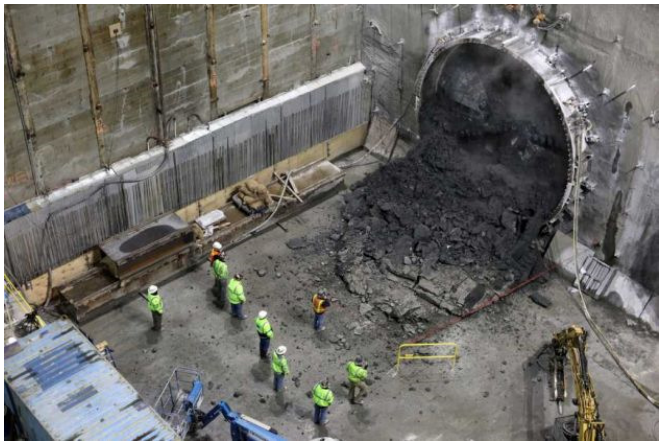
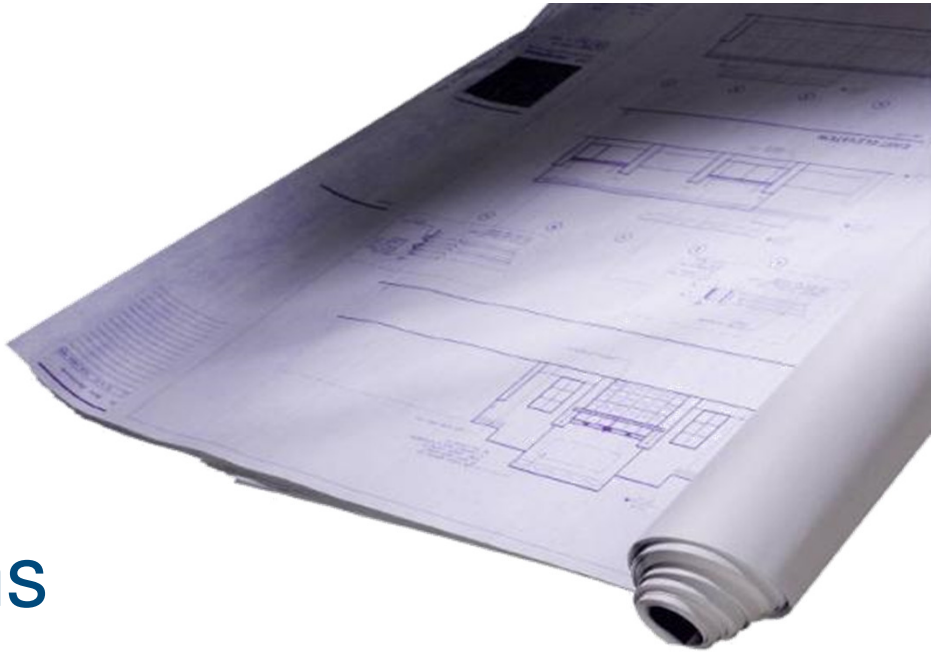
# Differing Site Conditions: Who Bears the Risk?

December 8, 2014

Don Carlow, PSP



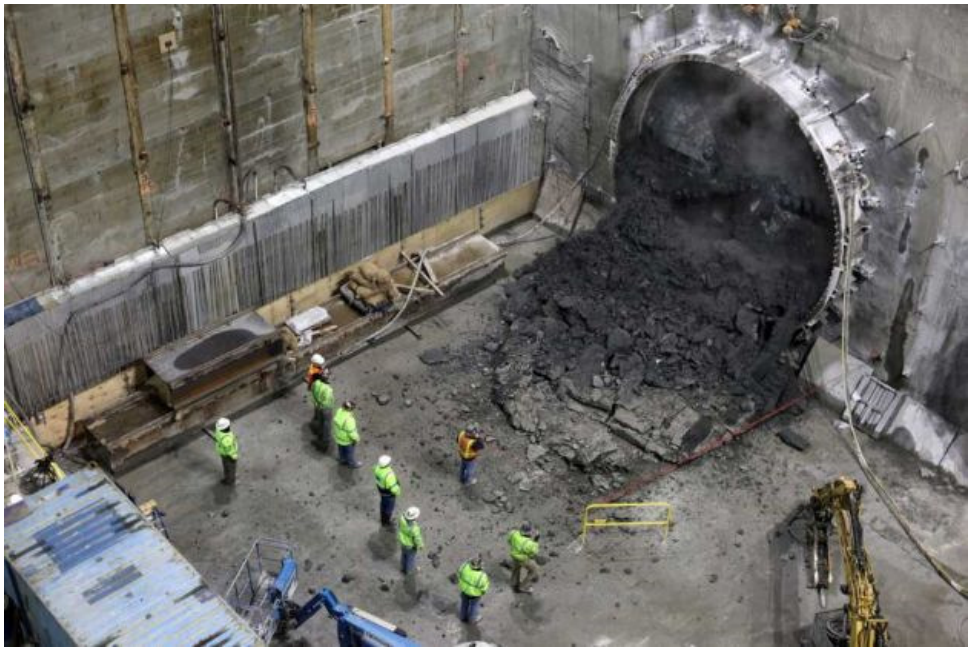


# Differing Site Conditions

- Types of unforeseen site conditions
- Who bears the risk?
- Proving delays

# Types of Unforeseen Site Conditions

- Type 1
- Type 2
- Classified
- Unclassified



# Who bears the risk?

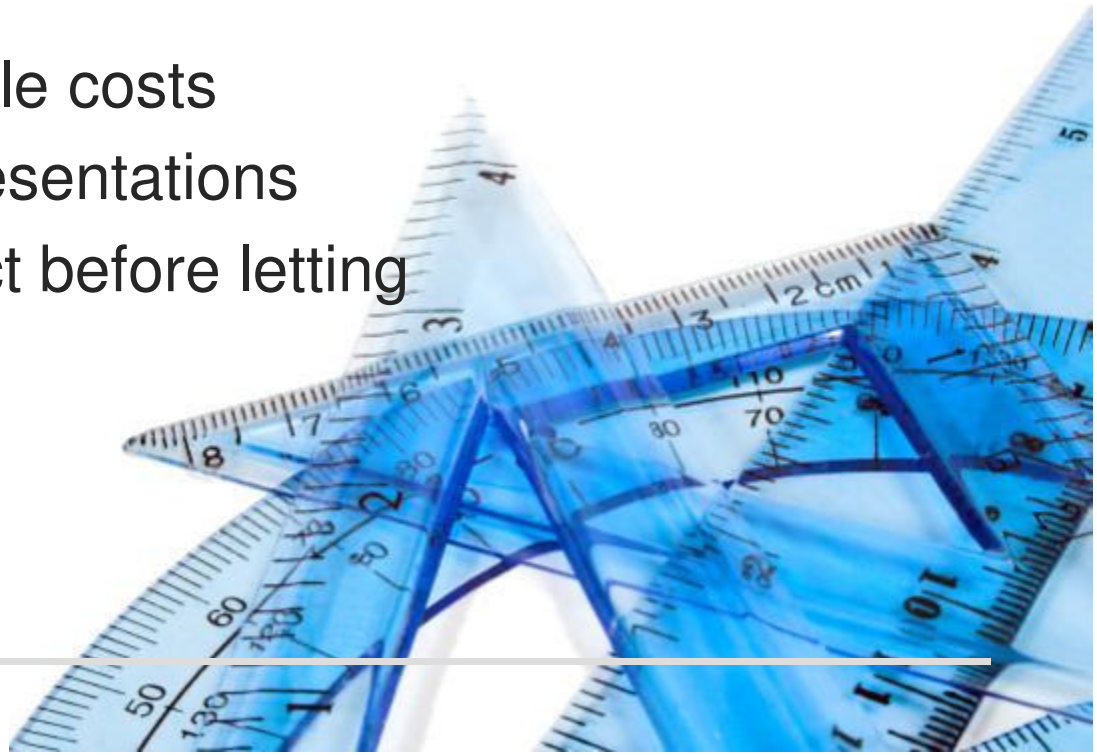
- ✓ Contractor: When neither party was aware of DSC
- ✓ Owner: Misrepresentation / concealment of information
- ✓ Contract Clauses:
  - ✓ Geotechnical Information Disclaimer
  - ✓ DSC Clauses
  - ✓ Site Inspection Clauses

## *Metcalf Construction Company, Inc. v. United States*, 742 F.3d 984 (Fed. Cir. 2014)

An owner may be required to provide an equitable adjustment for a Type I differing site condition if: (1) the contract indicated the conditions that the contractor could expect to find at the site; (2) the conditions indicated in the contract differed materially from the actual conditions; (3) the actual conditions were reasonably unforeseeable based upon all the information available to the contractor at the time of bidding; (4) the contractor acted as a reasonably prudent contractor in interpreting the contract documents; (5) the contractor reasonably relied on its interpretation of the contract and contract-related documents; and (6) the contractor incurred additional costs as a result of the difference between the expected conditions and the actual conditions.

# Risk Management Strategies - Owner

- Disclose everything
- Require notice
- Restrict reimbursable costs
- Avoid positive representations
- Understand contract before letting



# Risk Management - Contractor

- Understand the contract prior to bidding
- Be aware of onerous exculpatory clauses
- Perform reasonable site inspection
- Follow notice provisions
- Keep good/separate cost records
- Consult your construction lawyer!

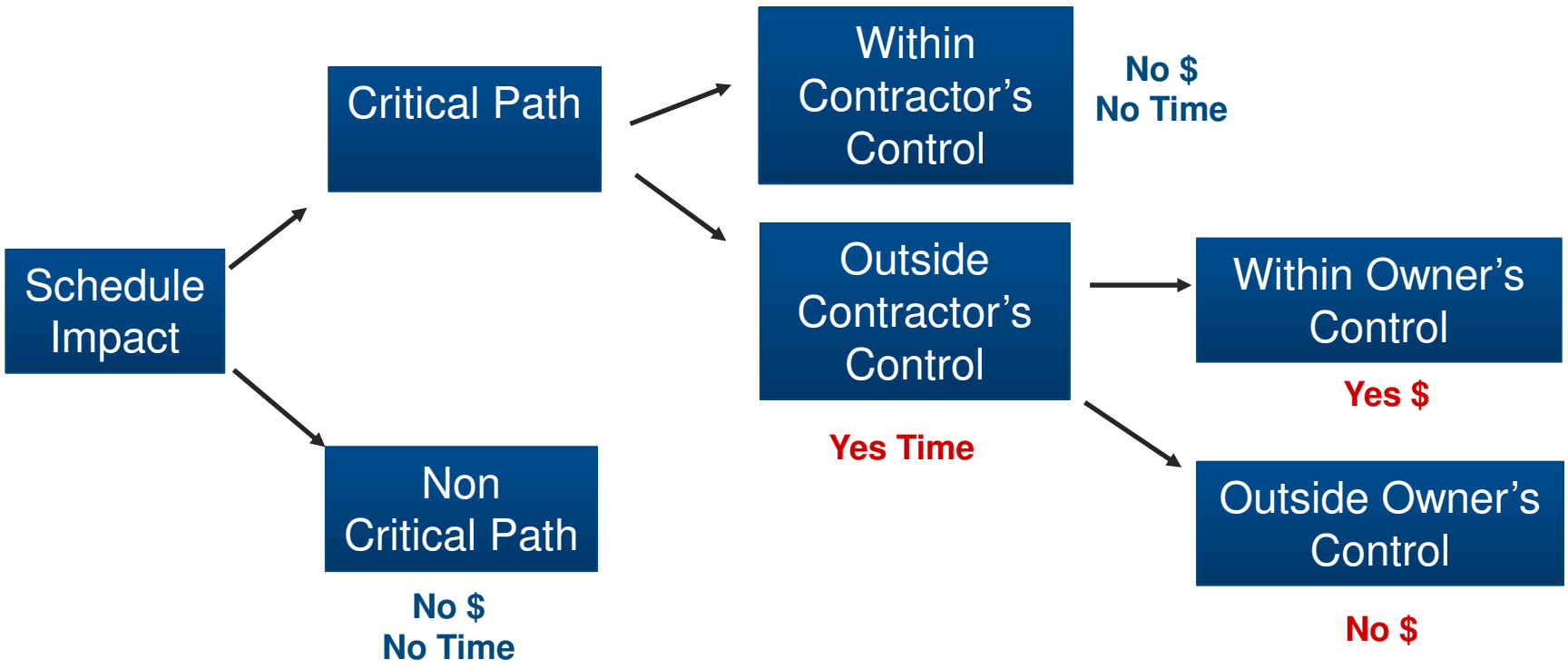
# Proving Delay

- Critical vs Non-Critical
- Excusable vs Non-Excusable
- Delay Analysis Methodologies

# Critical Path

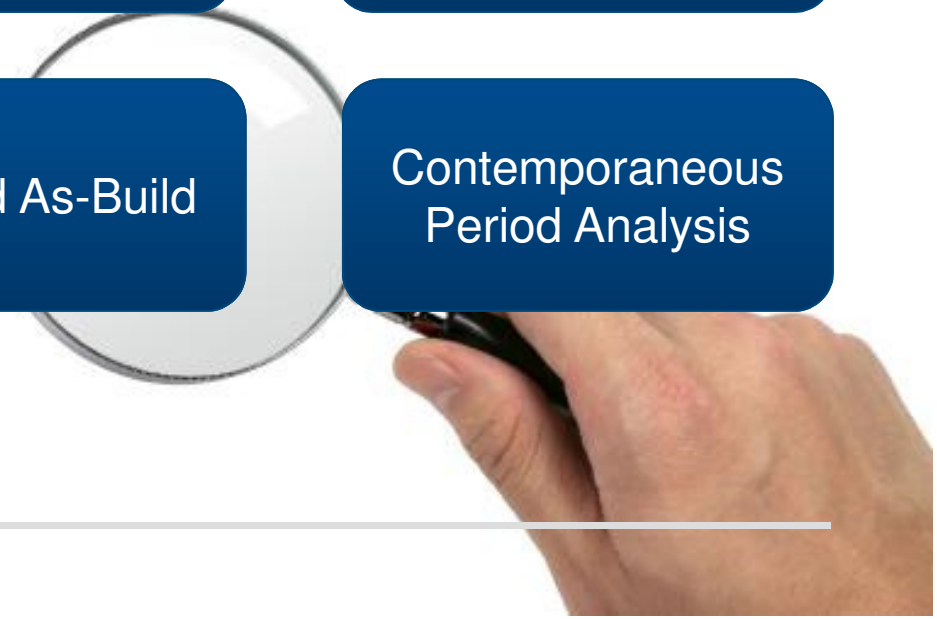
- Longest continuous chain of activities through the network schedule
- Establishes the minimum overall project duration
- Only delays to the project's critical path can delay the project completion date.

# Excusable or Compensable?



# Common Delay Analysis Methods

- Total Time
- Impacted As-Planned
- Time Impact (Fragnet)
- Window Analysis
- Collapsed As-Build
- Contemporaneous Period Analysis

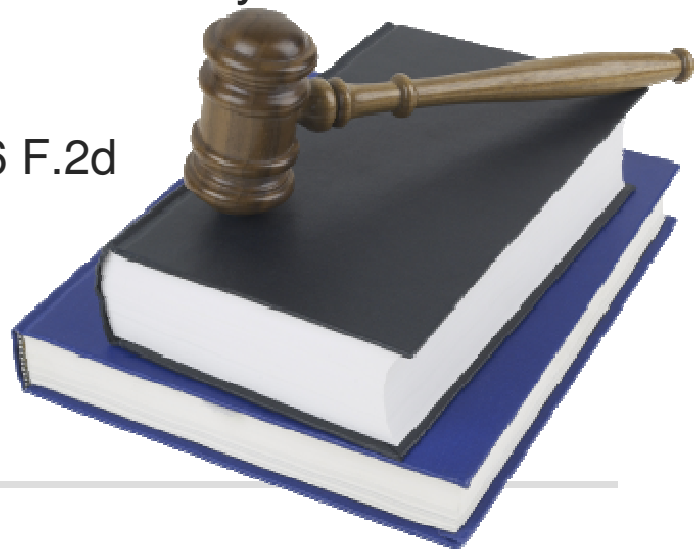


# Weakness of Impacted As Planned

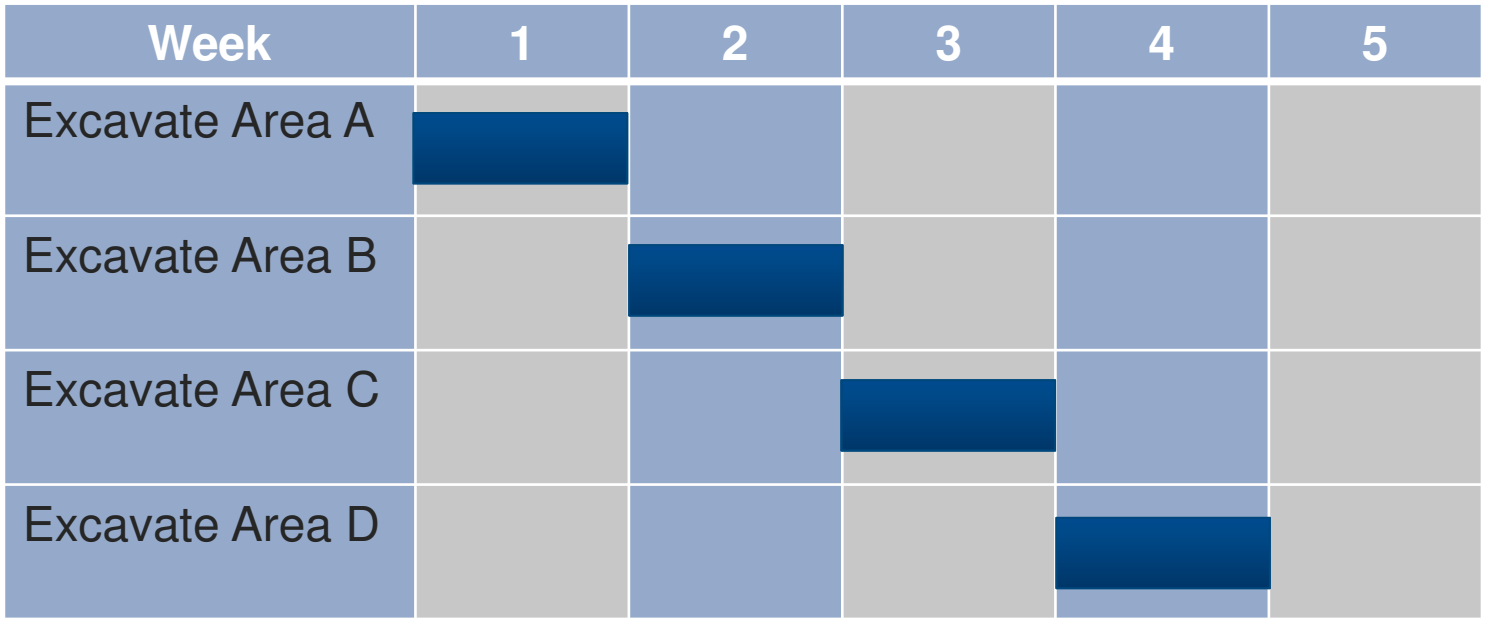
"We have found that Vinson's analysis systematically excluded all delays and disruptions except those allegedly caused by the Government (finding 92). We conclude that his analysis was inherently biased, and could lead to but one predictable outcome. . .

To be credible, a contractor's CPM analysis ought to take into account, and give appropriate credit for all of the delays which were alleged to have occurred."

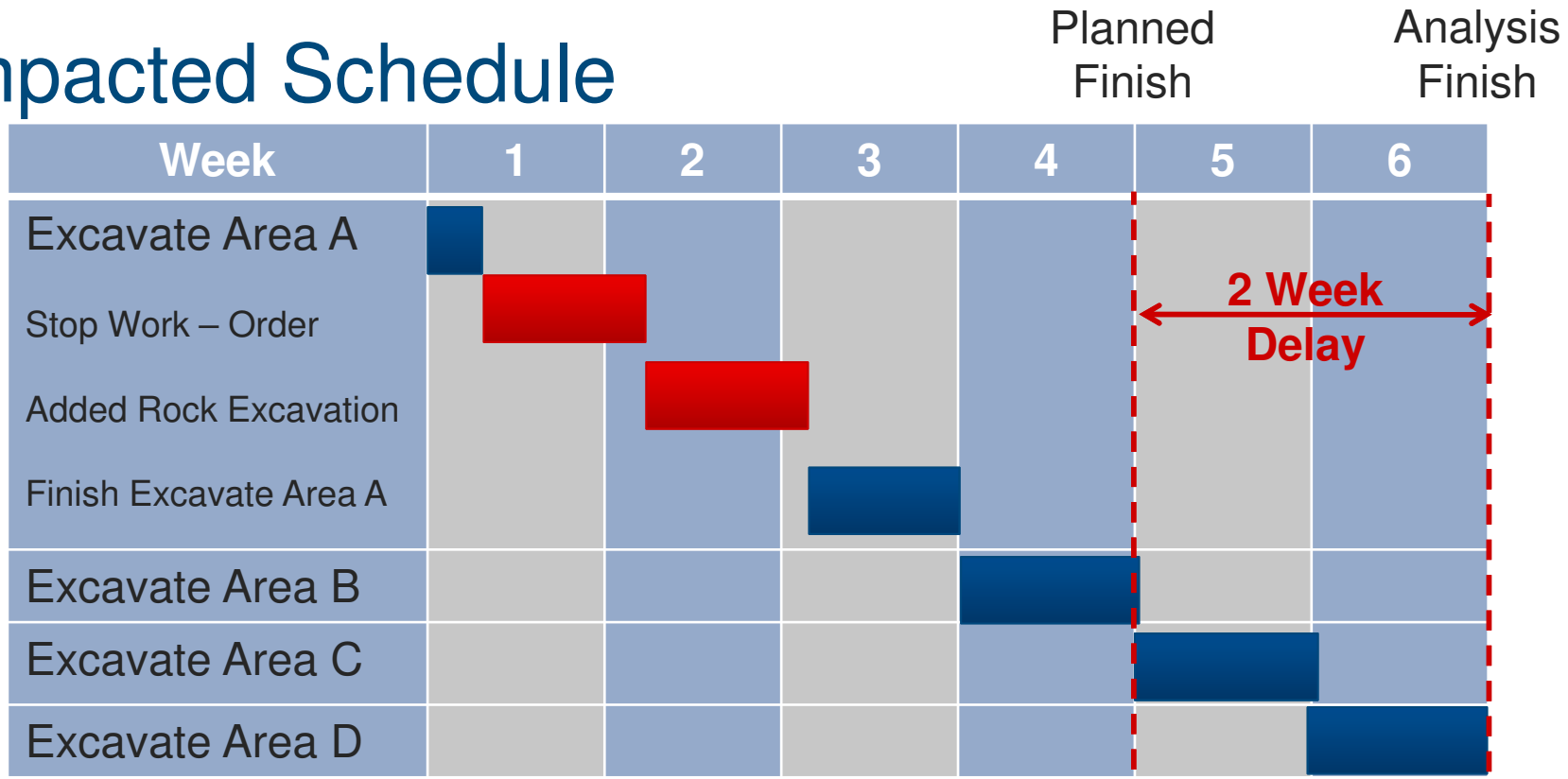
*Haney v. United States* [30 CCF ¶ 70,1891], 676 F.2d 584 (Ct. Cl. 1982); *Pathman Construction Co.*, ASBCA No. 23392, 85-2 BCA ¶ 18,096 (CPM analysis with "built-in bias" rejected).



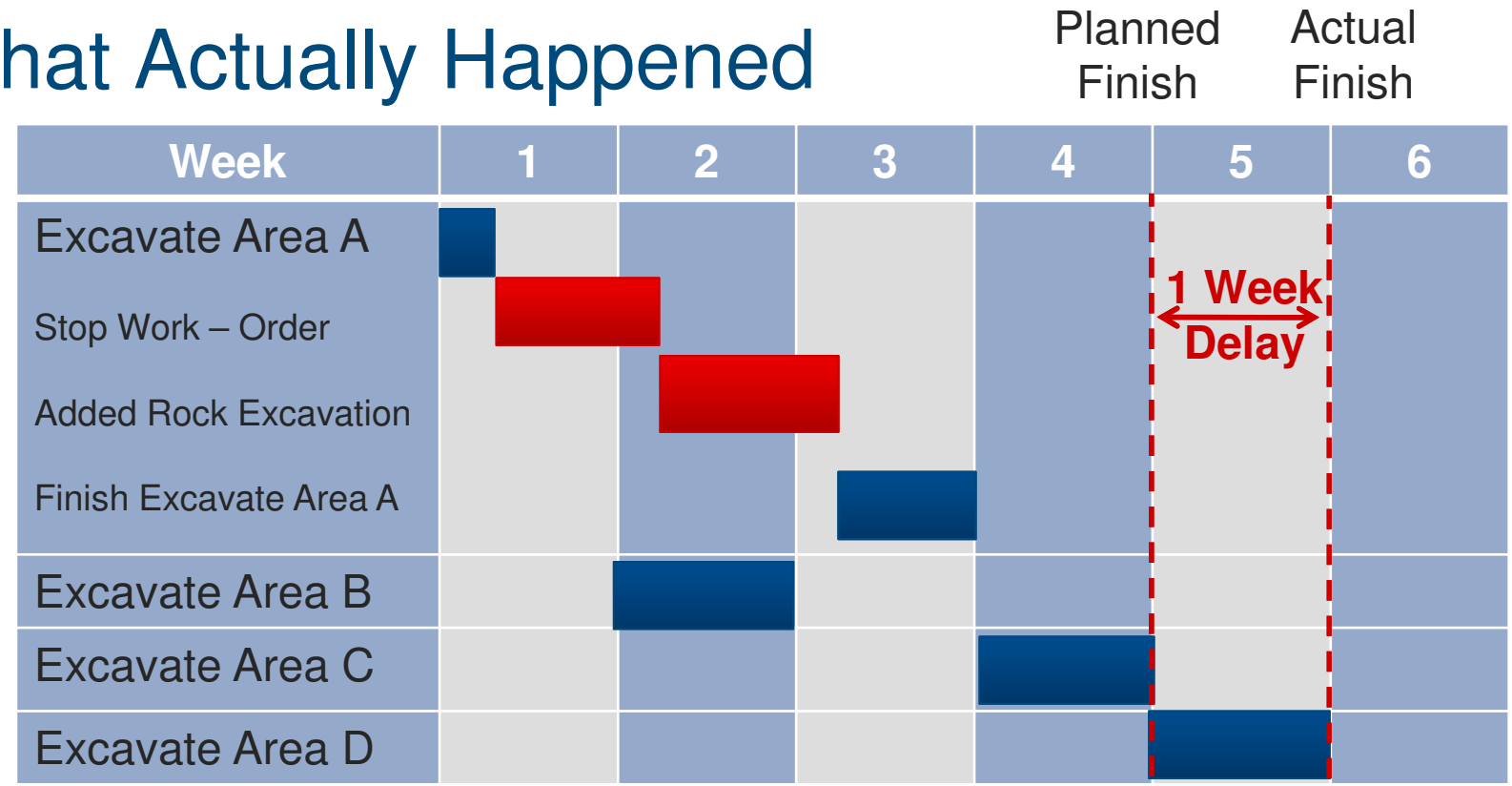
# As-Planned Schedule



# Impacted Schedule



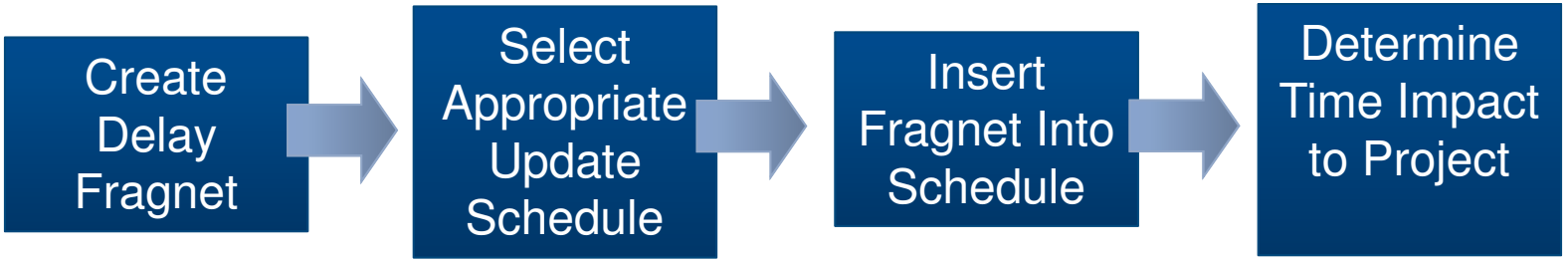
# What Actually Happened



# Time Impact Analysis

- Sometimes called “Fragnet Analysis”
- Often mandated by Contract
- Widely used by Federal agencies
- Best method for analyzing delays BEFORE and event occurs

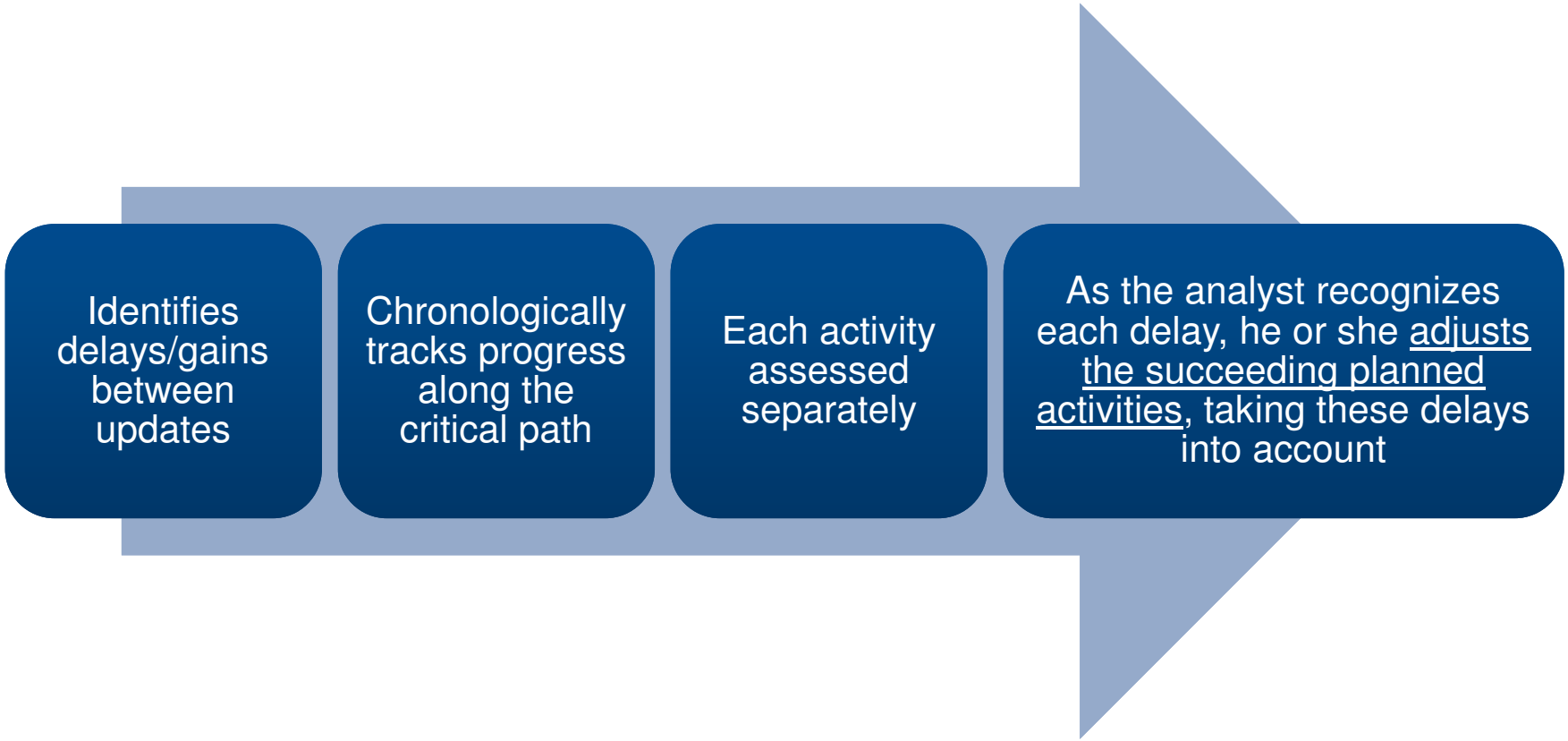
# Time Impact Analysis



# Contemporaneous Period Analysis

- Uses contemporaneous project schedules
- Recognizes the dynamic nature of network scheduling
- Adopts the perspective of the personnel onsite at the time the delay occurred
- Best method for analyzing delays AFTER the event occurs

# Contemporaneous Period Analysis



# Questions?

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