for the Baker Street properties is one that must be given priority attention since it is, as noted above, an essential ingredient to work moving ahead in a planned and desirable manner.

Crash Fire Rescue and Snow Removal Equipment Building - Bishop Airport (CFR/SRE)

Monitored from building network, issue 4, dated August 5, 1987 (working day 152).

It must be noted that this network model is preliminary and for the study and analysis purposes of the owner. It is not intended to represent a network for actual construction of the project.

Those attending:

Robert Hidley - Bishop Airport (in meeting part time)

Alan Maule - Bishop Airport Foreman

(NOTE: In Monitoring Report #237, dated November 30, 1987, Mr. Maule's name was noted as Mr. Fred D. Ebel on page 3. This should be revised. Please note the change on your monitoring report).

Archie Campbell - Consultant owner representative

Don Berry - DPW

Ralph J. Stephenson, P.E. - Consultant

In the field, the SRE facility is substantially closed in and work continues on interior installation activities. There apparently is some concern about a difference in floor elevations in the SRE, adjoining the strip drain at the middle of the building. This matter will be investigated and elevation information made available just as quickly as possible.

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Work, at present, is being concentrated on completion of mechanical and electrical rough work and installation of mechanical overhead services and equipment in the SRE area. There apparently are still matters to be resolved relative to the automatic door controls. It seems that the method by which these controls are to be installed and operated is still not totally clear to the field forces.

It should be noted that there were no contract field representatives at this session so the door control matter will have to be investigated further before it can be determined if this is actually the case.

Painting is still underway on interior surfaces at the SRE building and this work will continue on through as the other work is completed.

At the CFR area, the floor slab has been poured out and the building is substantially closed to weather. Overhead doors are installed although they are not yet hooked up, and here too, door operator types and location apparently need additional resolution.

Work is being concentrated, at present, on installation of rough mechanical and electrical services. Additional masonry units have arrived on the job site and will be put into place in the very near future. Some interior stud work has been installed although it has not yet started in a production mode.

The current major lag at the CFR appears to be in the installation of masonry, shower bases, painting, and trades that follow. The current status of masonry measures to a point where it was expected to be by about September 21, 1987 (working day 184). Thus, the lag as of December 21, 1987 (working day 248) is estimated at 64 working days. Projecting this from the end date of December 21, 1987 (working day 248), shown as completion in the issue 4 network model, dated August 5, 1987 (working day 152), sheet 175, gives a new projected completion of about April 1, 1988.

Since there was no representation at our meeting from either the architect/engineer nor the contractors, it was not possible to obtain their input for this analysis.

Apparently, the FAA has reviewed the revisions to the building. Mr. Gross of the FAA made these and determined that there was no extra cost to the FAA. However, extra funding will have to be provided from some source. There is still, from the discussion at our session, no written change order on the design revisions to the support area. The question was asked as to why this was the case. No one at our session appeared to have an answer.

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Oil tanks at the site are presently filled with water ballast. There had been some drainage of surface water into the tanks from the surface but this problem has been corrected by allowing the accumulated water at the surface to drain off to adjoining areas.

So far as the airport authority transfer is concerned, it has been delayed due to extended lease negotiations between the city and the authority. Mr. Hidley anticipates the transfer will be completed by Feb. 1, 1988 (working day 276).

On December 10, 1987 (working day 241) a comprehensive meeting was held at the airport to discuss subcontractor matters. Representatives of the Bureau of Aeronautics, the FAA, Madison & Madison, Forrester Construction, the City of Flint, and several subcontractors were present. The major discussion at the meeting apparently revolved around payment to subcontractors. This matter was analyzed in depth at the December 10, 1987 (working day 241) session and some resolutions made. However, from a review of the meeting and pending a written report on the session, it appears that there are still some very difficult matters that must be taken care of in the near future if the project is to continue on a full production basis.

Some of the matters discussed dealt with payments, acceptance of materials, pay requests, painting scope of work, and problems with the floor slab in the SRE. It would be advisable and is critical to resolve the matters discussed in a timely fashion so further delays to this project are minimized.

The matter of liquidated damages were also discussed once again. There was no information relative to the official liquidated damages date.

The total time allowed in the original contract was 312 calendar days. As of stop order #3 dated March 16, 1987 (working day 52), 123 of these days had been used. It is important, in order to gain an accurate view of the time structure on the project, to obtain additional information regarding the stop and start orders. Therefore, Madison & Madison will be requested by Mr. Hidley to be at the next meeting.

Information needed for our discussion at the next session includes the following:

- Official dates of all stop and start orders
- Copies of official stop and start orders
- Madison & Madison calculations on the current liquidated damages date

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

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- Statement of Madison & Madison's final resolution of the pre-cast panel problems
- Current information on differences in floor elevations at the SRE
- Copies of all change orders

It would also be of help if the contractor could attend the sessions so that there is authentic input relative to both the design process and the contract process in the field.

General

I shall be in touch with Mr. Don Berry shortly to set the date of our next planning and monitoring session. Please accept my best wishes for a happy and prosperous new year.

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

RJS:gmy

To: Mr. Don Berry