

# **Do you swear ...?"**

## **Examination & Cross-Examination of an Expert Witness**



*featuring:*

**R.Troy Mulder, Esq.**

Riley Bennett & Egloff, LLP, Indianapolis, IN  
As the Examining Attorney

**Bryce H. Bennett, Jr., Esq.**

Riley Bennett & Egloff, LLP, Indianapolis, IN  
As the Cross-Examining Attorney

**Jose Pienkagura, Esq.**

The Hunt Corporation  
As the Judge

**Robert Decker, V.P.**

The Hunt Corporation  
As the Lay Witness

**Fredric L. Plotnick, Esq., P.E.**

ENPROMAC, Jenkintown, PA  
As the Expert Witness & Program Moderator

# R. Troy Mulder, Esq.

## Direct Examination

### ▼ RILEY BENNETT & EGLOFF, LLP

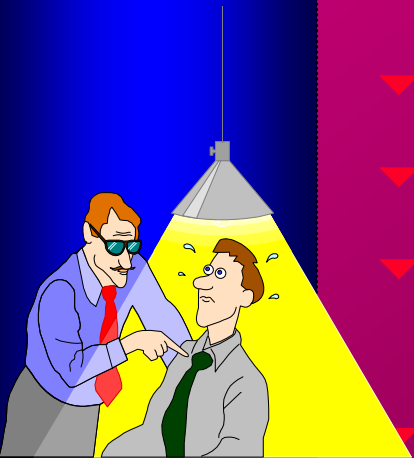
- ▼ 18th FLOOR ~ ONE AMERICAN SQUARE ~ BOX 82035  
INDIANAPOLIS, INDIANA 46282-003
- ▼ TELEPHONE: (317) 636-8000 FACSIMILE: (317) 636-8027

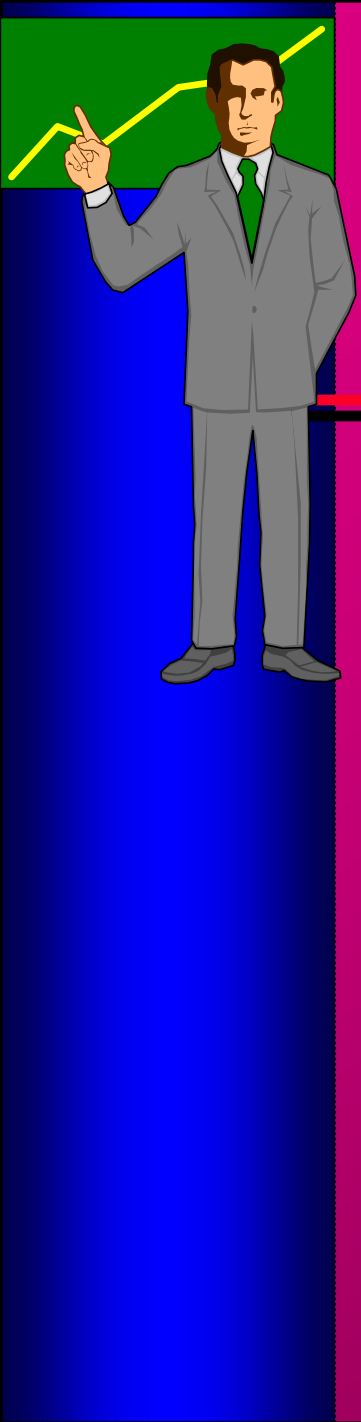


# Bryce H. Bennett, Jr., Esq.

## Cross Examination

- ▼ Riley Bennett & Egloff, LLP
  - ▼ 18th FLOOR ~ ONE AMERICAN SQUARE ~ BOX 82035 INDIANAPOLIS, INDIANA 46282-003
  - ▼ 317-636-8000 BBennett@rbelaw.com
- ▼ Founding partner Riley Bennett & Egloff
  - ▼ a full service Indianapolis Law Firm with 30 attorneys
- ▼ Civil Trial Lawyer - 22 years
- ▼ Member ABA Forum on Construction
- ▼ Member International Association
  - ▼ of Defense Counsel- Construction Law committee
- ▼ President Elect- Indianapolis Bar Foundation

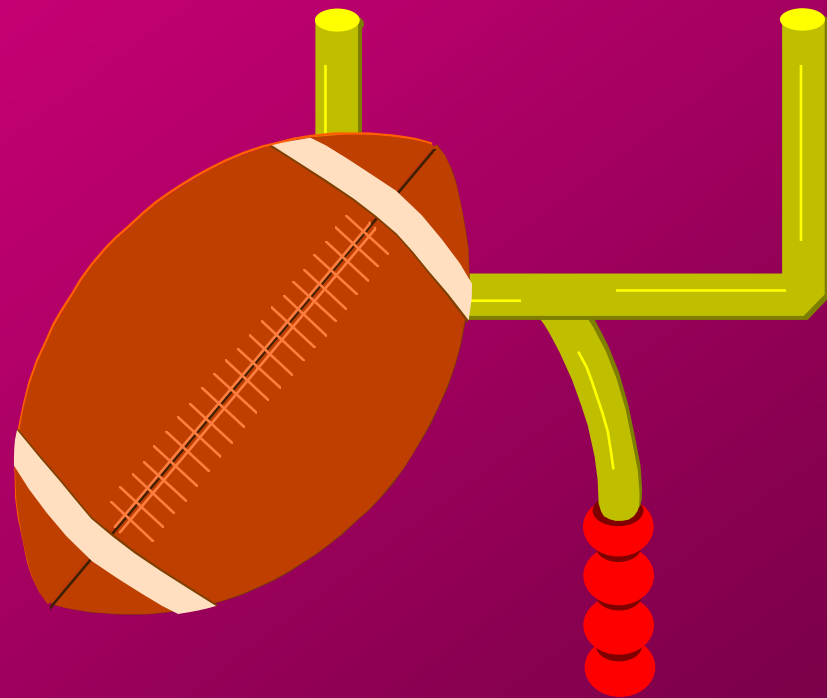


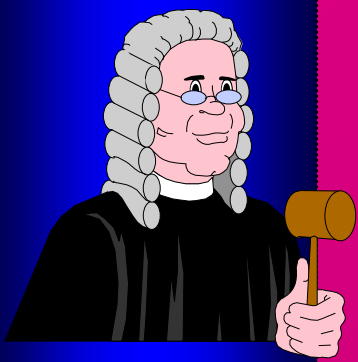


# Robert Decker, V.P.

The Lay Witness

▼ Purdue University





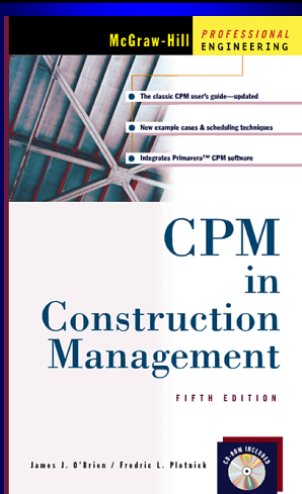
# “Hon.” Jose Pienknagura,

## Esq.

### Presiding

- ▼ Indiana University B.S. & J.D.
- ▼ ABA Forum on the Construction Industry





# Fredric L. Plotnick, Esq., P.E. The Expert

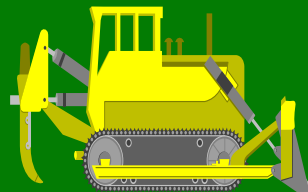
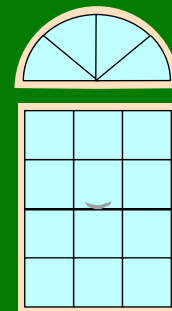
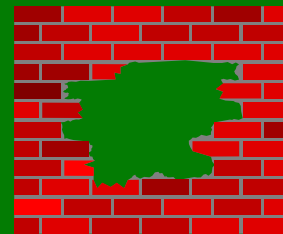
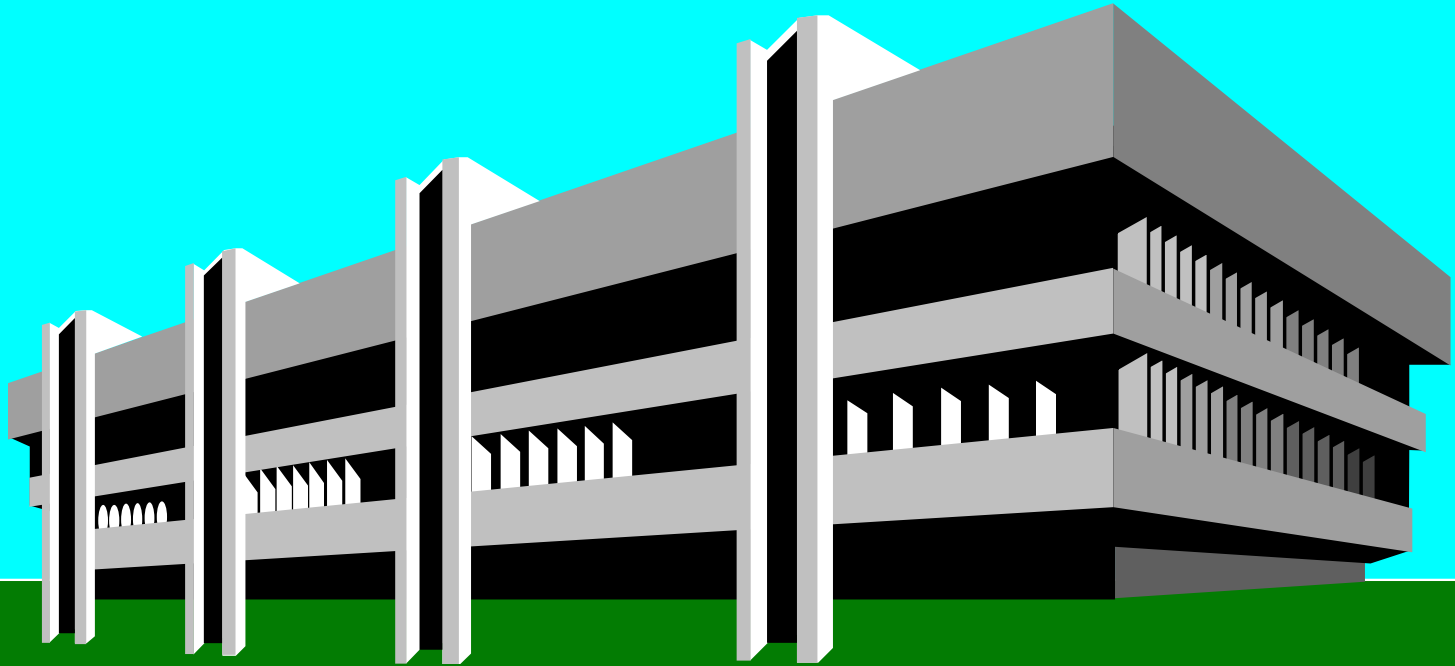
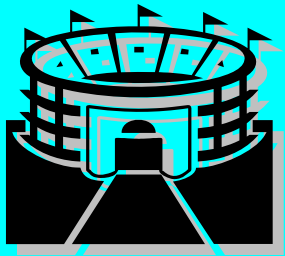
- ▼ Engineering & Property Management Consultants, Inc.  
Benson Manor #117 Jenkintown PA 19046  
215-885-3733 fplotnick@fplotnick.com
- ▼ CPM Scheduling since 1975
- ▼ Professional Engineer and Attorney -- PA, NJ, FL
- ▼ Professor of Engineering -- Drexel U. -- Phila. PA
- ▼ Co-Author: *CPM in Construction Management*
- ▼ Past President PSPE-Phila.
- ▼ Member ASCE, AACE, ABA Forum on Construction

# What is Expected of a Lay Witness

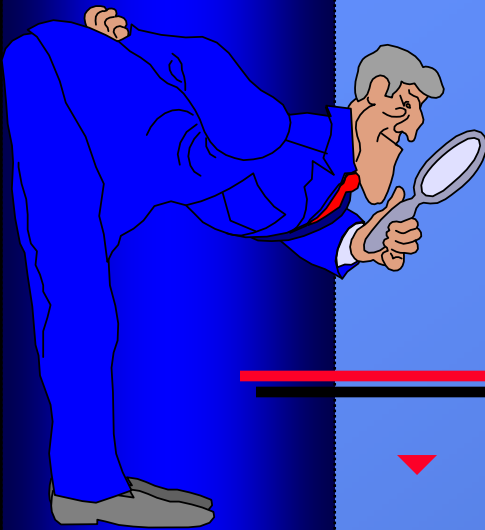


- ▼ Answer truthfully
  - ▼ You *may* present facts in their best light but
  - ▼ Be a **WITNESS** and not an advocate
- ▼ Answer factually of your personal knowledge
  - ▼ Do not offer what you have heard from others
  - ▼ Do not offer opinions
- ▼ Answer the question asked
  - ▼ and no more
  - ▼ understand the attorney may have a reason for not having you tell of matters which you deem important

# Describe the company, the project and the problems







# What to Expect on Cross

- ▼ Listen carefully and understand the question
  - ▼ Do not try to anticipate the next question
  - ▼ Your job is to relate the facts -- not match wits with the attorney
- ▼ Answer as briefly as truthfulness permits
  - ▼ Answer only the question asked
  - ▼ Do not give attorney excuse to ask another question
  - ▼ If you do not know or are uncertain, say so
  - ▼ But do not abuse this to avoid “bad news”
  - ▼ Do not attempt to explain
  - ▼ If it is important, your attorney will bring out on re-direct or through other witnesses or in his or her closing

# What is Expected of an Expert



- ▼ Tell the factfinder what you are going to prove
- ▼ Show the factfinder how you reached conclusions
- ▼ Summarize how the facts support conclusions
- ▼ State the facts upon which you rely
- ▼ State the process of where those facts lead
- ▼ Live by one set of rules
- ▼ If assumed “facts” can be disputed ...
- ▼ Be prepared to show where alternate facts lead



# The Role of the Judge

## GUIDELINES FOR ADMISSIBILITY OF EXPERT TESTIMONY

- ▼ Experts play an important role in civil litigation
- ▼ The Judge's overarching goal as "**GATEKEEPER**" is to make certain that an expert, whether basing testimony upon professional studies or personal experience, uses the same intellectual rigor that the expert would use in everyday practice
- ▼ Focus of admissibility is on methodology used and the reasonableness of use of the approach, rather than on the ultimate conclusions generated by the methodology



# The Role of the Judge

## Continued

- ▼ The Judge must determine whether expert's testimony is both **RELEVANT** to the task at hand and rest on a **RELIABLE** foundation
- ▼ Federal Rules of Evidence requires an expert be **QUALIFIED** through knowledge, skill, experience, training or education
- ▼ Even if the Judge finds the expert to be qualified and the testimony to be relevant and reliable, the Judge also must consider whether proposed testimony should be excluded because of other concerns

---

# Direct Examination

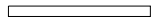


# Direct Examination of a Scheduling Expert

---

- ▼ Qualify witness as an expert
- ▼ Establish reliability of methodology and opinion
- ▼ Humanize witness -- stress credibility
- ▼ Weave expert's report into the "storyline"
- ▼ Simplify presentation of
  - ▼ assumptions
  - ▼ findings
  - ▼ analysis
  - ▼ opinions
- ▼ Defuse weak points

ACT ID	ACTIVITY DESCRIPTION	OD	ES	EF	1999												2000											
					JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
<b>SITWORK</b>																												
0	START PROJECT	0	4JAN99																									
2010	MOBILIZE	10	4JAN99	15JAN99																								
2020	CLEAR & PREPARE SITE	20	18JAN99	12FEB99																								
<b>SUB-STRUCTURE</b>																												
3010	EXCAVATE BASEMENT	20	15FEB99	12MAR99																								
3020	DRIVE PRECAST PILES	25	15MAR99	16APR99																								
3030	FORM/POUR PILE CAPS & FOUNDATIONS	50	19APR99	28JUN99																								
3040	FORM/POUR WEST FOUNDATION WALL	15	10MAY99	31MAY99																								
3050	FORM/POUR NORTH FOUNDATION WALL	15	1JUN99	21JUN99																								
3060	FORM/POUR EAST FOUNDATION WALL	15	22JUN99	13JUL99																								
3070	FORM/POUR SOUTH FOUNDATION WALL	15	14JUL99	3AUG99																								
3080	MEP UNDERGROUND & SLAB ON GRADE	25	11NOV99	16DEC99																								
<b>SUPER-STRUCTURE</b>																												
5010	PREPARE STEEL SUBMITTALS	60	4JAN99	26MAR99																								
5020	REVIEW STEEL SUBMITTALS	20	29MAR99	23APR99																								
5030	FAB/DELIVER STRUCTURAL STEEL	70	26APR99	3AUG99																								
5040	ERECT STEEL & DECK	60	4AUG99	27OCT99																								
5050	POUR SLABS ON METAL DECK	25	28OCT99	2DEC99																								
5060	SPRAY-FIREPROOFING	30	3DEC99	17JAN00																								
<b>ENCLOSURE</b>																												
8010	PREPARE WINDOW SUBMITTALS	20	28OCT99	24NOV99																								
8020	REVIEW WINDOW SUBMITTALS	20	26NOV99	23DEC99																								
8030	FAB/DELIVER WINDOWS	50	27DEC99	6MAR00																								
8040	FRAMING/PLYWOOD FOR PARAPETS	25	28OCT99	2DEC99																								
8050	ROOFING	30	3DEC99	17JAN00																								
8060	START FACADE BRICK ON BLOCK BACK-UP	65	3DEC99	6MAR00																								
8070	FINISH FACADE BRICK ON BLOCK BACK-UP	40	7MAR00	1MAY00																								
8080	WINDOWS	50	7MAR00	15MAY00																								
<b>INTERIOR FINISHES &amp; FIT-OUT</b>																												
9010	ROUGH-IN & PARTITIONS (UNDER WET CONDITIONS)	30	3DEC99	17JAN00																								
9020	ROUGH-IN & PARTITIONS (UNDER ROOF CONDITIONS)	85	18JAN00	15MAY00																								
9030	FINISHES/TRIM-OUT (UNDER DRY CONDITIONS)	30	16MAY00	27JUN00																								
9999	COMPLETE PROJECT	0		27JUN00																								

Plot Date 8SEP00  
 Data Date 4JAN99  
 Project Start 1JAN99  
 Project Finish 27JUN00

 Activity Bar/Early Dates  
 Critical Activity  
 Milestone Activity

Sheet 1 of 1

**HUBER, HUNT & NICHOLS, INC.**  
**AS-PLANNED SCHEDULE**

Date	Revision	Checked	Approved

# Baseline Schedule

---

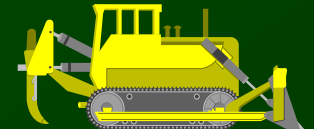
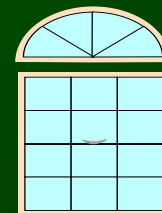
- ▼ Multiple Critical Paths throughout project
  - ▼ From Notice to Proceed
    - ▼ Sitework and Substructure
    - ▼ Procurement of Steel
  - ▼ Merging at Erect Steel and Deck and splitting to
    - ▼ Pour Slabs & Fireproof
    - ▼ Custom measure & procure Windows
    - ▼ Roofing and Interior Partitions & Rough-Ins
  - ▼ Again merging at Finishes and Completion

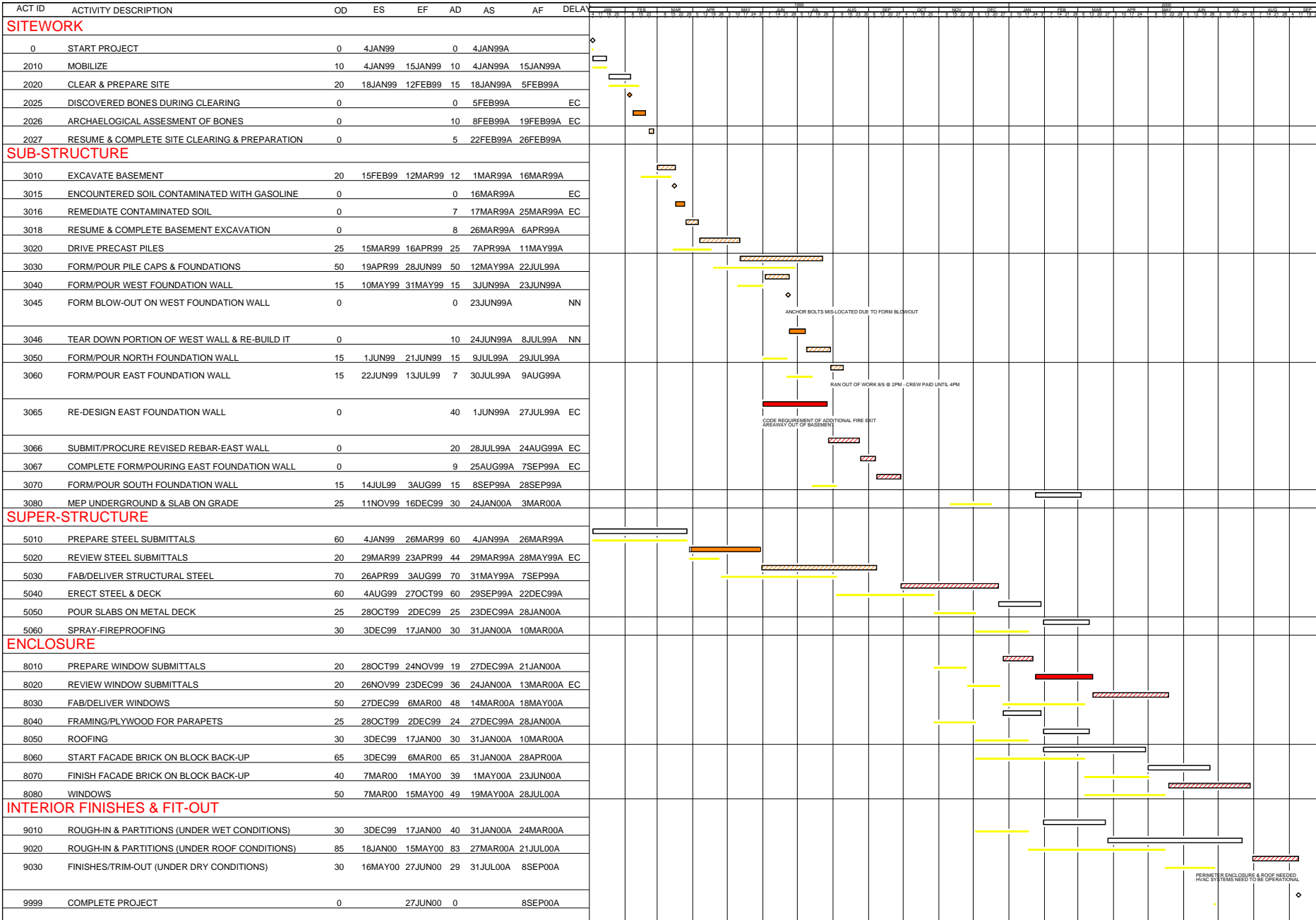




# As-Built Schedule

- ▼ Delays Encountered:
  - ▼ DISCOVERED BONES DURING CLEARING
  - ▼ ENCOUNTERED SOIL CONTAMINATED WITH GASOLINE
  - ▼ REVIEW STEEL SUBMITTALS
  - ▼ RE-DESIGN EAST FOUNDATION WALL FOR FIRE EXIT
  - ▼ FORM BLOW-OUT ON WEST FOUNDATION WALL
  - ▼ REVIEW WINDOW SUBMITTALS
  - ▼ MEP UNDERGROUND & SLAB ON GRADE and ROUGH-IN & PARTITIONS (UNDER WET CONDITIONS)
- ▼ Note the order of presentation





Target Date	4JAN99
Plot Date	8SEP00
Data Date	9SEP00
Project Start	1JAN99
Project Finish	8SEP00

	Activity Bar/Early Dates
	Delay to Critical Path
	Impact to Critical Path
	Impact to Non-Critical Path
	As-Planned Milestone Activity

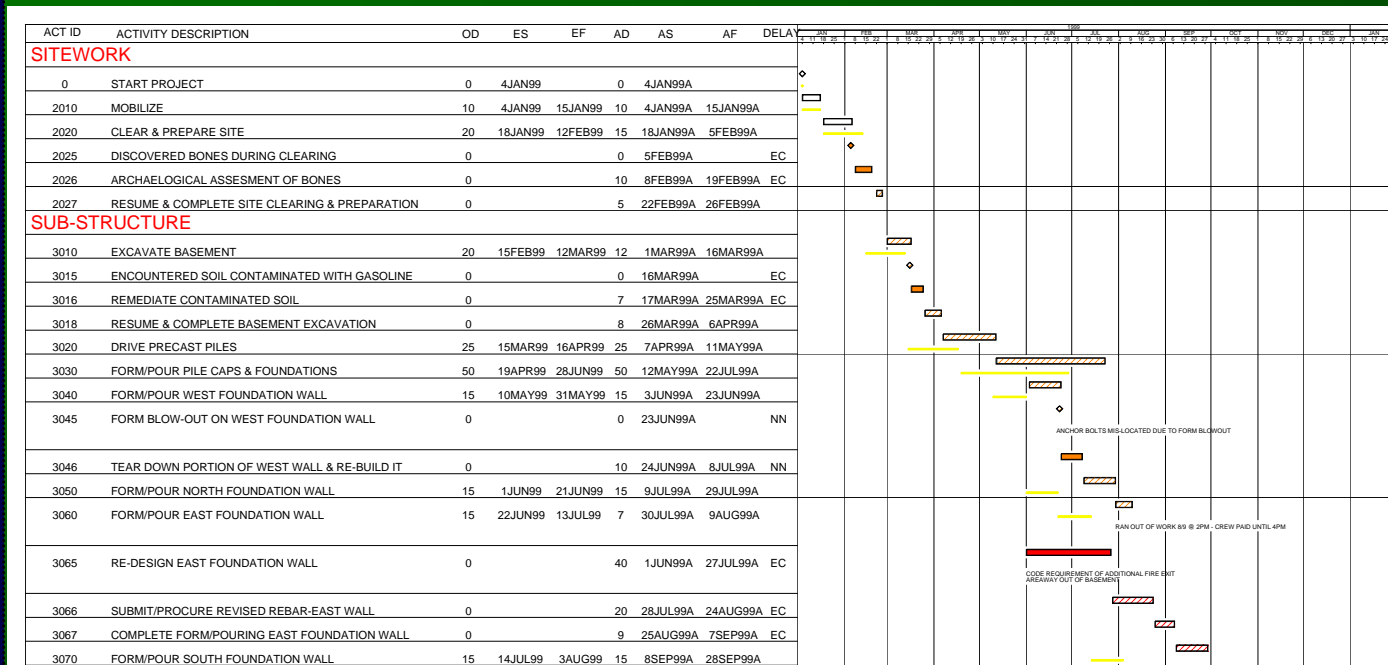
**HUBER, HUNT & NICHOLS, INC.**  
**4 STORY, 150,000 SF LAB/OFFICE**  
**COMPARISON AS-BUILT TO AS-PLANNED**

Sheet 1 of 1

Date	Revision	Checked	Approved

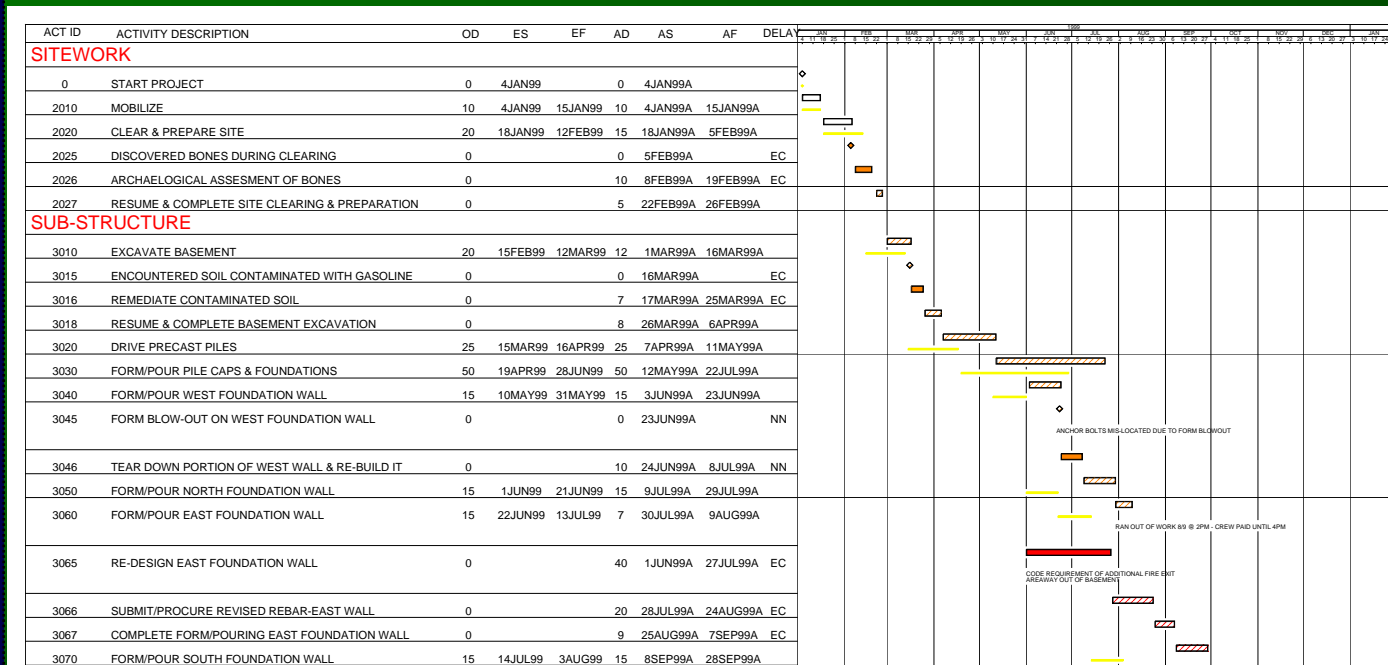
# Delay caused by bones

- ▶ Would be excusable & compensable
  - ▶ Unforeseeable condition
- ▶ 10 day delay to Excavation & Sub-Structure work
  - ▶ Was on a Critical Path until East Wall problem discovered



# Delay caused by gasoline

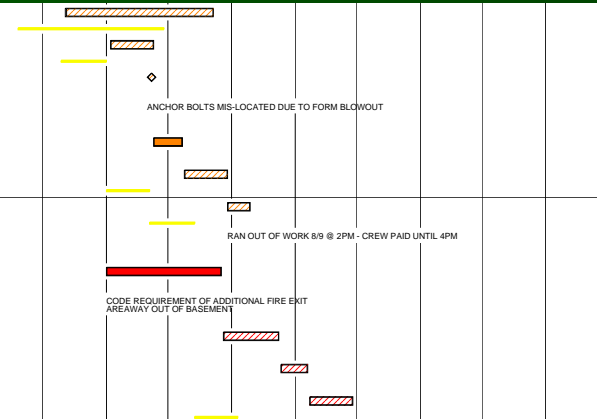
- ▶ Would be excusable & compensable
  - ▶ Unforeseeable condition
- ▶ 7 day delay to Excavation & Sub-Structure work
  - ▶ Was on a Critical Path until East Wall problem discovered



# Delay caused by blowout

- ▼ Would be non-excusable & non-compensable
  - ▼ chargeable to the contractor
- ▼ 10 day delay to Excavation & Sub-Structure work
  - ▼ Occurred after East Wall problem discovered
  - ▼ Therefore was not on a critical path when it occurred

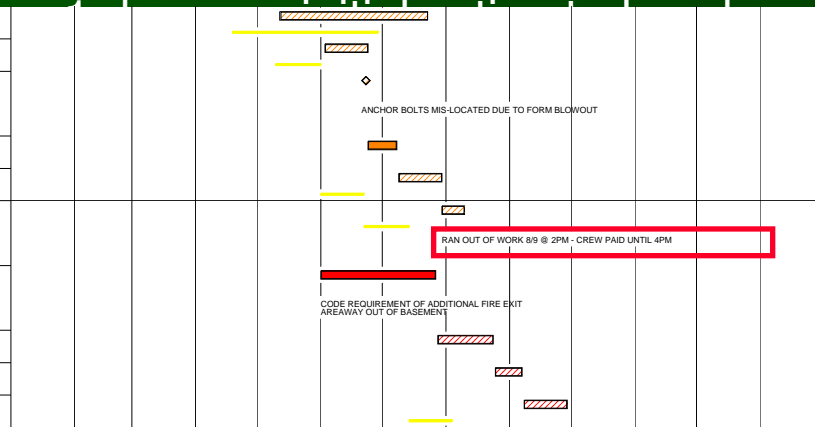
3030	FORM/POUR PILE CAPS & FOUNDATIONS	50	19APR99	28JUN99	50	12MAY99A	22JUL99A													
3040	FORM/POUR WEST FOUNDATION WALL	15	10MAY99	31MAY99	15	3JUN99A	23JUN99A													
3045	FORM BLOW-OUT ON WEST FOUNDATION WALL	0			0	23JUN99A		NN												
3046	TEAR DOWN PORTION OF WEST WALL & RE-BUILD IT	0			10	24JUN99A	8JUL99A	NN												
3050	FORM/POUR NORTH FOUNDATION WALL	15	1JUN99	21JUN99	15	9JUL99A	29JUL99A													
3060	FORM/POUR EAST FOUNDATION WALL	15	22JUN99	13JUL99	7	30JUL99A	9AUG99A													
3065	RE-DESIGN EAST FOUNDATION WALL	0			40	1JUN99A	27JUL99A	EC												
3066	SUBMIT/PROCURE REVISED REBAR-EAST WALL	0			20	28JUL99A	24AUG99A	EC												
3067	COMPLETE FORM/POURING EAST FOUNDATION WALL	0			9	25AUG99A	7SEP99A	EC												
3070	FORM/POUR SOUTH FOUNDATION WALL	15	14JUL99	3AUG99	15	8SEP99A	28SEP99A													



# Delay caused by need to Redesign East Wall

- ▼ Discovered during layout for Foundation Walls
  - ▼ Code requirement for additional fire exit
- ▼ Pushed back job completion without regard to prior delays
- ▼ Total days of delaying activities = 40 + 20 + 1 days = 61 days
  - ▼ 40 days for redesign by Engineer
  - ▼ 20 days for shop detailing & procurement by Contractor

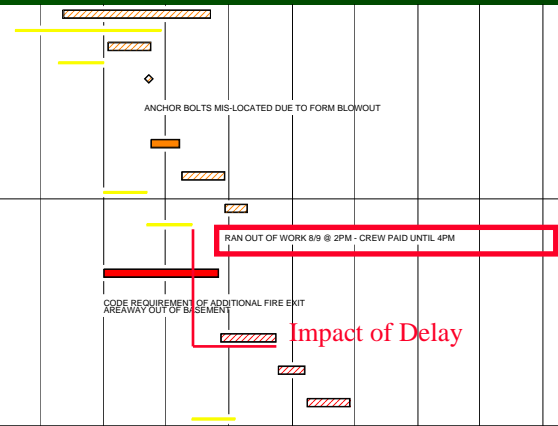
3030	FORM/POUR PILE CAPS & FOUNDATIONS	50	19APR99	28JUN99	50	12MAY99A	22JUL99A	
3040	FORM/POUR WEST FOUNDATION WALL	15	10MAY99	31MAY99	15	3JUN99A	23JUN99A	
3045	FORM BLOW-OUT ON WEST FOUNDATION WALL	0			0	23JUN99A	NN	
3046	TEAR DOWN PORTION OF WEST WALL & RE-BUILD IT	0			10	24JUN99A	8JUL99A	NN
3050	FORM/POUR NORTH FOUNDATION WALL	15	1JUN99	21JUN99	15	9JUL99A	29JUL99A	
3060	FORM/POUR EAST FOUNDATION WALL	15	22JUN99	13JUL99	7	30JUL99A	9AUG99A	
3065	RE-DESIGN EAST FOUNDATION WALL	0			40	1JUN99A	27JUL99A	EC
3066	SUBMIT/PROCURE REVISED REBAR-EAST WALL	0			20	28JUL99A	24AUG99A	EC
3067	COMPLETE FORM/POURING EAST FOUNDATION WALL	0			9	25AUG99A	7SEP99A	EC
3070	FORM/POUR SOUTH FOUNDATION WALL	15	14JUL99	3AUG99	15	8SEP99A	28SEP99A	



# Delay caused by need to Redesign East Wall

- ▼ Total delay to project is only **41 days of Delay**
  - ▼ Contractor worked on East Wall as far as possible w/o fix
  - ▼ Contractor needed and used reasonable time for addl procurement
  - ▼ Total duration for East Wall was 16 days > 15 days planned

3030	FORM/POUR PILE CAPS & FOUNDATIONS	50	19APR99	28JUN99	50	12MAY99A	22JUL99A													
3040	FORM/POUR WEST FOUNDATION WALL	15	10MAY99	31MAY99	15	3JUN99A	23JUN99A													
3045	FORM BLOW-OUT ON WEST FOUNDATION WALL	0			0	23JUN99A		NN												
3046	TEAR DOWN PORTION OF WEST WALL & RE-BUILD IT	0			10	24JUN99A	8JUL99A	NN												
3050	FORM/POUR NORTH FOUNDATION WALL	15	1JUN99	21JUN99	15	9JUL99A	29JUL99A													
3060	FORM/POUR EAST FOUNDATION WALL	15	22JUN99	13JUL99	7	30JUL99A	9AUG99A													
3065	RE-DESIGN EAST FOUNDATION WALL	0			40	1JUN99A	27JUL99A	EC												
3066	SUBMIT/PROCURE REVISED REBAR-EAST WALL	0			20	28JUL99A	24AUG99A	EC												
3067	COMPLETE FORM/POURING EAST FOUNDATION WALL	0			9	25AUG99A	7SEP99A	EC												
3070	FORM/POUR SOUTH FOUNDATION WALL	15	14JUL99	3AUG99	15	8SEP99A	28SEP99A													







# Delay caused by overrun on Review of Windows

- Contract provides Engineer shall complete reviews in 20 days
- Engineer's review used 36 days -- 16 days overrun
- Release of fabrication of Windows was impacted by 16 days
- Fab/Delivery of Windows was on critical on the initial CPM
- Total delay to project is **16 additional days of Delay**



# Do not ignore loose ends

- ▼ Contractor did not begin work on critical item ASAP
  - ▼ **PREPARE WINDOW SUBMITTALS**
  - ▼ Could start 23DEC99 -- Did start 27DEC99
  - ▼ But completed work in 19 days -- 20 days after predecessor

## SUPER-STRUCTURE

5010	PREPARE STEEL SUBMITTALS	60	4JAN99	26MAR99	60	4JAN99A	26MAR99A	
5020	REVIEW STEEL SUBMITTALS	20	29MAR99	23APR99	44	29MAR99A	28MAY99A	EC
5030	FAB/DELIVER STRUCTURAL STEEL	70	26APR99	3AUG99	70	31MAY99A	7SEP99A	
5040	ERECT STEEL & DECK	60	4AUG99	27OCT99	60	29SEP99A	22DEC99A	
5050	POUR SLABS ON METAL DECK	25	28OCT99	2DEC99	25	23DEC99A	28JAN00A	
5060	SPRAY-FIREPROOFING	30	3DEC99	17JAN00	30	31JAN00A	10MAR00A	

## ENCLOSURE

8010	PREPARE WINDOW SUBMITTALS	20	28OCT99	24NOV99	19	27DEC99A	21JAN00A	
8020	REVIEW WINDOW SUBMITTALS	20	26NOV99	23DEC99	36	24JAN00A	13MAR00A	EC
8030	FAB/DELIVER WINDOWS	50	27DEC99	6MAR00	48	14MAR00A	18MAY00A	
8040	FRAMING/PLYWOOD FOR PARAPETS	25	28OCT99	2DEC99	24	27DEC99A	28JAN00A	
8050	ROOFING	30	3DEC99	17JAN00	30	31JAN00A	10MAR00A	
8060	START FACADE BRICK ON BLOCK BACK-UP	65	3DEC99	6MAR00	65	31JAN00A	28APR00A	
8070	FINISH FACADE BRICK ON BLOCK BACK-UP	40	7MAR00	1MAY00	39	1MAY00A	23JUN00A	
8080	WINDOWS	50	7MAR00	15MAY00	49	19MAY00A	28JUL00A	

December 1999						
SUN	MON	TUE	WED	THU	FRI	SAT
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	G <sub>24</sub>	25
26	27	28	29	30	G <sub>31</sub>	



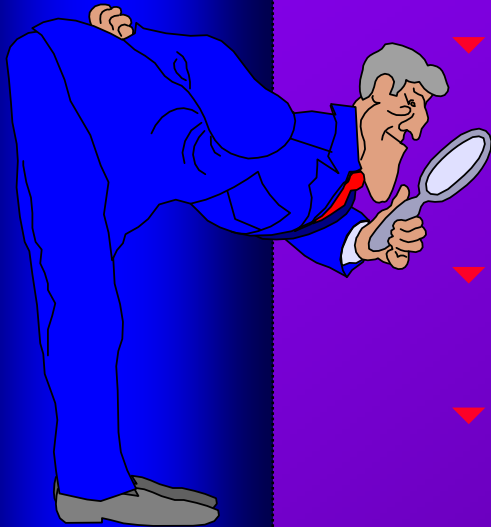
# Summary of Delays

- ▼ Project actual finish is 53 days late -- not 57 days
  - ▼ Note **ACCELERATED COMPLETION**
    - ▼ of Procurement of Windows -- 48 rather than 50 days
    - ▼ of installation of Windows -- 49 rather than 50 days
    - ▼ of Finishes -- 29 rather than 30 days
  - ▼ Contractor is entitled to lesser of
    - ▼ 57 days of field and home office overheads
    - ▼ 53 days of field and home office overheads plus documented costs for the 4 days of acceleration noted above
- or

---

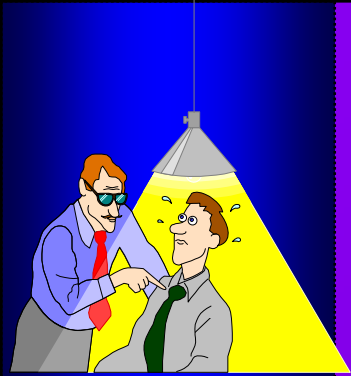
# Cross- Examination

# Purpose of Cross-Examination



- ▼ Raise “doubts” as to Expert’s Opinion
  - ▼ Qualifications of the Expert
    - ▼ For the opinion to be rendered
    - ▼ Any particular “bias”
  - ▼ Knowledge (lack thereof) of “true” underlying facts
  - ▼ Methodology and assumptions employed to reach conclusions and opinions
- ▼ Advance your theory of the case
  - ▼ “If the jury determines ..., you would agree that ...”

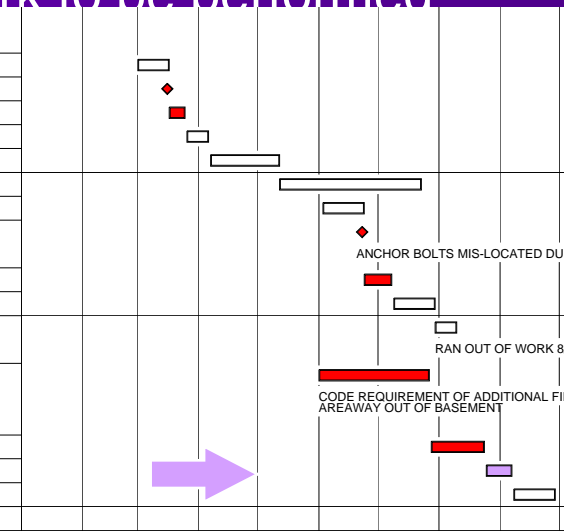
# Narrow in on the assumed fact



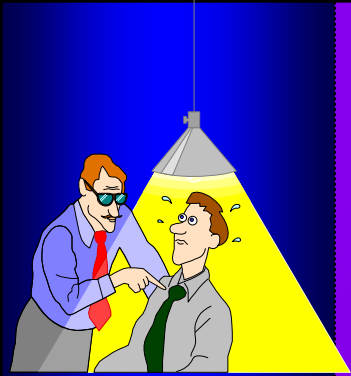
- ▼ Your direct testimony was that the overrun in time for performance of Tasks 3060, 3066 and 3067 was due to
  - ▼ reasonable duration for procurement of additional steel
  - ▼ the additional complexity of work to be performed

## SUB-STRUCTURE

3010	EXCAVATE BASEMENT	20	15FEB99	12MAR99	12	1MAR99A	16MAR99A	
3015	ENCOUNTERED SOIL CONTAMINATED WITH GASOLINE	0			0	16MAR99A		EC
3016	REMIEDIATE CONTAMINATED SOIL	0			7	17MAR99A	25MAR99A	EC
3018	RESUME & COMPLETE BASEMENT EXCAVATION	0			8	26MAR99A	6APR99A	
3020	DRIVE PRECAST PILES	25	15MAR99	16APR99	25	7APR99A	11MAY99A	
3030	FORM/POUR PILE CAPS & FOUNDATIONS	50	19APR99	28JUN99	50	12MAY99A	22JUL99A	
3040	FORM/POUR WEST FOUNDATION WALL	15	10MAY99	31MAY99	15	3JUN99A	23JUN99A	
3045	FORM BLOW-OUT ON WEST FOUNDATION WALL	0			0	23JUN99A		NN
3046	TEAR DOWN PORTION OF WEST WALL & RE-BUILD IT	0			10	24JUN99A	8JUL99A	NN
3050	FORM/POUR NORTH FOUNDATION WALL	15	1JUN99	21JUN99	15	9JUL99A	29JUL99A	
3060	FORM/POUR EAST FOUNDATION WALL	15	22JUN99	13JUL99	7	30JUL99A	9AUG99A	
3065	RE-DESIGN EAST FOUNDATION WALL	0			40	1JUN99A	27JUL99A	EC
3066	SUBMIT/PROCURE REVISED REBAR-EAST WALL	0			20	28JUL99A	24AUG99A	EC
3067	COMPLETE FORM/POURING EAST FOUNDATION WALL	0			9	25AUG99A	7SEP99A	EC
3070	FORM/POUR SOUTH FOUNDATION WALL	15	14JUL99	3AUG99	15	8SEP99A	28SEP99A	
3080	MEP UNDERGROUND & SLAB ON GRADE	25	11NOV99	16DEC99	30	24JAN00A	3MAR00A	



# State the hypothetical

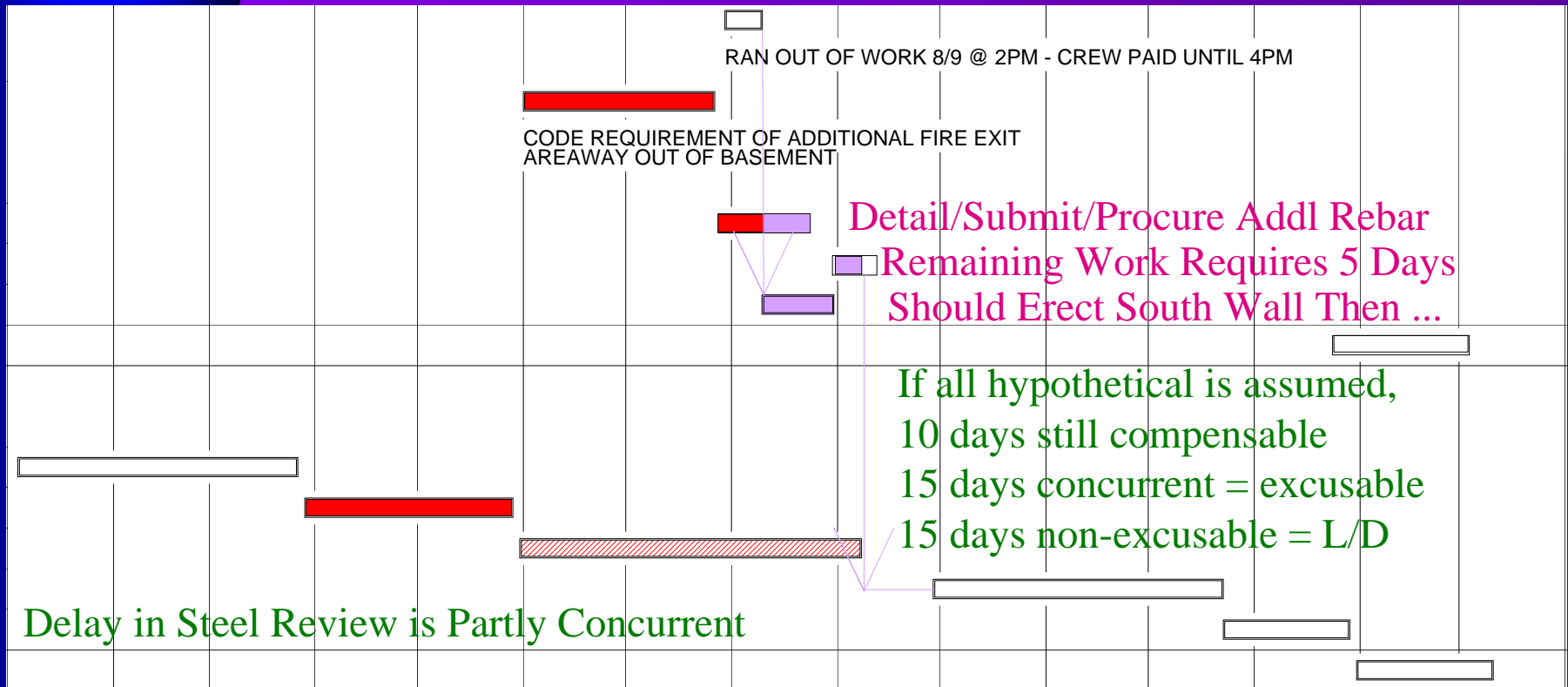


- ▼ If the finder of fact finds that
  - ▼ the fabrication of steel could have been performed in only half the time used (10 days) and
  - ▼ the complexity of the work was reduced and the remaining work on the East Wall could have been completed in only 5 days and
  - ▼ the crew could have moved to work on the South Wall after running out of work on the East Wall (returning to complete the East Wall later,) then...

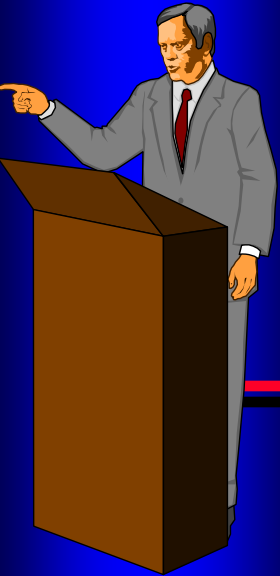


# Have Answer Prepared

- ... for each assumed set of facts on which the expert opinion is based:

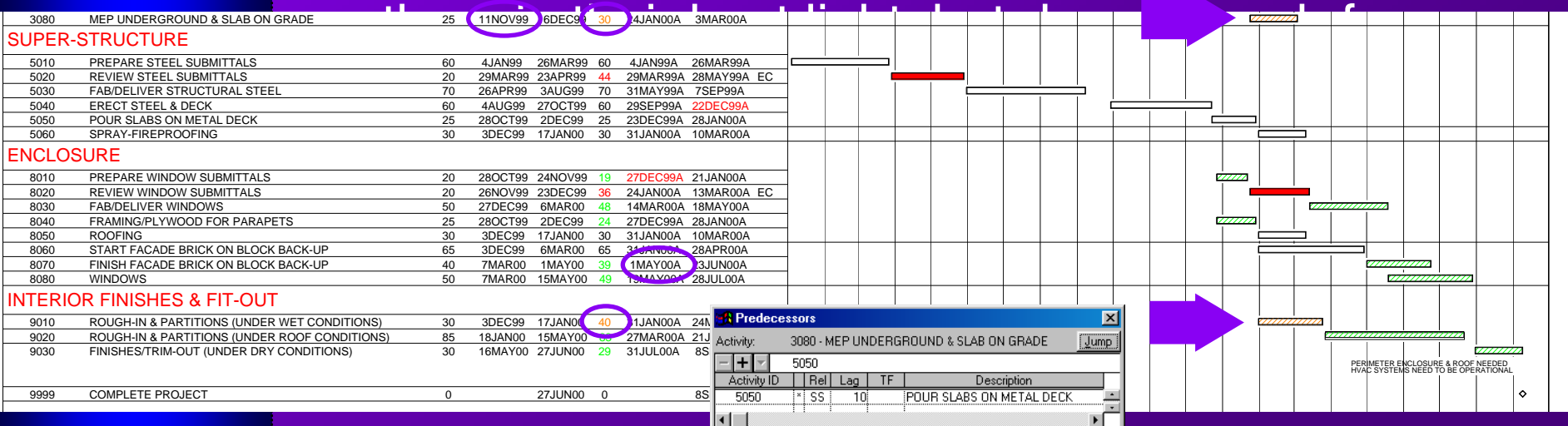






# To Thine Own Self Be True

- ▼ Be an Expert -- Not an Advocate
- ▼ An Expert Must Maintain His/Her Credibility
- ▼ You *may* present facts as you have received



# Summary of Expert Appearance

- ▼ Be prepared - know the project - know the schedule
- ▼ Teach the factfinder how you arrived at your conclusions
- ▼ It's a small world -- Play from only one set of rules
- ▼ Expect attacks on your credentials and credibility
  - ▼ Don't take personally -- let your client's lawyer handle
- ▼ Anticipate attacks on your assumptions and
  - ▼ Determine in advance alternative analysis for such scenario
- ▼ Don't take yourself too seriously
  - ▼ Everybody's an expert at something -- this is your turn