



1



Matthew Semerad

- 25 Years in the construction industry
- 2 years Materials 1997-98
- 3 years Electrical (local 110) 98-00
- 4 years Laborer (local 563) 01-05
- 2 years Vertical Construction 05-07
- 14 years Horizontal Construction 07-21
- AGC of MN 21- Present

Construction Mgt U of MN



AGC Safety and Education Development: Housekeeping

2

Unit 4 *CLASS* Themes

- Understanding and reinforcing the rights and responsibilities of each party involved in a project.
- Understanding and reinforcing the rights and responsibilities of the construction supervisor.
- Solving problems and resolving issues.
- Creating a win-win situation for all parties.



3

Unit 4 *CLASS* Objectives

- Understand critical information about contract documents and construction law to help recognize the various roles and responsibilities of all contracting parties.
- Understand how contract documents and construction law can be helpful to solve problems, resolve issues and remedy conflicts.
- Know how to develop jobsite processes that are consistent with contract documents and construction law to maintain positive relationships among contractors, architects, engineers, and owners.
- Know how to create a productive, respectful environment on the jobsite.
- *THIS IS NOT RISK MANAGEMENT BUT***



4

Session 1: Learning Objectives

- Describe the importance of contract documents and construction law as they apply to construction supervisors.
- Define key legal terms associated with contracts and contract documents.
- Describe common contract documents.
- Describe how a contract is formed and define basic legal terms used in construction documents.
- Describe the contractual relationships among various parties to a construction contract.



5

Contract Documents: (1-2)

- Contract Documents are a set of *interrelated* documents supplied by the owner or contracting agency to the general contractor to build a specific project. (this was in bold)
 - Are there contract documents not supplied by the owner?
 -my game.



6

Contract Documents: (1-2)

S-41.1

Table 2301-3 of MnDOT 2301.2.B.3 shall be deleted and replaced with the following:

Table 2301-3 Intermediate Aggregate for Use in Concrete			
If the gradation meets the following:	Classify material type as:	Gradation Test Procedures	Quality Test Requirements
100% passing the 1/2" and ≤90% passing #4	Intermediate Aggregate	Coarse Aggregate (+4 Portion)	Spec. 3137.2.D.3 except 3137.2.D.3(c) modified to maximum 40% carbonate
		Fine Aggregate (-4 Portion)	3126 Shale in Sand (-4 Portion)
100% passing the 1/2" and >90% passing #4	Intermediate Aggregate	Fine Aggregate * (Minimum 1000 g sample)	Shale Content Test by AASHTO T113 MnDOT Modified (+4 Portion)
			3126 Shale in Sand (-4 Portion)
100% passing the 3/8" and ≤90% passing #4	Coarse Sand	Fine Aggregate	Shale Content Test by AASHTO T113 MnDOT Modified (+4 Portion)
			3126 Shale in Sand (-4 Portion)

* Include a 1/2" sieve in the fine aggregate sieve stack. If a 1/2" sieve is not available, test the +4 portion as a coarse aggregate and the -4 portion as a fine aggregate.



UNIT 4 CONTRACT DOCUMENTS



7

Contract Documents: Drawings (1-2)

- Drawings graphically provide:
 - Arrangements
 - Materials
 - Dimensions
 - Configurations
- Do drawings contain more than above?
- Are they just graphical?



UNIT 4 CONTRACT DOCUMENTS

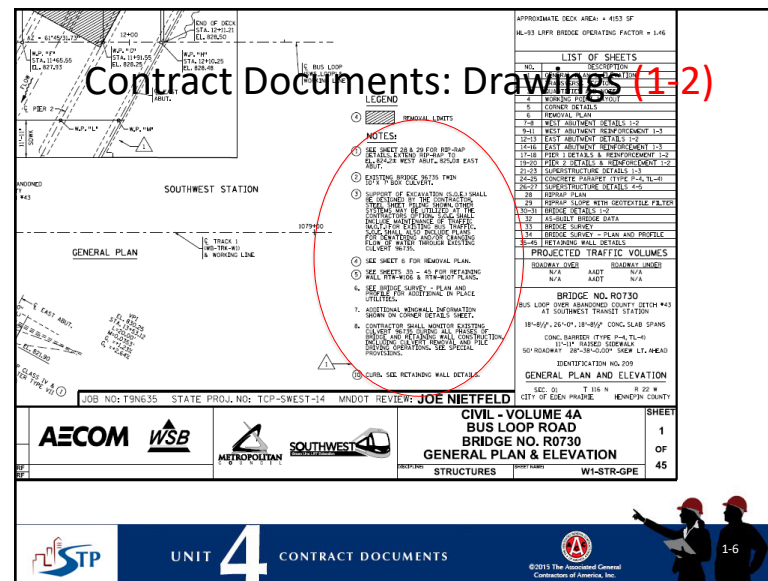


8

10



10



Contract Documents: Specifications (1-3)

- Specifications provide:
 - Written instructions that detail project requirements.
 - Advertisement Notice to Bidders
 - Instructions on bidding
 - Form of bid or proposal
 - Contract agreement documents
 - Bonding requirements
 - Insurance requirements
 - Prevailing Wage Documentation
 - General and Special Conditions
 - Technical Specifications *

[X] C11_0000_COVER PAGE
 [X] C11_0001_INVITED NOTICE TO PROCEED
 [X] C11_0003_CERTIFICATIONS PAGE
 [X] C11_0008_SCHEDULE OF CHANGES
 [X] C11_0010_TABLE OF CONTENTS
 [X] C11_0011_SHEET INDEX
 [X] C11_0110_ADVERTISEMENT FOR BID
 [X] C11_0200_INSTRUCTIONS TO BIDDERS
 [X] C11_0300_INFORMATION AVAILABLE TO BIDDERS
 [X] C11_0410_BID FORM
 [X] C11_0440_BID BOND
 [X] C11_0450_BIDDER'S AFFIRMATIVE ACTION CERTIFICATION STATEMENT
 [X] C11_0457_BIDDER'S EQUAL PAY CERTIFICATION STATEMENT
 [X] C11_0457_CERTIFICATE REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNT...
 [X] C11_0460_BAY AREA CERTIFICATION
 [X] C11_0470_LOBBYING RESTRICTION CERTIFICATION
 [X] C11_0471_RESTRICTED SUBCONTRACTOR CERTIFICATION
 [X] C11_0485_DRAINAGE BUSINESS ENTERPRISE (DBE) SUBCONTRACTING POLICY AND PRL...
 [X] C11_0486_PROTEST PROCEDURES
 [X] C11_0489_RESPONSIBLE CONTRACTOR VERIFICATION AND CERTIFICATION OF COMPLIANC...
 [X] C11_0520_CONTRACT AGREEMENT
 [X] C11_0610_PERFORMANCE BOND
 [X] C11_0614_PAYMENT BOND
 [X] C11_0670_GENERAL CONDITIONS
 [X] C11_0671_SUPPLEMENTAL CONDITIONS FOR FTA & MINNESOTA STATE FUNDED PROJECTS L...
 [X] C11_0680_SUPPLEMENTARY CONDITIONS
 [X] C11_0680_PREVAILING WAGE RATES
 [X] C11_0680_CERTIFIED PAYROLL FORM
 [X] C11_0675_DISABLED INDIVIDUALS AFFIRMATIVE ACTION CLAUSE
 [X] C11_0675_EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS
 [X] C11_0680_NOTICE OF REQUIREMENTS FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLO...
 [X] C11_0680_WORKFORCE INCLUSION COMMITMENT TO PLAN
 [X] C11_0688_SWAIFT CIVIL CONSTRUCTION PROJECT DESCRIPTION
 [X] C11_9999_SWAIFT CIVIL ADDENDA

UNIT 4
CONTRACT DOCUMENTS

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11

Contract Documents: Specifications (1-3)

- Specifications provide:
 - Written instructions that detail project requirements.
 - Technical Specifications
 - Masterformat Divisions (1-4)
 - » 1: General
 - » 2: Site Work
 - » 3: Concrete
 - » 4: Masonry
 - » 5: Metals
 - » 6: Carpentry
 - » 7: Moisture & Thermal Protection
 - » 8: Doors and Windows
 - » 9: Finishes
 - » 10: Specialties
 - » 11: Equipment
 - » 12: Furnishings
 - » 13: Special Construction
 - » 14: Conveying Systems
 - » 15: Mechanical
 - » 16: Electrical
 - There are other ways these technical specifications can be sorted?!
 - Cost Codes:
 - Information that is not easily shown on drawings.

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CONTRACT DOCUMENTS

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12

Contract Documents: Specifications (COFFEE)

- Quick Break



UNIT 4 CONTRACT DOCUMENTS



13

Contract Documents: Specifications (1-5)

- Why are specifications important:
 - This is not guidance; this is the rule book.
 - Explicitly defines your general duties.
 - Fulfillment of these requirements, regardless of current project status, will ALWAYS be a contractual obligation.
 - Example:
 - Conflicts in documents can be damaging or beneficial.



UNIT 4 CONTRACT DOCUMENTS



14

Contract Documents: Other Key Documents

- Other key documents:
 - Contract
 - Subcontract
 - General conditions
 - Supplemental conditions
 - Addenda and change orders
 - Purchase orders
 - Request for information (RFI)



15

Contract Documents: Other Key Documents

- Other key documents:
 - Contract
 - Delivery dependent *important* (DELIVERY METHOD)
 - Establishes the contractual rights and duties and identifies other documents that are intended to form a part of the contract terms.



16

Contract Documents: Other Key Documents

- Other key documents:
 - Subcontract
 - Creates a legal relationship and is intended to assign some of the contractor duties established by the construction contract to a 3rd party hired by the contractor (RISK – again this isn't RM but...)
 - Doesn't alleviate the requirements...



17

Contract Documents: Other Key Documents

- Other key documents:
 - General conditions
 - Provides additional terms and conditions required to be met and establishes procedures to be followed on a project.
 - Holidays? No work times? Lighting requirements? Re-finishing requirements? Material supplier requirements.



18

Contract Documents: Other Key Documents

- Other key documents:
 - Supplemental conditions
 - Information, terms and conditions that are special or unique to a particular construction project.
 - Contamination, Work/Insitu protection, environmental exposures, etc.



19

Contract Documents: Other Key Documents

- Other key documents:
 - Addenda and change orders
 - Additions or modifications to the project drawings and specifications, and to the parties' construction project.
 - Why a last second addition?
 - DBB
 - » 70%, 85%, 90%, 95%, 100%.
 - DB
 - » Transparency to other bidders.



20

Contract Documents: Other Key Documents

- Other key documents:
 - Purchase orders
 - Authorize purchases and procurement of materials and equipment.
 - Typically between contractor and vendor.



21

Contract Documents: Other Key Documents

- Other key documents:
 - Request for information (RFI)
 - Issued when one of the contracting parties needs to wants specific information or clarifying concerning the project.
 - When to write an RFI
 - How to write an RFI



22

Contract Documents: Other Key Documents

- Other key documents:
 - Odd Items
 - Special Instructions
 - Hiring Preference Requirements
 - Stop Work Orders
 - Soil or Environmental Reports
 - Purchasing lists
 - Notice or cert. of Substantial completion



23

Contract Documents: Other Key Documents

- Other key documents:
 - Contractor Required
 - Shop Dwgs.
 - Submittals
 - Codes and Permits
 - Land Owner Agreements



24

Typical Order of Precedence (why) (1-7)

Top

- Job Special Provisions
- General Special Provisions
- Detailed Plans and Notes
- General Plans and Notes
- Standard Specs
- Drawing Notes
- Drawings

Bottom



25

IMPORTANCE OF LANGUAGE

Language Logic

- Can vs Must
- Shall vs Should
- May vs Will



26

Elements of Contract Documents (1-8)

- Common elements of a **contract** include:
 - Mutual consent
 - Offer and acceptance
 - Exchanging something of value
 - Operating in good faith
 - Delivering and performing
 - No violations of public policy



27

How a contract initiates

- Offer / Acceptance / Consideration (1.11-14)
 - **Offer** – formal proposal
 - **Acceptance** – the formal choice of the offer
 - **Consideration** – exchange of goods



28

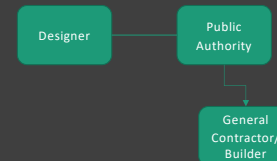
Contractual Roles (1-17)

- Owner, Designer, Contractor
 - Owner – decides the scope, requirements, budget, fund availability, monitor project progress/ quality, payments to designer / contractor.
 - Designer – creates the drawings and specs, advise the owner, generate graphic solutions to issues, material selection process.
 - Contractor – perform the work, responsible for cost, time, quality of construction.
 - OTHER METHODS LEAD TO OTHER ROLES!!!



29

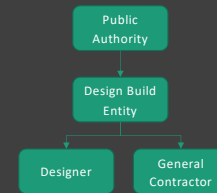
DBB: Basic Structure (1-18)



Project Delivery	Design Risk	Construction Risk	Financial Risk	O & M Risk	Project Award
Design Bid Build (DBB)	Owner	Contractor	Owner	Owner	Low Bid
Design Build (DB)	-	-	-	-	-
P3 (DBFOM)	-	-	-	-	-

30

DB: Basic Structure (1-20)



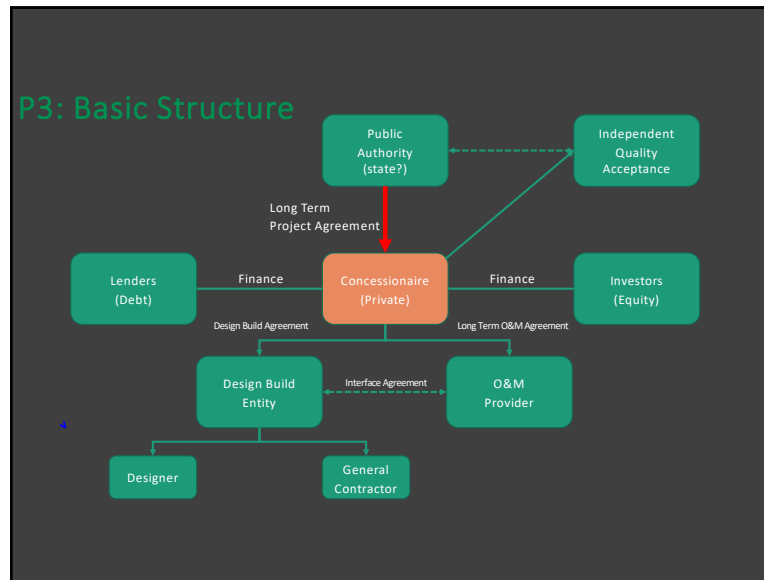
Project Delivery	Design Risk	Construction Risk	Financial Risk	O & M Risk	Project Award
Design Bid Build (DBB)	Owner	Contractor	Owner	Owner	Low Bid
Design Build (DB)	DB Entity	DB Entity	DB Entity	Owner	Best Value Construction
-	-	-	-	-	-

31

P3: The Basics : Risk Matrix

Project Delivery	Design Risk	Construction Risk	Financial Risk	O & M Risk	Project Award
Design Bid Build (DBB)	Owner	Contractor	Owner	Owner	Low Bid
Design Build (DB)	Design Build Entity	Design Build Entity	Design Build Entity	Owner	Best Value Construction
P3 (DBFOM)	Concessionaire: DB Entity/ Designer	Concessionaire DB Entity/ Contractor	Concessionaire	Concessionaire: O&M Provider	Best Value Construction + O&M

32



33

Using on the Job What You Learned Today

- Summary: first key concept
 - Recognize various contract documents, how they relate to each other, and their importance in providing information pertinent to successful job completion.

34

Using on the Job What You Learned Today

- Summary: second key concept
 - Define a contract, understand terms common to construction contracts, and recognize the importance of following contractual obligations.



35

Using on the Job What You Learned Today

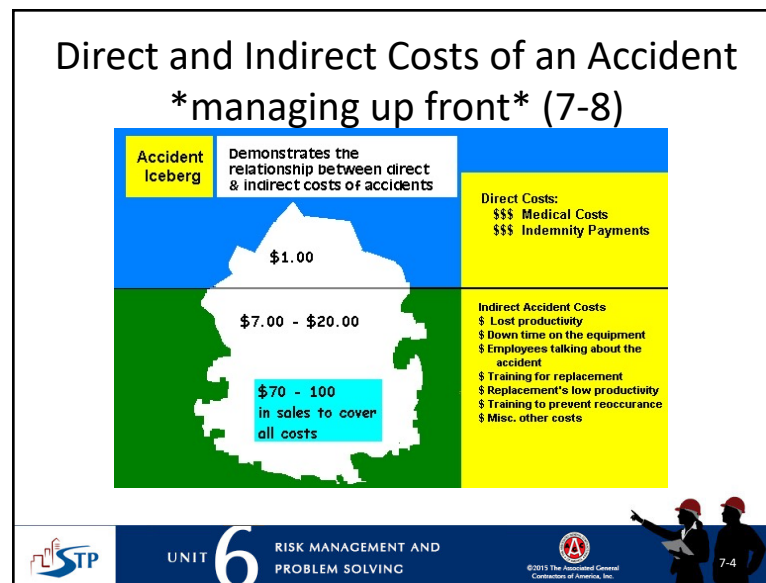
- Summary: third key concept
 - Understand the various roles contractual parties have, how they interact, and the importance of cultivating positive relationships between contractual parties.



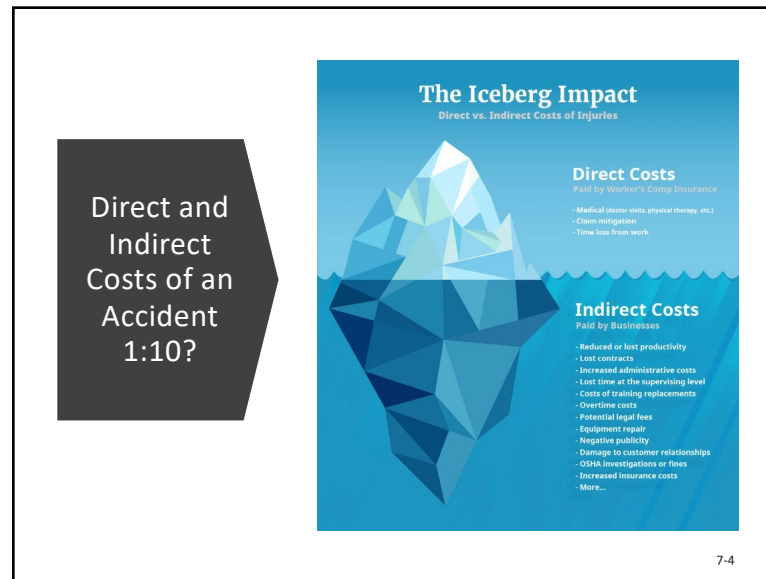
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37





38



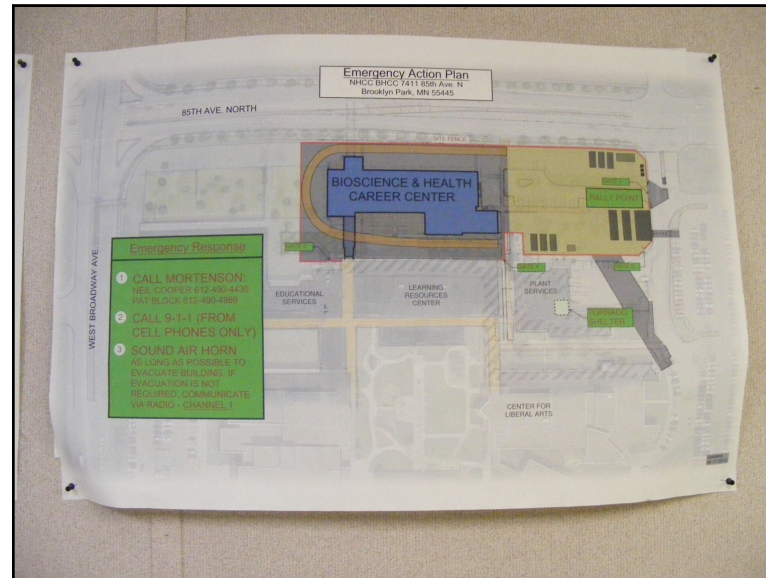
39

Using on the Job What You Have Learned Today

- Jobsite Assignment
 - Review your contract documents and identify the types of insurance policies required.
 - Check with the general contractor and see if certificates of insurance are on file for all the contractors on site.
 - *Review the crisis management plan and identify*
 - *the primary crisis coordinator and the primary spokesperson.*
 - (Crisis mgt)
 - *your crew's evacuation process and gathering point.*
 - (emergency response)


UNIT 6 RISK MANAGEMENT AND PROBLEM SOLVING
 
 7-7

40



41

<p>Nearest Emergency Phone Location: The Braun Intertec Site Safety Representative will have a cellular phone on site at all times during work activities.</p> <p>Nearest Emergency Phone Location: Each crew will have a cell phone on site at all times during work activities.</p>					
<p>Emergency Phone Numbers</p> <table border="1"> <tr> <td>Police/Fire/Ambulance:</td> <td>911</td> </tr> <tr> <td>Poison Control:</td> <td>800-222-1222</td> </tr> </table>		Police/Fire/Ambulance:	911	Poison Control:	800-222-1222
Police/Fire/Ambulance:	911				
Poison Control:	800-222-1222				
<p>Hospital Emergency Room Information</p> <p><u>East/West Portion</u> Park Nicollet Methodist Hospital 6500 Excelsior Blvd, St Louis Park, MN 55426 (952) 933-6600</p> <p>Or</p> <p>HCMC 701 Park Avenue, Minneapolis, MN 55415 (612) 873-3000</p> <p><u>West Portion</u></p>					
<p>Braun Intertec Site Specific Health and Safety Plan METRO Green Line Extension (Southwest LRT) February 25, 2019 Page 10</p> <p>Park Nicollet Methodist Hospital 6500 Excelsior Blvd, St Louis Park, MN 55426 (952) 933-6600</p> <p>Or</p> <p>Fairview Southdale 6401 France Avenue, Edina, MN 55435 (800)824-1953</p> <p>Braun Intertec Accident Reporting and Investigation Procedure: Braun Intertec's Accident Investigation procedure is primarily a fact-finding procedure; the facts revealed are used to prevent recurrences of similar accidents in the future. The focus of accident investigation at Braun Intertec is to prevent future accidents and injuries in order to increase the safety and health of our employees. A standard practice instruction establishes uniform guidelines to evaluate accidents, controls and procedures are implemented and reduce or prevent future occurrences, and the proper hazard information is communicated to affected workers. Attached in Appendix E is the complete Accident Reporting and Investigation Procedure.</p>					

42

Why a Crisis Plan?

The purpose :

- ★ No crisis should ever be a surprise.
- ★ Every project manager, superintendent, and foremen should do this exercise on their drive to the job every day.
- ★ Five minutes of proactive thinking can put you in control.
- ★ Can prevent an accident through “awareness” to what could happen.



UNIT **6** RISK MANAGEMENT AND PROBLEM SOLVING



43

The Plan

The purpose of a crisis management plan is to provide a systematic approach to managing a crisis in an organized fashion.

In the heat of a crisis, emotions may reign supreme and logical thinking may not prevail...So a written plan is needed to help you through it and preserve integrity.



UNIT **6** RISK MANAGEMENT AND PROBLEM SOLVING



44

Crisis Management (overview)

- Control the situation. (workforce)
- Secure the site
- Deal with the media
- Accident Investigation



UNIT **6** RISK MANAGEMENT AND PROBLEM SOLVING



45

Aspects of a Crisis Plan

- Identifying team members
- Establishing responsibilities
- Establishing protocol site issues
- Handling injured employees and families
- Dealing with media
- OSHA and other regulatory agencies
- Accident investigation process



UNIT **6** RISK MANAGEMENT AND PROBLEM SOLVING



46

Your Responsibilities

The incident has occurred...

A crew of four is working on power pole using a bucket truck on a heavily traveled urban street. The bucket truck in an extend position tips over with the arm striking a passing vehicle. As it tips it pulls down a high voltage power line. One employee in the bucket is killed. The other is badly injured. Two passengers in the car are injured and are trapped. The power line lands across the car and is still live. The dropped power line results in an outage to 500 customers



47

47

Your Responsibilities

The incident has occurred...

...you are the on-site supervisor. Only you are able to provide any direction or assistance. You must handle immediate needs in the first hour. How should you deal with it and how may the emotional impact of your other two workers affect your ability to manage the scene. List the needs in chronological order and how you will handle them or delegate responsibilities.



48

48

Your Responsibilities

The incident has occurred...

You are the manager in-charge. You must enact the crisis plan and oversee company response, calls to the office, other company needs, etc. List the needs in chronological order and how you will handle them or delegate responsibilities



49

49

Your Responsibilities

The incident has occurred...

You have been assigned to notify and deal with families of injured and killed. How will you do that and what you will say to those families? Write out initial contact statements. How will you handle the next week.



50

50

Your Responsibilities

The incident has occurred...

You are the company spokesperson and are able to reach the site one hour after the incident has occurred. When you arrive there are both print and television media looking for information. Develop a first statement for the media. Include answers to: How did this happen? How much is the cost? When will power be restored? Be prepared to respond to questions from the other group



51

51

Your Responsibilities

The incident has occurred...

You are required to initiate an accident investigation, handle insurance issues, and deal with local enforcement and regulatory agencies. OSHA arrives on site within the first hour. Summarize how you will investigate the incident. List items needing attention in the first hour and the first week



52

52

Your Responsibilities

The incident has occurred...

Would a plan to follow help or hinder?



53

53

Identify and Attend to the Injured

1. Are there injuries?
2. How bad?
3. Who are they?
4. Administer first-aid to the injured.



54

54

Get Emergency Help (911)

- Identify yourself
- Identify the location
- Describe the problem
- Describe special issues
 - Number of injuries
 - Is there a hazard? – What?
 - Are you are evacuating?
 - Is any one trapped?



55

55

Check for Full Evacuation

- Meet up zones established
- Head counts done
 - Each foreman get his crew count
 - Have each sub contract get their crew count and advise you



56

56

Secure the Site

- Post someone at entrances
 - Be ready to direct emergency personnel
- No one in except emergency, government and company management personnel.



57

57

Traffic at an Accident Scenes

- If an accident occurs on a roadway right-of-way.
- **STOP** all traffic
- **DO NOT** direct traffic around an accident scene.
- There could be additional liability
- Let the police deal with it.



58

58

Control the Work Force

- Have them keep working?
- Assist Emergency Personnel
- Send them home?
- Keep them gathered for initial interviews?
- Post traumatic stress?



59

59

Keep The Internal Grapevine Down

- Restrict use of cell phones.
- No calls to outsiders or other employees (except authorized crisis team members)
- NO communication on radios
- **NO PICTURES EXCEPT AUTHORIZED ACCIDENT INVESTIGATION!!**



60

60

OSHA

- Required to report:
 - A fatality or 1 injury that results in hospitalization.
 - A loss of an eye
 - An amputation
- Fatality report to OSHA within 8 hours
- Injury Report within 24 hours
- OSHA can inspect on any injury or incident they become aware of.



61

61

What About The Media?



62

62

Avoid the Media if Possible

- The best thing you can do is stay away from the media.
- But they will seek you out.
- And some factual information is better than media conjecture.
- So be prepared.



63

63

Media Truth and Public Perception

- What is truth!
- What is perception!
- Your reality is your perception!
- Does the media or public always get it right!



64

64

Media Stories

- Example of the power of the media
- Can make you look bad, even if it's justified or not
- Masters at creating emotion
- Media will do the story with or without you



65

65

Deal With The Media

1. Do not let media on the site
2. Buy time until the spokesperson arrives
3. If possible, provide a secure place for them to wait
4. Be prepared to deal with negative reactions from the media

5. Keep your cool



66

66

Sensitive Information That the Media Will Seek

1. Cause of the incident. Let the officials release this...NEVER state a cause until after investigations are complete and you are 100% certain
2. Specific damage estimates. Dependent upon the type of crisis, this information is not usually readily available and you would be forced to speculate.
3. Who or what is at fault. This can only be released once the investigation has been completed.



67

67

Don't Let Them Wander The Site

"I am sorry, but at this time we are only allowing emergency personnel and authorized inspectors into the area. This is for your and everyone's safety. Thank you for your cooperation"



68

68

Buy-Time Statement

- Allows time to gather facts and verify information
- It does not look like you're stonewalling
- It gives time to get the plan rolling!!
- Acknowledges the situation, but doesn't really divulge any information
- It gives the media something to work with and report



69

69

State Only The Facts



- *"There has been an accident. This happened."*
- *"People have been injured and have been taken to area hospitals"*
- *"Our main concern right now is for the victims and their families"*



70

70

Be Careful to Watch Comments

- Avoid “No Comment”
- Never provide information “Off the Record”
- Assume everything you say could be a headline



71

71

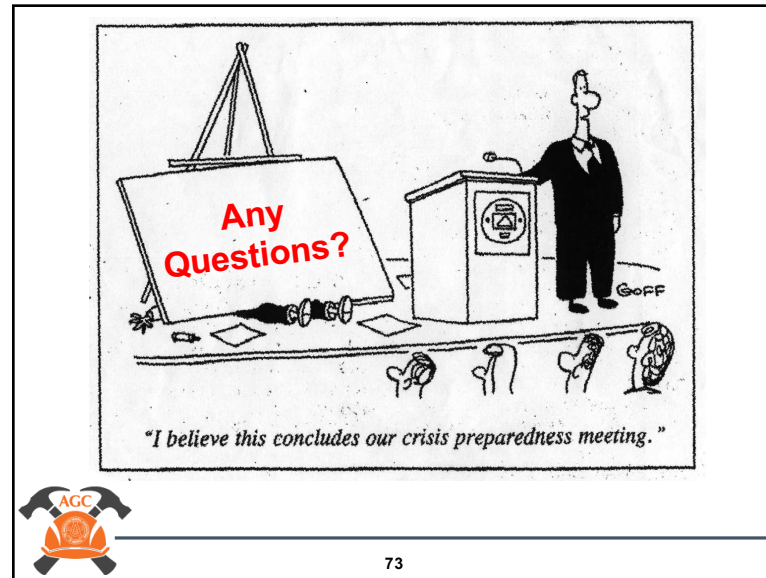
Tell The Truth

- Reporters will find it out anyway.
- Doesn't mean give every detail
- If you don't know the answer...say so!
 - It's not a crime to say "I don't know" or "I'm not absolutely certain about that"...as long as you follow it up with "but I'll find out and get right back with you."
- **IF YOU LIE** – Be prepared for the consequences



72

72



73

Unit 4 & 6

Welcome to Unit 4: Contract Documents

- Session 1: Introduction to Contract Documents
- Session 2: Contractual Relationships
- Session 3: Contract Forms and Documents
- Session 4: Managing General Conditions
- Session 5: Construction Field Documentation
- Session 6: Scope Changes
- Session 7: Time Impacts
- Session 8: Avoiding and Resolving Disputes

Welcome to Unit 6: Risk Management

- Session 1: What is Risk
- Session 2: Human Performance Risk
- Session 3: Reactive Problem Solving
- Session 4: Proactive Problem Solving
- Session 5: Labor and Subcontractor Risk
- Session 6: Safety, Risk, Emergencies and Crisis Management
- Session 7: Risk Management
- Session 8: Risk Specific Solutions



74