Ralph J. Stephenson PE PC Consulting Engineer

April 28, 1991

Subject: Monitoring Report #1

Van Dyke School District Renovation Program

Tomblinson, Harburn Associates - Architects, Engineers & Planners

Project: 91:21

Disks: rjs #258

Date of monitoring: April 15, 1991 (working day 074) - base calendar 1991

Key dates:

Asbestos abatement at Kramer & Washington

- 06/17/91 am (wd 118) Asbestos abatement starts
- 07/12/91 pm (wd 137) Asbestos abatement completed

Contract A work

- 04/23/91 pm (wd 080) Construction documents for package A issued for bidding
- 05/07/91 am (wd 090) Hold mandatory attendance pre bid meeting primes only
- 05/14/91 pm (wd 096) Bids due
- 05/16/91 am (wd 097) Recommendations sent to district
- 05/17/91 am (wd 098) District staff sends recommendations to board
- 05/20/91 am (wd 099) Board meeting to approve package A notice to proceed
- 05/21/91 am (wd 100) School board issue letter of intent
- 05/22/91 am (wd 101) Hold pre award meeting with apparent low bidder
- 05/22/91 am (wd 101) Contractor could start work on project if letter of intent allows
- 06/14/91 am (wd 117) Package A contract executed
- 07/15/91 am (wd 137) Contract A field work on abated areas can start
- 08/15/91 pm (wd 161) Package A contract work complete

School calendar

- 06/17/91 am (wd 118) summer recess begins
- 08/30/91 pm (wd 172) summer recess ends
- 12/23/91 am (wd 250) Christmas holiday starts
- 01/01/92 pm (wd 256) Christmas holiday ends
- 02/17/92 am (wd 288) Start of midwinter break
- 02/21/92 pm (wd 293) End of midwinter break
- 04/17/92 am (wd 332) Start of spring break
- 04/24/92 pm (wd 338) End of spring break
- 06/15/92 am (wd 372) Start of summer vacation
- 09/04/92 pm (wd 431) End of summer vacation

Actions taken:

- Made summary review of total renovation program
- Prepare network model for package A work sheet #sm1, issue #1, dated April 15, 1991 (wd 074)

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- Tabulated key dates for school year, asbestos abatement and contract A actions
- Reviewed bleacher and related electrical installation
- Reviewed folding partition procurement and installation

Those attending:

Don Harris - Van Dyke - Director of Business Affairs Dave Puranen - Van Dyke - Director of Maintenance Jerry Harburn - THA - Principal in charge Les Hartzman - THA - Field representative Bob Hall - THA - Project architect Terry Gill - THA - Project job captain Ralph J. Stephenson - consultant

General Notes:

This meeting was to make a general review of the projects and to set an early pattern of planning for the entire project. The total project is divided into two major packages, A and B.

Package A work, which is to be done during the summer of 1991, consists of the following:

Kramer Elementary School

Replace gym ceiling

Replace lighting and ceilings at small hallways

• Lincoln Junior High School

Replace folding doors as designated

Provide power for new bleachers at gym

Washington School

Replace ceiling

Package B work, which is to be done in 1991 & 1992 consists of projects in the following buildings:

- Administration
- Carlson
- Harding
- Lincoln Elementary School
- Lincoln Junior High School
- Lincoln Senior High School
- Little
- Macomb Park
- Washington

The scope of Package B work is defined in a THA memo re Van Dyke projects assigned to THA, dated March 27, 1991 (wd 061). We did not discuss this material in depth at the meeting. However, because of its scope and complexity it should be addressed in the very near future and a summary plan of action prepared.

Our major work in this session concentrated on planning the package A work and it was

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decided to prepare a summary network plan of the major activities. This was done and is shown on Sheet #sm1, issue 1, dated April 15, 1991 (wd 074). The network model was printed and copies provided to those attending the meeting.

Rough notes were also taken by me during the meeting and distributed for use in the session. An edited copy of these notes is attached to this monitoring. Also enclosed is a unassembled higher quality copy of the network model sheet #sm1, issue 1, dated April 15, 1991 (wd 074) for distribution as desired by Mr. Harburn.

Four main streams of work are in process now. These include:

- Preparation and issue of the Package A contract documents Package A
- Procurement of new folding bleachers for Lincoln Junior High School Owner
- Abatement work at the Kramer and the Washington schools Owner
- Preparation of Package B contract documents Package B

The summary network model for Package A was discussed in detail at our meeting and will be used to track project progress of the project in our planning meetings. It is anticipated presently that work at the Lincoln Junior High School can begin as soon as the summer recess begins on June 17, 1991 (wd 118). Completion of Package A work at Lincoln Junior High is currently set for the pm of August 15,1991 (wd 161).

Package A work at Kramer and Washington will begin after abatement is complete, currently scheduled for the pm of July 12, 1991 (wd 137). Work at Kramer and Washington schools is to be completed by the pm of August 15, 1991 (wd 161).

I suggest that a careful review of the relationships existing between Package A and Package B be made to insure that work in A or B does not interfere or excessively hamper work in the other package.

We briefly discussed how contractors might work in the schools during vacation and break periods. The owner said that they would resolve any internal problems relative to a contractor's presence in the building during the school shut down times. This matter should be discussed with the successful contractors. Because of the short construction time, particularly in Package A, the contractors will have to take advantage of all time available.

I shall be in touch with Mr. Jerry Harburn shortly to set the date of our next meeting on the project. At this session we should monitor the project progress and then prepare a summary analysis of the Package B work.

Ralph J. Stephenson PE

Ralph J. Stephenson PE PC

Consulting Engineer 323 Hiawatha Drive - Mt. Pleasant, Michigan 48858 phone 517 772 2537 May 15, 1991

Subject: Monitoring Report #2

Van Dyke School District Renovation Program

Tomblinson, Harburn Associates - Architects, Engineers & Planners

Project: 91:21

Date of monitoring: May 13, 1991 (wd 094)

Monitored from:

Package A work - Sheet #sm1 - issue #1 dated April 15, 1991 (wd

074)

Disks: rjs #258

Kev dates:

School calendar

- 06/17/91 am (wd 118) summer recess begins
- 08/30/91 pm (wd 172) summer recess ends
- 12/23/91 am (wd 250) Christmas holiday starts
- 01/01/92 pm (wd 256) Christmas holiday ends
- 02/17/92 am (wd 288) Start of midwinter break
- 02/21/92 pm (wd 293) End of midwinter break
- 04/17/92 am (wd 332) Start of spring break
- 04/24/92 pm (wd 338) End of spring break
- 06/15/92 am (wd 372) Start of summer vacation
- 09/04/92 pm (wd 431) End of summer vacation

Asbestos abatement at Kramer, Washington, Harding, Washington, Carlson, Lincoln Senior, Lincoln Junior, and Lincoln Elementary

- 06/17/91 am (wd 118) Asbestos abatement starts
- 07/12/91 pm (wd 137) Asbestos abatement completed

Package A design and construction work

- 04/23/91 pm (wd 080) Construction documents for package A issued for bidding
- 05/07/91 am (wd 090) Hold mandatory attendance pre bid meeting primes only
- 05/14/91 pm (wd 096) Bids due
- 05/16/91 am (wd 097) Recommendations sent to district
- 05/17/91 am (wd 098) District staff sends recommendations to board
- 05/20/91 am (wd 099) Board meeting to approve package A notice to proceed
- 05/21/91 am (wd 100) School board issue letter of intent
- 05/22/91 am (wd 101) Hold pre award meeting with apparent low bidder
- 05/22/91 am (wd 101) Contractor could start work on project if letter of intent allows
- 06/14/91 am (wd 117) Package A contract executed
- 07/15/91 am (wd 137) Package A field work on abated areas can start
- 08/15/91 pm (wd 161) Package A contract work complete

Those attending:

Ralph J. Stephenson PE PC

Consulting Engineer 323 Hiawatha Drive - Mt. Pleasant, Michigan 48858 phone 517 772 2537 May 15, 1991

- Jerry Harburn THA Principal in charge
- Les Hartzman THA Field representative
- Bob Hall THA Project architect
- Terry Gill THA Project job captain
- Ralph J. Stephenson consultant

Actions taken:

- Monitored package A work
- Monitored package B work
- Prepared network model for package B contract awards
- Tabulated preliminary list of key dates for package B work

General notes:

Status of package A work - monitored from sheet #sm1, issue #1, dated April 15, 199 (wd 074)

Package A documents were issued on April 23, 1991 (wd 081), the pre bid walk through was held May 7, 1991 (090), and contractor proposals are due the pm of May 14, 1991 (wd 097). It is still the intent to have contractor selection approved by the School Board at their meeting of May 20, 1991 (099). This will be followed by a pre award meeting at which a letter of intent is to be issued.

The purchase order for new bleachers has been issued by the school district staff and the contractor is currently preparing shop drawings for submittal to Van Dyke and THA.

Asbestos abatement work is scheduled to begin on June 17, 1991 am (wd 118) at the Kramer and Washington schools. This work is to be completed by the pm of July 12, 1991 (wd 137).

During our review of package B work it was brought out that there is also asbestos abatement work to be done at Harding, Washington, Carlson, Lincoln Senior, Lincoln Junior, and Lincoln Elementary schools. This abatement work is due to be accomplished between June 17, 1991 am (wd 118) and July 12, 1991 pm (wd 137).

Currently all package A work is meeting targets between early and late starts and finishes.

Status of package B work

We reviewed the package B work scope from the THA outline of estimated construction costs. In our meeting this list was used to establish a summary random laundry list of activities for each school. The list is shown in the attached project notes under the main heading **Work** scope & timing. These notes have had minor editing changes made to them for ease of use.

Preparation of the laundry list included a review of what work could be done while the school buildings were occupied. It appears there is work at Lincoln Senior High, the Administration Building, Little Elementary, and Washington Elementary that can be done with full or partial

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student occupancy. These activities are also listed under the main heading **Work scope & timing** in the meeting notes.

The areas that could be started prior to the 1992 summer recess should be defined carefully and thoroughly since the present plan for construction on package B extends from the am of June 15, 1992 (wd 372) to the pm of August 14, 1992 (wd 416). This is a period of only 44 working days and these must be devoted to activities that can only be done with the schools fully vacated by students.

We prepared a summary network model for package B work showing work through the issue of a letter of intent for package B work to a prime contractor. This date with the current plan for production of construction documents could be as early as the am of October 16, 1991 (wd 203). This is a distinct advantage in procurement since shop drawings can be submitted and approved for most long lead items early enough to allow timely fabrication and delivery at appropriate field installation points.

In a subsequent planning meeting I recommend we examine this matter in detail so as to be able to accurately mesh early procurement with actual job needs.

The network prepared with the THA staff was labeled sheet #sm2, issue #2, dated May 10, 1991 (wd 093). A rough copy of the network was printed and given to THA at our meeting. A copy of the network is enclosed with this report for further use and distribution by THA as they desire.

Preliminary dates for package B work were abstracted from sheet #sm2, issue #2, dated May 10, 1991 (wd 098) and are listed below for ease of reference. All dates listed are to be confirmed by the Van Dyke school district staff and THA

- 09/11/91 pm (wd 179) Construction documents for package B issued for bidding
- 09/26/91 am (wd 189) Hold mandatory attendance pre bid meeting primes only
- 10/09/91 pm (wd 199) Construction proposals due for package B work
- 10/11/91 am (wd 200) Recommendations sent to district
- 10/14/91 am (wd 201) District staff sends recommendations to board
- 10/15/91 am (wd 202) Board meeting to approve package B notice to proceed
- 10/15/91 am (wd 202) School board staff hold pre award meeting and issue letter of intent
- 11/05/91 pm (wd 218) Package B contract executed
- 11/06/91 am (wd 218) Contractor could start work on package B work if space available and letter of intent allows
- 08/14/92 pm (wd 416) Package B contract work complete to be further studied

I shall be in touch with Mr. Jerry Harburn shortly to set the date of our next meeting on the project. At this session we should monitor the project progress and then prepare a summary analysis of the Package B work.

Ralph J. Stephenson PE

- 1. Yan Duke School District Renovation Notes d258
- II. 9:28:08 AM Friday, May 10, 1991
- III. By Ralph J. Stephenson PE
- IV. Those attending
 - A. Jerry Harburn THA Principal in charge
 - B. Bob Hall THA Project architect
 - C. Terry Gill THA Project job captain in meeting part time
 - D. Ralph J. Stephenson consultant
- Y. Agenda
 - A. Prepare summary work plan for bid package B 1991/92
 - B. Monitor current status of bid package A
 - C. Monitor current status of bid package B
- Yl. School Board mostings 3rd Monday in each month
 - A. 05/20/91
 - B. 06/17/91
 - C. 07/15/91
 - D. 08/19/91
 - E. 09/17/91
 - F. 10/15/91
 - G. 11/19/91
 - H. 12/17/91

YII. Physical components

- A. Bid package A
 - 1. Kramer Elementery School
 - 2. Lincoln Junior High School
 - 3. Washington School
- B. Bid package B
 - 1. Administration building

Two storu building

Replace windows

2. Carlson Elementary - class room building

One story building

3. Harding Elementary - classroom building

Two story building

- 4. Lincoln Elementary classroom building
- 5. Lincoln Senior classroom building

Two story building

6. Lincoln Junior - classroom building

Two & three story building

7. Little Elementary - classroom building

One story building

8. Macomb Park Elementary - classroom building

One story building

9. Washington Elementary - classroom building

One story builing

YIII. Current status of work

- A. Package A
 - Contract documents were issued 04/23/91
 - 2. Prebid meeting held 05/07/91
 - 3. Bids due pm 05/14/91
 - 4. Will issue letter of intent on pm 05/21/91
 - Bleacher contract awarded by change order Shop drawings being prepared by Hussey
 - THA will check bleacher shop drawings
 - 6. Asbestos abatement work still to begin on 06/17/917. Proposals for work need not be opened at board meetings
- B. Package B
 - 1. Are working on school by school design
 - 2. Key dates

08/27/91 pm (wd 169) - Target date for issue to owner for final review THA and Owner will meet during contract document preparation to resolve revisions and additions

09/10/91 pm (wd 178) - Internal THA date for issue of documents for proposals 10/09/91 pm (wd 199) - Proposals due - do proposals have to opened at Board meeting?

10/14/91 pm (wd 202) - Board approves construction of bid pack B work 10/15/91 pm (wd 203) - Issue letter of intent to selected bid pack B contractor

IX. Work scope & timing

- A. Where is package B construction work restrained by substantial vacating of buildings?
 - 1. * indicates possible work with school fully occupied
 - 2. Bid package B

Carlson Elementery - classroom building

Renovate front & northeast ext canopy

Replace exterior siding as required

Construct vestibules

Replace exterior sash

Install wire glass in all classroom & corridor doors

Refurbish all exterior doors & frames

Replace all damaged electrical wiring

Harding Elementary - classroom building

Renovate building exterior

Renovate old section toilet rooms

Install wire glass in designated classroom & corridor doors

Enclose west stair with fire rated door assembly

Install additional classroom electrical outlets

Lincoln Elementary - classroom building

Replace old section toilet room partitions

Replace gum exterior windows

Expand principal's office into hall area

Refurbish classroom cabinets

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Replace designated classroom doors

Install additional classroom electrical outlets

Replace gym lighting

Replace existing exit light fixtures

Lincoln Junior - classroom building

Replace boy's toilet room partitions

Install connecting door between rooms 161 & 163

Lincoln Senior - classroom building

Refurbish & replace cross-corridor fire doors

Renovate lobby show cases

Convert greenhouse to storage

Convert room 206 to computer lab & ventilate or cool

Check on feasibility of cooling

install wire glass in classroom doors 116 thru 127

Renovate gym spectator entrance interior & exterior

Little Elementary - classroom building

Renovate building exterior

install wire glass in designated classroom & corridor doors

Remove & close in windows at rooms 15, 16 & 17

*Remove porch at boiler room entrance

Replace wood doors at north entrance

*Provide additional outside lighting

*Replace outside security light

Macomb Park Elementary - classroom building

Replace exterior skin on building overhang at gum

Replace east end entru doors

Renovate building exterior

Install new toilet room partitions at designated toilet rooms

install new south front entrance canopy ceiling & light fixtures

Install wire glass in designated classroom & corridor doors

Washington Elementary - classroom building

Renovate building exterior

Install wire glass in designated classroom & corridor doors

install additional classroom electrical outlets

Construct two vestibule entrances

- B. Where can construction work proceed on package B with partial or full student occupancy?
 - 1. Lincoln Senior classroom building

Can have two rooms vertically, at a time - from Mr. Harris by phone

Remodel building exterior for energy conservation

Remodel entrance to auditorium

Need additional information and review by owner

Install elevator in existing shaft & install elevator equipment room

2. Administration building

Can have one elevation at a time - from Mr. Harris by phone

Replace exterior windows

Probably will be installed from exterior of building depending on weather

3. Little Elementary - classroom building

No information on what areas might be available from Mr. Harris

Remove porch at boiler room entrance

Provide additional outside lighting

Replace outside security lights

4. Washington Elementary - classroom building

No information on what areas might be evailable from Mr. Harris

Replace porch decks & resurface as required

Where are these?

Replace outside security lighting

X. Potential long lead items

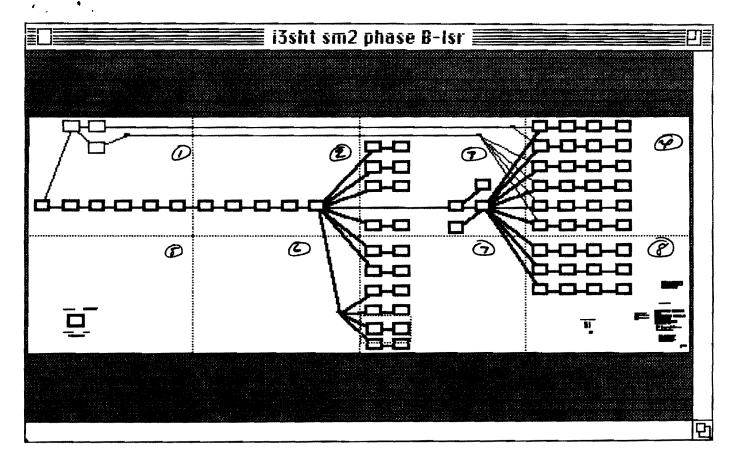
- A. Contract package B
 - 1. Aluminum entries & glass
 - 2. Elevator & equipment
 - 3. Hardware
 - 4. Hollow metal doors
 - 5. Hollow metal frames
 - 6. Mechanical equipment units

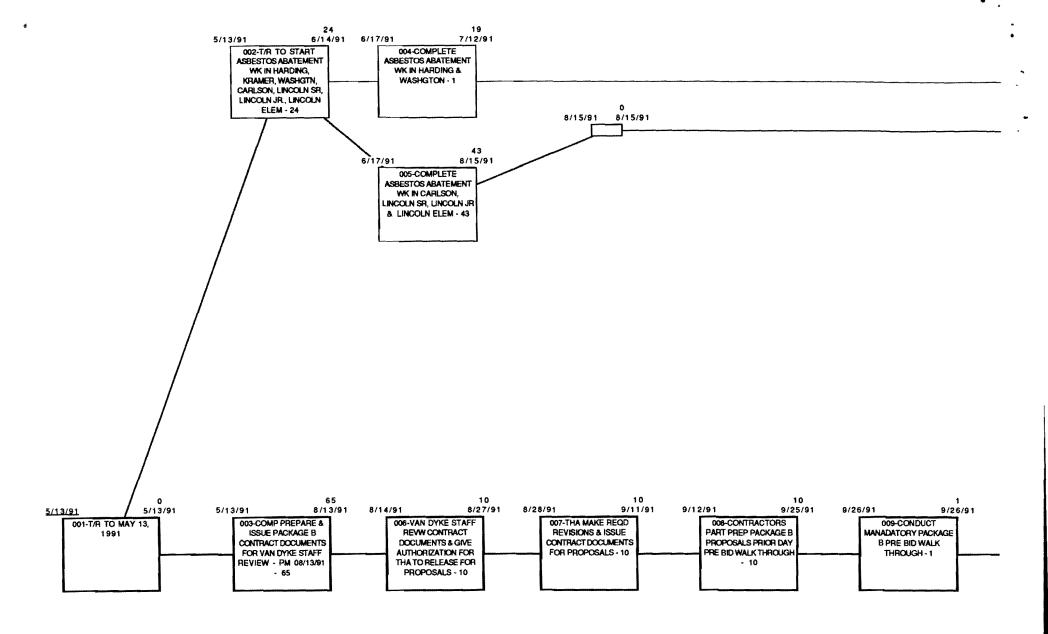
What are these?

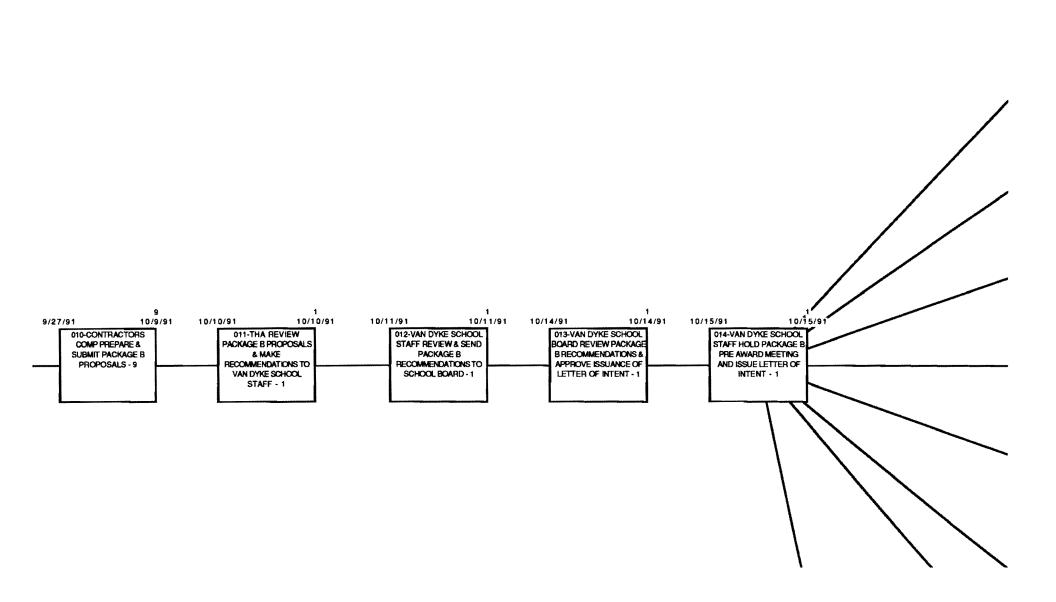
- 7. New classroom cabinent tops
- 8. Prefinished exterior metal wall panels
- 9. Terrazzo replacement
- 10. Toilet pertitions
- 11. Windows
- 12. Wire glass

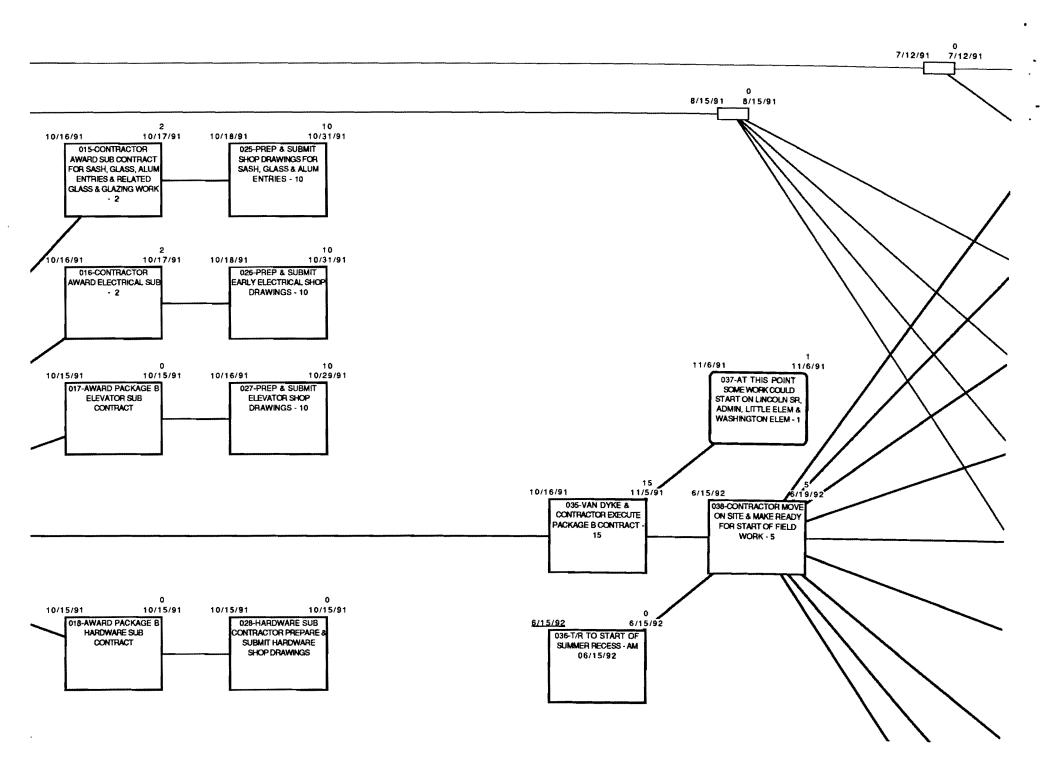
XI. General items

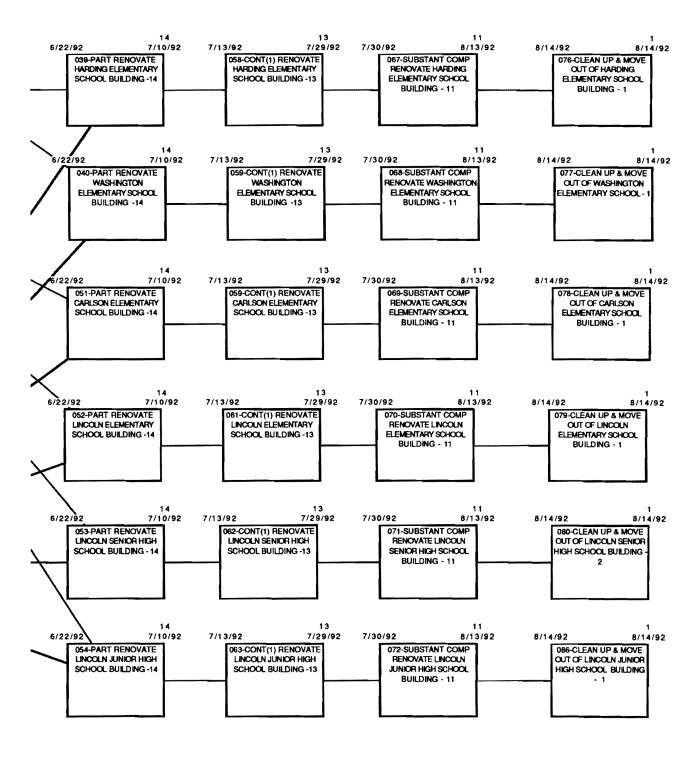
- A. THA may prepare district standards for following items
 - 1. Acoustic tile grid
 - 2. Acoustic tile panels
 - 3. Exterior light fixtures
 - 4. Hardware
 - 5. Interior light fixtures
 - 6. Keying
 - 7. Paint
 - 8. Plumbing fixtures
 - 9. Resilient floor tile
 - 10. Toilet partitions











estimated duration wd
earliest start

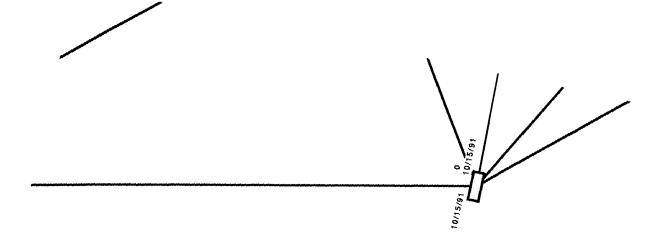
8
4/14/91

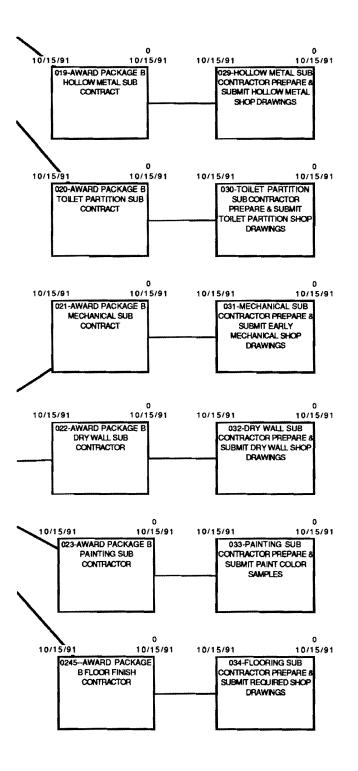
089-ERECT EXT BLOCK
BACKUP MASONRY AT
LEVEL 12 - 9 (sample
activity)

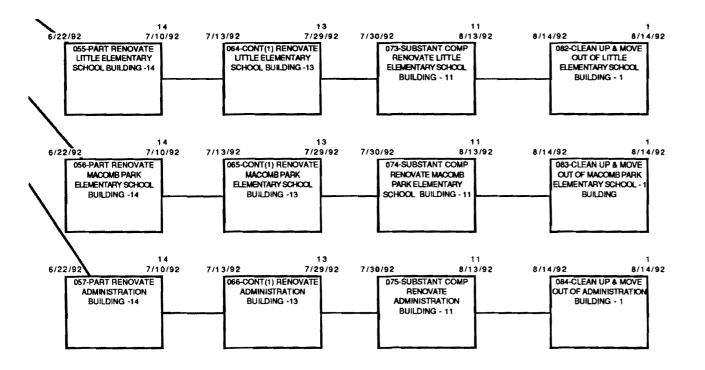
Latest start

Latest finish

ACTIVITY KEY







PRELIMINARY FOR REVIEW & COMMENT ONLY

PACKAGE B WORK

Issue #1 - not issued Issue #2 - Mey 10, 1991 Issue #3 - May 15, 1991 Issue #3 - May 15, 1991 Issue #258 NETWORK MODEL FOR VAN DYKE SCHOOL DISTRICT RENOVATION PROGRAM - Warren, Michigan

TH Associates - Architects Flint, Michigan

Reiph J. Stephenson PE PC Consulting Engineer 323 Hiewatha Drive Mt. Pleasant, Michigan ph 517 772 2537

SHEET #sm2

Reserved Activity Numbers

> ian 001 han 084