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STANDING NEUTRAL 2

WORK BOOK

Date & Location:

- Tuesday July 8, 1997
  Holiday Inn West
  Lansing, Michigan

- Wednesday July 23, 1997
  Detroit Metro Area

Time:

- 08:00 A.M. to 05:00 P.M.

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Standing Neutral Seminar 2 Work Book

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Alternative Dispute Resolution - Seminar #2 for Standing Neutrals

Tuesday July 8, 1997

MEETING AGENDA

07:30 to 08:00 A.M. - Registration for attendees

08:00 to 08:15 A.M. - Greetings and introduction of attendees

08:15 to 09:00 A.M. - Introduction to the characteristics and structure of the design and construction profession.

09:00 to 10:00 A.M. - Introduction to conflict management, alternative dispute resolution, definitions, and principles of dispute resolution during design and during construction

10:00 to 10:20 A.M. - Coffee break

10:20 to 11:00 A. M. - Review of ADR methods of prevention, internal negotiation, and informal and external exterior neutral methods of issue resolution

11:00 to 11:20 A. M. - Introduction to workshop case study procedures

11:20 to 11:40 A. M. - Attendees review case studies of design disputes arising during the design phase

11:40 to 12:00 noon - Review steps to be taken in resolving disputes arising during the design phase

12:00 noon to 01:00 P.M. - Lunch

01:00 to 01:30 P.M. - Attendees review case studies of design disputes arising during the construction phase

01:30 to 02:00 P.M. - Review steps to be taken in resolving design disputes arising during the construction phase

02:00 to 02:45 P.M. - Attendees work on 1st round of case studies and presentations

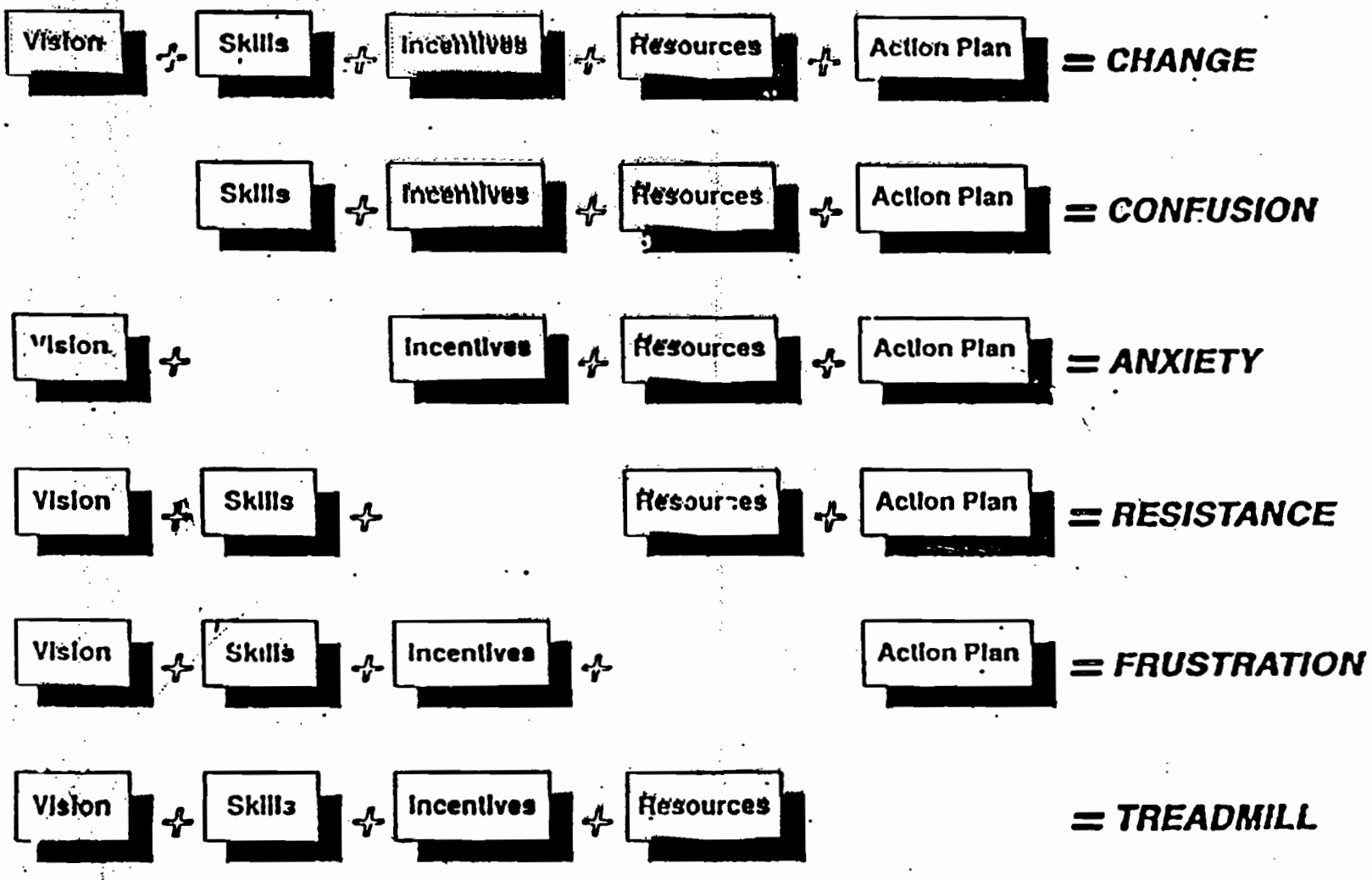
02:45 to 03:05 P.M. - Refreshment break

03:05 to 03:45 P.M. - Attendees work on 2nd round of case studies and presentations

03:45 to 04:30 P.M. - Hearings of case studies by panels and decision on resolution

04:30 to 05:00 P.M. - Completion of hearings, attendee questions and answers, discussion review of standing neutral procedures, and adjournment

Managing Complex Change



— Adapted from Knoster, T. (1991) Presentation at TASH Conference, Washington, D.C. (Adapted by Knoster from Enterprise Group, Ltd.)

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GROUND RULES

1. Open your mind to new ideas & to new applications of old ideas.

2. Listen well & ask helpful questions.

3. Be selective in which techniques you use.

4. Learn more about the subjects of interest to you.

5. Relax and enjoy the company of your professional friends.

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THINKING PATTERNS

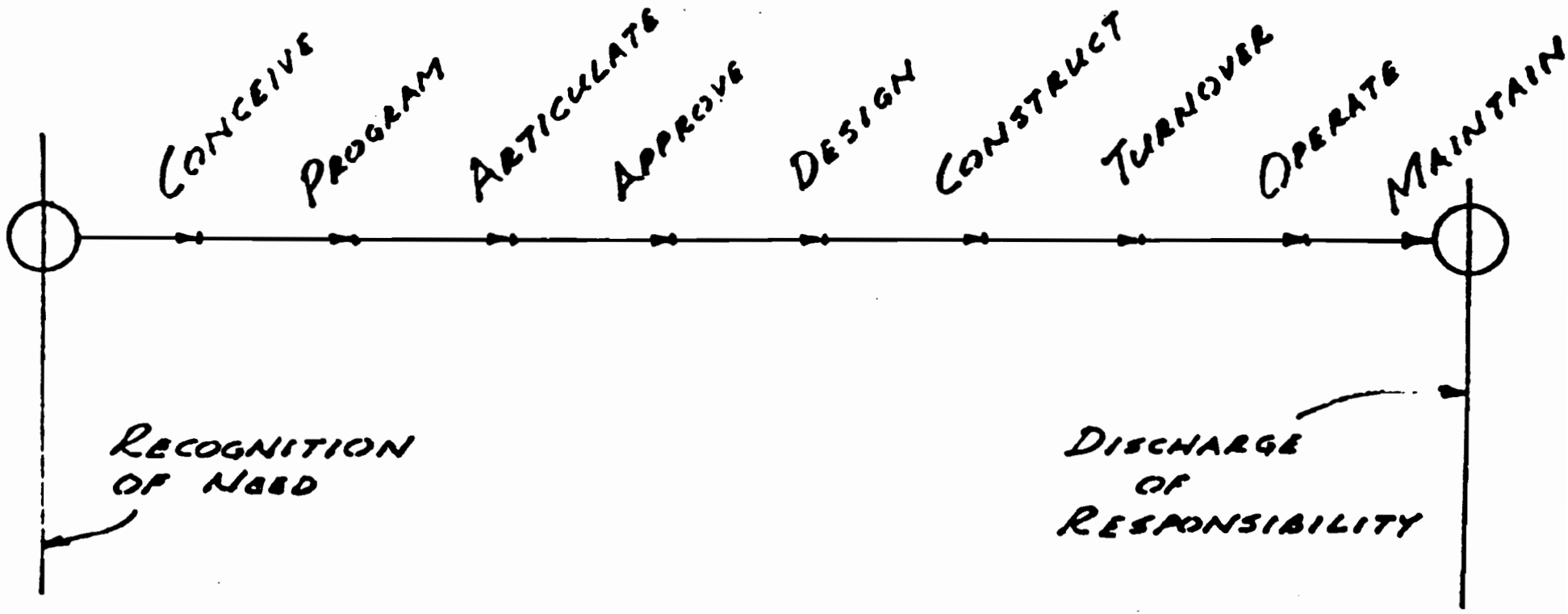
Why plan?.....to evaluate

Why translate?.....to communicate

Why control?.....to achieve

Why correct?.....to maintain

Why learn?.....to improve



LINE OF ACTION

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D.S 2/4/72

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PARTICIPANTS IN DESIGNING & BUILDING ENVIRONMENTS

There are six basic participants in the process of designing and building environments. These are the conceiver, the translator, the constructor, the user, the operator and the regulator.

Conceivers - Those who conceive the idea and provide the wherewithal to bring the environmental program to a successful conclusion. The conceiver may be the owner but it also might be a governmental agency, a financial source, an architect, an engineer, a contractor, a vendor or a potential tenant looking for space. We identify the conceiver since he usually is the key person driving the project on to completion.

Translators - Those who translate the environmental program into construction language. Traditionally we think of the architect/engineer as the translator. However careful consideration of this matter shows there are many others who translate the conceiver's fundamental ideas into understandable, workable construction language. Subcontractors, suppliers, vendors, manufacturers, contractors and the conceiver may all play a role in translating.

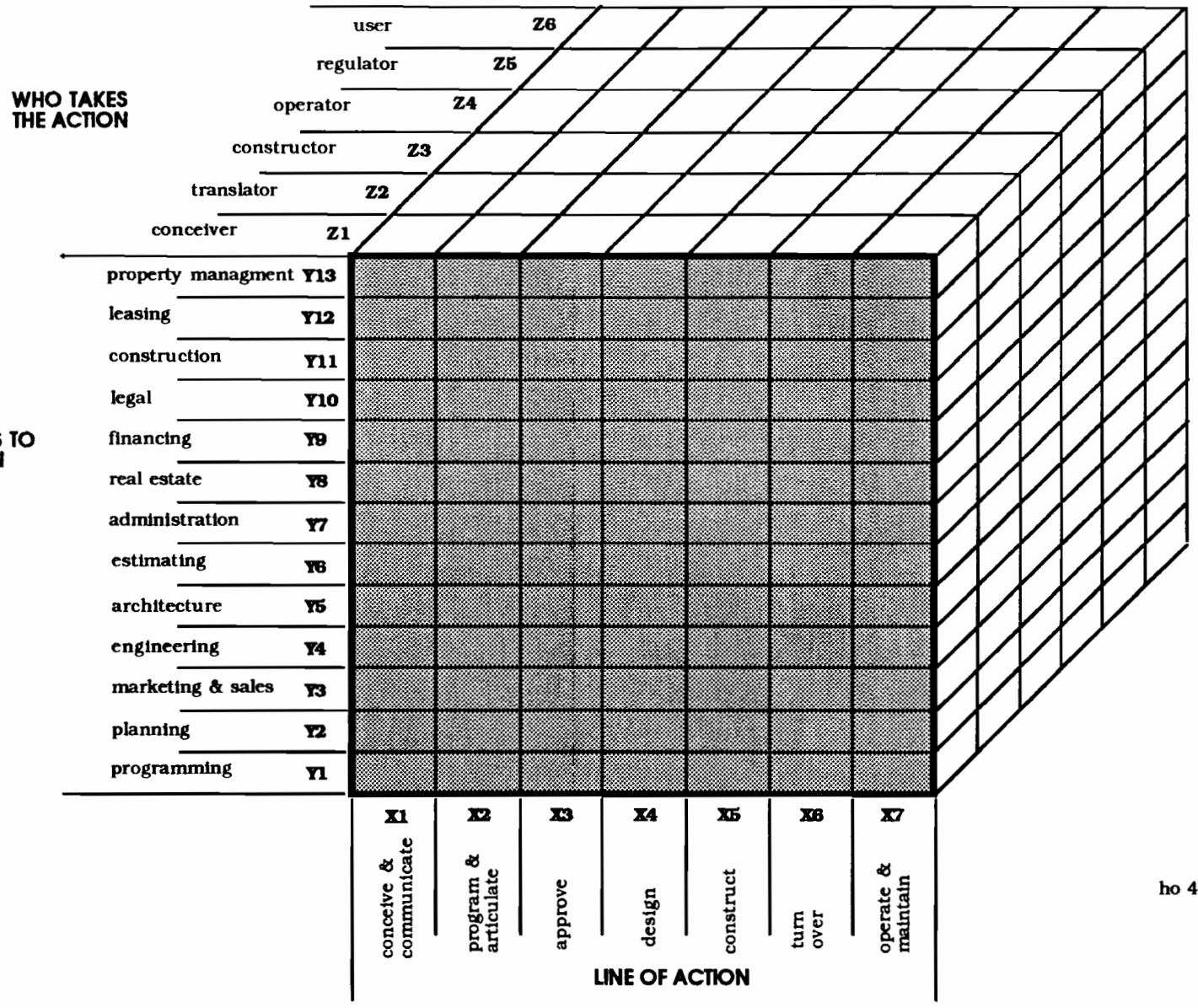
Constructors - Those who interpret the construction language and convert it to a actual physical environment. Occupying this role are general contractors, specialty contractors, vendors, suppliers, manufacturers, artists and others who actually put the materials into place in the field.

Users - Those who occupy and use the completed facility to conduct their work, their recreation, their domestic living, or other activities for which the facility was specifically designed and built.

Operators - Those who operate and maintain the completed physical environment on a continuing basis. Usually the party responsible for this function is an owner or tenant working through a plant or facilities manager.

Regulators - Those who fill a review & inspection position to help insure protection of the health, safety & welfare of the people. This is usually done by enforcing regulations written and adopted by qualified public or private bodies. Examples of regulators include those who work for building departments, departments of natural resources, public health agencies, fire prevention organizations, technical societies and other such groups.

FIGURE 472
MACRO MATRIX BOUNDARIES OF DESIGN AND CONSTRUCTION



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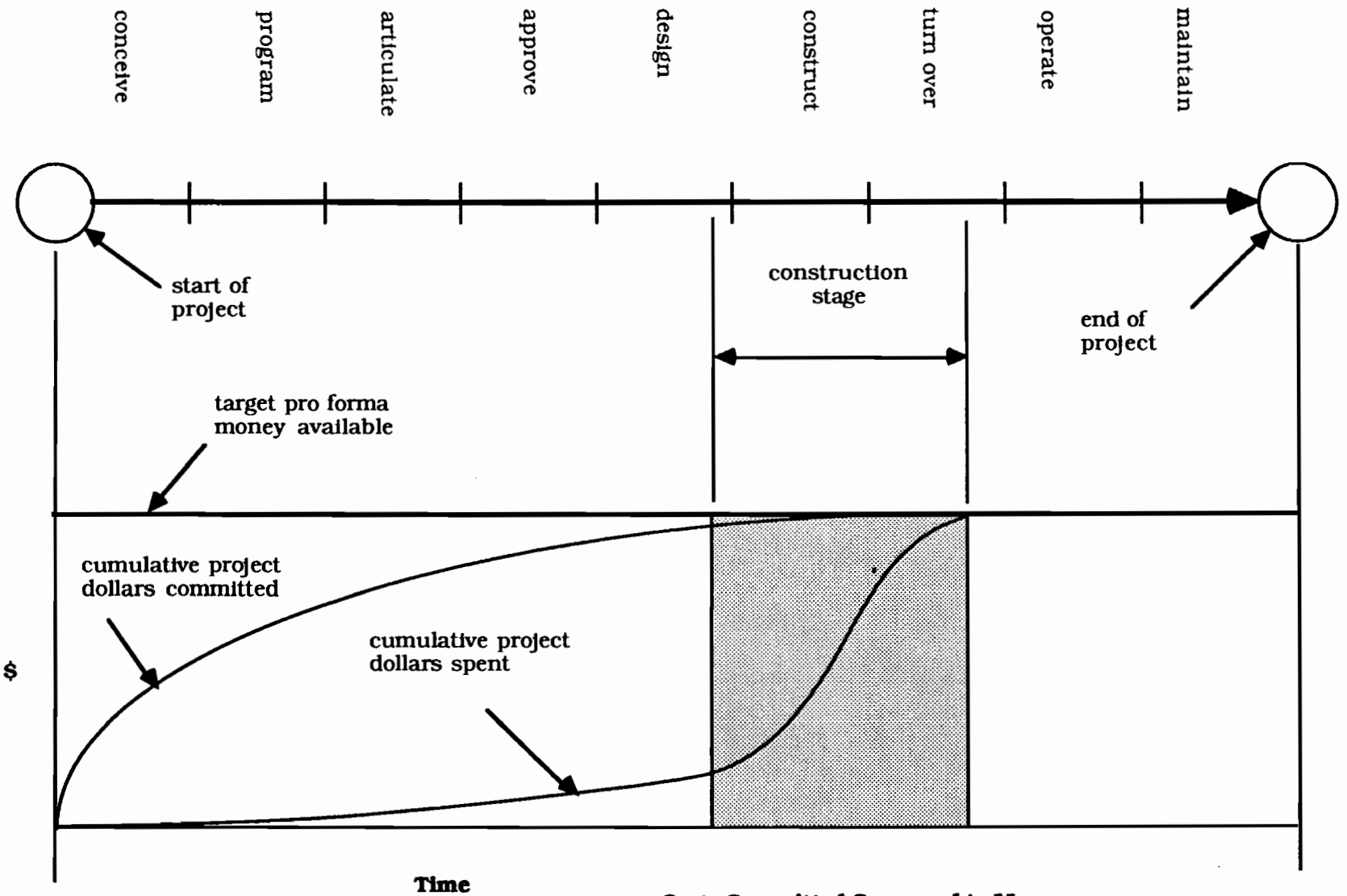

Costs Committed Compared to Money Spent on Construction Projects

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Costs Committed vs. Money Spent

Committed costs are promised funds for purposes, that if such purposes are aborted a penalty must be paid, and a loss is often incurred.

Penalties and losses may include such items as:

- OPTION COSTS
- RIGHT OF FIRST REFUSAL COSTS
- LEGAL FEES
- EARLY ENGINEERING FEES
- EARLY PLANNING FEES
- DISPLEASURE OF POLITICAL ENTITIES
- STAFF TIME EXPENDITURES
- LOSS OF CREDIBILITY
- LOSS OF OPPORTUNITY

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OBLIGATIONS

Hierarchy of professional obligations as formulated by Dean Freund

- *Prime - To the protection of public health, welfare & safety*
- *Secondary - To your employer or client*
- *Tertiary - To your peers*

OBLIGATIONS & PROFESSIONAL NEEDS

- **The design and construction professional is obliged, above all, to protect the health, welfare and safety of the public.**

- **The legal professional is obliged, above all, to protect the interest of his or her client. These interests are supposed to be defined by the body of law. Thus the body of law, not the legal professional, is depended upon to protect the health, welfare & safety of the public - relative to the law.**

OBLIGATIONS & BUSINESS NEEDS

- **To profitably produce services & facilities.**
- **To provide solutions.**
- **To measure the quality of the process you provide.**
- **To help manage destructive conflict.**
- **To encourage early action on potentially damaging events.**
- **To reduce professional liability costs.**

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QUESTIONS TO CONSIDER

Guides to Ethical Decision Making

1. Is my decision legal?

- Does it violate civil law or company policy?

2. Is my decision balanced?

- Is it fair to all concerned in the short and long term situation. Does it avoid sum zero situations?

3. How will my decision make me feel about myself?

- Will it make me proud?
- Will I feel good if it is published in the newspaper?
- Will I feel good if my family finds out about it?

Adapted from "The Power of Ethical Management"
by Kenneth Blanchard & Norman Vincent Peale

38 Elements of importance to success in design and construction - ho 341

- **Summary**

In the design and construction industry there exist many factors which influence the degree of success achieved on a project. They deal with project goals, profit types, project sequencing, the nature of the participants and the kinds of problems most likely to be encountered.

If the parties to a planning, design and construction program recognize the nature and importance of these factors, a major step will have been made toward their proper and effective combination and management.

Below are listed 38 basic influences on project delivery systems. Project management concerns how to combine these into a successful job of which all participants are proud.

- **Six major goals to meet for design & construction project success**

The client, owner & user must be assured upon completion of his job that:

1. The facility program and the facility design have met their needs, desires and wishes.

2. The planning, design and construction work on the project has been accomplished within the time and cost structure required and desired.

3. All relationships on the project have been maintained at a high technical and professional level, and have proven rewarding for those involved and affected.

4. The people involved at all levels of work on the job have realized a financial, professional and technical profit for themselves and their associates by being on the project.

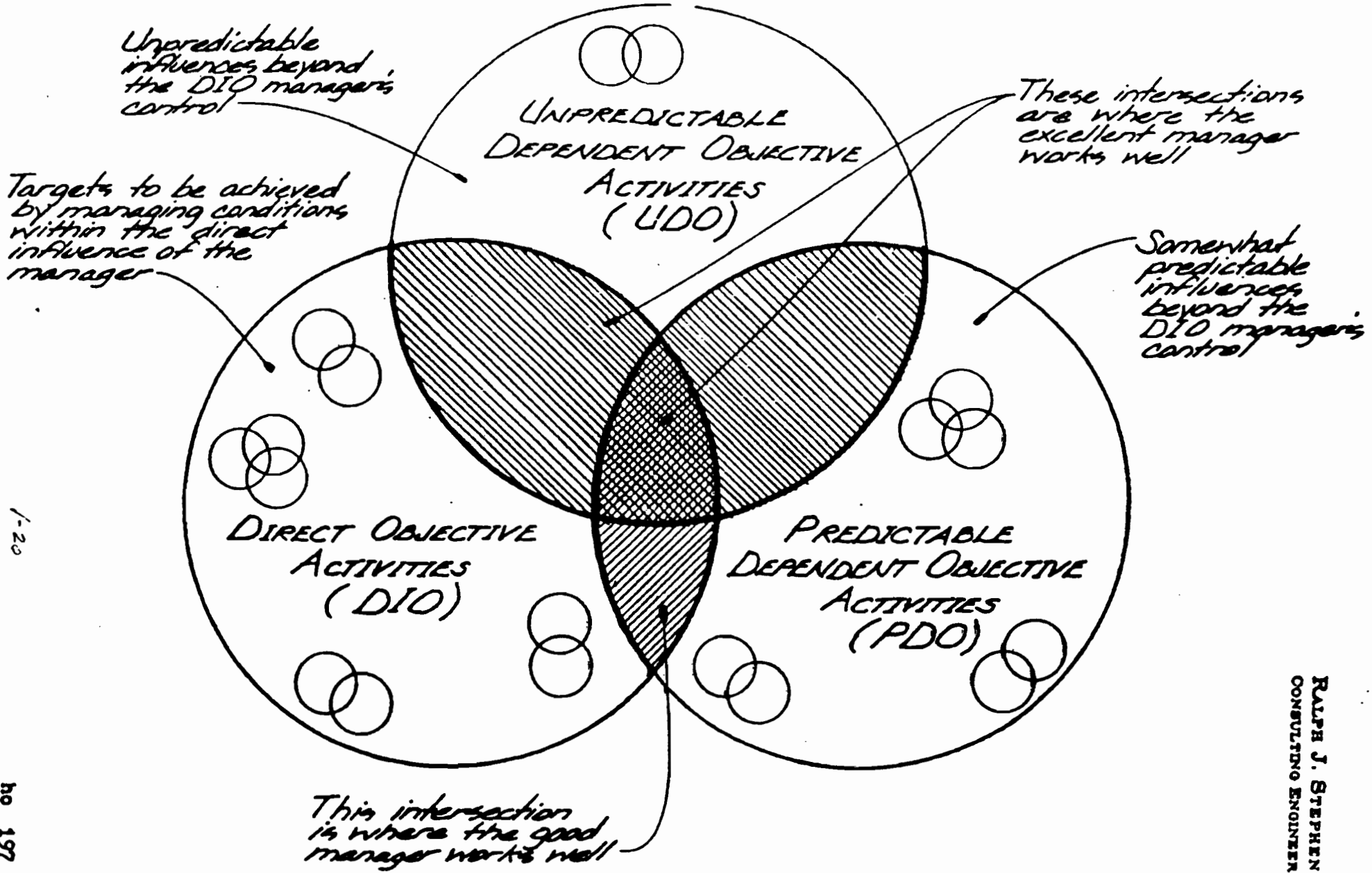
5. The project has been closed out with little or no residual potential for major problems of maintenance or operation.

6. The entire process has been free of unresolved contested claims for additional money, additional time, damage payments, and of the potential for future financial demands after the job has been closed out.

- **Seven types of profit**
  1. **Financial** - an improvement in a money position
  2. **Social** - a gratifying experience contributing to society's well being
  3. **Self actualization** - a gain in personal non financial satisfaction by contributive work
  4. **Value system** - reward gained by application of values in which one believes
  5. **Technical** - acquisition of technical skill or technical data of value
  6. **Enjoyment** - personal enjoyment of a situation gained from involvement in it
  7. **Educational** - learning made possible only by efforts exerted in any given situation

- Nine major elements in the design & construction sequence & how they are done
  1. **Conceive the basic project**
     Visualize and state the fundamental nature of the proposed project, what purpose it is to serve, and its base characteristics.
  2. **Prepare the program**
     Set down the physical characteristics of the total project in written and graphic form so as to be able to translate these characteristics into approval documents from which the full design can proceed.
  3. **Articulate the program for approval**
     Merge the concept, and the written and graphic program into written and graphic construction language which can be reviewed and released by the ultimate decision makers for full design.
  4. **Approve the basic project**
     Approve the concept, the program, and the merging of the two. This approval by those in authority initiates the full design and construction process
  5. **Design the project**
     Prepare full contract documents for construction use.
  6. **Construct the project**
     Build the project and make it ready for turnover to the owner or user.
  7. **Turn over the project**
     Release the constructed project to the owner or user with full documentation needed to operated and maintain the completed environment.
  8. **Operate the project**
     Take over, run in, and make the new environment fully operational.
  9. **Maintain the project**
     Keep the new environment in proper operating condition by a well conceived and effectively managed maintenance effort.
- Six major participants in the design & construction process
  1. **Conceiver** - The ultimate decision making force behind the entire program
  2. **Translators** - The parties that translate the project concept into construction documents
  3. **Constructors** - Those who build the facility
  4. **Operators** - Those who operate the completed facility
  5. **Regulators** - Those who help assure project adherence to the cause of public good
  6. **Users** - Those who occupy and use the facility for the purpose for which it is intended
- Ten major types of design & construction problems
  1. **Constructive acceleration**
     An action by a party to the contract that forces more work to be done with no time extension, or the same amount of work and a shorter period of time in which to do it.
  2. **Constructive change**
     A construction action or inaction by a party to the contract that has the same effect as a written order.
  3. **Defective or deficient contract documents**
     Contract documents which do not adequately portray the true contract scope.
  4. **Delay**
     A situation, beyond the control and not the fault of a contract party, that causes a delay to the project

5. **Differing site condition**
   A situation in which the actual conditions at the site of a project differs from those represented on the contract documents, or from reasonable expectations of a site in that area.
6. **Directed change**
   A legitimate change within the contract scope for which the owner is obligated to pay.
7. **Impossibility of performance**
   A situation in which it is impossible to carry out the work within the contract requirements.
8. **Maladministration**
   The interference of one contract party with another contract party's rights, that prevents the latter party from enjoying the benefits of least cost performance within the contract provisions.
9. **Superior knowledge**
   The withholding of knowledge by one party to a contract from another party to the contract during the precontract period, and that, subsequent to contract execution, adversely affects the second party's construction operations in matters of importance.
10. **Termination**
    Dismissal of a party to the project contract for convenience or default.



THE DIO/PDO/UDO INTERSECTION

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Claim Prone Job Characteristics

During the profiling, proposing and negotiating period, it is often possible to gain a good insight into the expected nature of a job if one is fortunate (or unfortunate) enough to be the successful proposer. The problem job is becoming increasingly serious in our business and professional lives and it should be identified early. The problem job generally results in increased costs during the construction period and quite often requires arbitration or litigation to achieve resolution of costs and damages.

Thus, it is good policy for the perceptive owner, architect/engineer and contractor to become familiar with those characteristics that early identify a job as having potential for being a trouble project.

This list of characteristics is by no means complete, nor is it meant to imply that a job having these features will necessarily be claim prone. It is, on the other hand, an honest effort to state certain unique job features that have been identified in projects that have ended up in litigation or arbitration. The list is at random with no attempt to classify or characterize the features.

Claim prone job characteristics may include:

a. A wide spread in proposal prices.

b. Issuance of a large number of pre-bid addenda and instructions.

c. For subcontractors, a poor general contractor reputation if the project is being built by one prime.

d. For projects with separate primes, poor other prime contractor reputations.

e. More than four to six prime contractors involved(applicable on normal building work only).

f. Poor reputation of architect/engineer preparing contract documents.

g. Excessive how-to-do-it emphasis in contract drawings and specifications.

Claim Prone Job Characteristics
(continued)

h. Non-liable party involvement in responsible positions, i.e. non-liable construction manager.

i. Large numbers of allowance items.

j. Zero (or excessively small) tolerance specifications.

k. Poorly defined authority and responsibility patterns in the offices of the architect/engineer, the owner, the general contractor or other prime contractors.

l. Inexperienced specialty contractors.

m. Excessive number of pre-selected suppliers for key material and equipment.

n. Large dollar amount or numbers of owner purchased equipment.

o. Location in strike prone areas.

p. Location in jurisdictionally sensitive areas.

q. Heavy use specified for untried products and equipment.

r. Non-liable party involvement in establishing delivery commitments, i.e. construction manager, architect/engineer, owner representative.

s. Involvement of politically accountable owners, architect/engineers or other contractors.

t. Multi responsibility payment structures.

u. Excessively long time periods to award contracts after a proposal.

(Note: This often occurs in public work where many non-project approvals and agencies are involved.)

v. Poor owner reputation.

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COMMON CAUSES OF CONTESTED CLAIMS

Contested construction claims have increased over the past few years and now must be recognized as a serious road block to proper and profitable construction procedures.

The reasons for the increase in contested claims are many and must be understood in the sense that our society has become somewhat legalistic. That is to say, the recourse to legal resolution, as opposed to interpersonal, technical, or administrative resolution of problems has become a common fortunately shows some signs of diminishing as costs and time involvement in legal matters have increased astronomically.

However, there are claims, there always have been claims, and there will probably always will be contested claims. Those in construction should however, thoroughly understand the structure of the contested claim.

Specifically, contested claims lead to resolution by an administrative settlement, litigation, arbitration, or mediation. There are some common causes of conflict and it is these that stimulate the parties to go to a formal settlement by outsiders. It is important for those in construction to understand how to avoid the mistakes that cause wasteful contested claims.

Several years ago a firm specializing in construction claims and their settlements studied some of the most common causes of disputes. Of two hundred occurrence of contested claims the following percentages were found.

1. Directed Change - 48%

A legitimate change within the contract scope for which the owner must pay.

Examples
- Owner changes the door color after the door is painted.
- Owner revises size of electrical room door opening

Advice
- Required extensions of time should be stated in writing.
- Costs for extended general conditions should be agreed upon early.
- The client or owner is obligated to pay for the change, if there is a charge.
- Payment for the work should be explicitly agreed upon before starting.

2. Constructive change - 42%

An owner's action or inaction that has the same effect as a written order.

Examples
- Shop drawing corrections, showing additional work not covered in contract documents.
- Owner's representative tells a superintendent to relocate a wall with no payment intended.

Advice
- Don't assume changes will be free. Find out if there is a cost.

- Don't enrich contract documents.
- Don't enrich shop drawings.
- Make certain the scope and costs of additional work is clearly understood.

3. Defective or deficient contract documents - 41%

Contract documents which do not adequately portray the true contract scope.

Examples
- A retaining wall shown dotted on the contract documents and expected by the architect/engineer and the owner to be built as part of the contract.
- Dimensional errors that cannot be resolved by verbal clarification.
- Contract documents that expect performance by default. For instance, specifying a miscellaneous iron ladder but not showing it on the drawings.

Advice
- Expect to pay your architect and engineer for good quality assurance in the production of contract documents.
- Select your design team on the basis of performance not cost.
- Clearly define design and construction delivery methods to be used.
- Don't expect your contractor to design the job unless it is a design/build project.
- Don't make unrecorded corrections to contract documents.

4. Delays - 41%

A delay situation beyond the control and not the fault of the contractor.

Examples
- Rock encountered that delays the job but was not shown on the contract documents.

Advice
- Be as thorough as possible in defining physical conditions of the site upon which the facility is to be constructed.
- Specify weather standards when it is necessary to clarify time extensions that might be caused by inclement weather.
- Determine delay costs quickly and eliminate them as soon as possible.
- Don't stop field work without proper authority and a very good reason.

5. Constructive acceleration - 35%

More work with no time extensions, or the same work and a shorter time period in which to do it.

Examples
- Owner refuses to grant time extension for work that will take longer to perform.
- Owner makes unauthorized use of critical path time without extension.
- Owner makes use of float time with the expectation that the contractor will not request or require a

time extension.

Advice
- Never assume the contractor will do extra work within the contract time.
- Work out an early agreement on the use of float time in the network model.
- Never assume a field order is a no cost, no time extension change.

6. Maladministration - 35%

Owner interference with the contractor's right to enjoy least cost performance.

Examples
- Owner directs contractor to provide a certain space in a facility early without such early turn over having been specified in contract documents.
- Owner directs contractor to start work on an encumbered site.
- Architect/engineer unresponsive to legitimate requests for information.

Advice
- Always allow the contractor to select construction methods and means.
- Make certain the site is fully available to the contractor before the job begins.
- Process submittals promptly.
- Clearly define the time frame and the sequence by which submittals are to be processed, and do it early in the job.

7. Differing site conditions - 31%

The actual site differs from that represented on the contract documents, or deviates from ordinary or normal expectations of such a site in that area.

Examples
- Artesian water encountered in sand seam outside of where soil borings were taken.
- Existing basements encountered but not indicated on contract documents.
- Restrictive easements or assessments on the property not made known to the contractor before contract execution.

Advice
- Expect to pay for and get a good site survey
- Make certain soil borings are adequate to show any unusual conditions.
- Locate and define all easements.
- Check the site history for unusual or restricted conditions.
- Take photos of any unusual conditions encountered.

8. Impossibility of performance - 18%

A situation where it is impossible to carry out the contract work.

Examples
- Expecting a contractor to work on an encumbered site.
- Owner refuses to move interfering utilities he is supposed to relocate by contract.
- Specifying installation of above ceiling work that won't fit in the space provided.

Advice
- Expect the design team to check their work thoroughly for interferences.
- Accept your legitimate design and administrative duties and responsibilities and take care of them.
- Resolve dimensional difference early.
- Do your homework to presolve expected problems and interferences.

9. Superior knowledge - 18%

Withholding data or information during the pre contract period, that affects construction on matters of importance.

Examples
- On a steel erection contract not telling the bidders that the steel had been refabricated from a previous job.
- Failing to tell bidders that there is a cost cap on the first two months costs
- Not telling bidders that there is a high pressure gas line through the site that must be accommodated during construction.

Advice
- Be certain all bidders know as much as they must know to propose properly.
- Be certain demolition contract documents specify all work to be done.
- Locate, to the best of your ability, all site obstructions before bidding.
- Don't expect the contractor or the architect and engineer to read your mind.

10. Termination - 7%

Dismissal from the project for convenience or default.

Examples
- The section of the project is no longer needed and is removed from the contract.
- The contractor is behind schedule.
- The contractor's performance is unsatisfactory.
- The owner doesn't like the way the superintendent talks back to him.
- The contractor doesn't manage submittals promptly and accurately.

Advice
- Be certain the cause for dismissal is legitimate and well defined.
- Don't dismiss for minor reasons. Dismissal is serious business.
- If dismissing, be certain proper notice is given.
- Insure the contract documents give you the right to dismiss.

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Negotiated dispute resolution and project success

I. **Definitions**

A. ***Binding resolution***
A third party imposed solution to a contested claim in which the conditions are legally binding on the parties.

B. ***Litigation***
The process of formal legal proceedings. Usually results in permanent or temporarily binding resolution.

C. ***Non binding resolution***
A suggested solution to a contested claim or problem in which the conditions are not legally binding on the parties, but are an expert's recommendations for resolution.

D. ***Pro Forma***
A financial model unusually built early in a construction program to show by projecting income and expenses, how the money flow to and from the project will occur. It is often used to establish the capital amount to be allocated to a project based on simulated operating conditions. The term pro forma means according to form.

E. ***Project***
A set of work actions having identifiable objectives, and a beginning and an end.

F. ***Project Delivery System***
A method of assembling, grouping, organizing & managing project resources so as to best achieve project goals & objectives.

II. **Introduction**

A. **Unresolved conflict and disputes often require that a neutral view be considered where positive change is desired.**

III. **What is alternative dispute resolution (ADR)?**

A. **In broadest terms, ADR is a method of resolving disputed design and construction claims outside the courtroom.**

IV. **Origins of negotiated methods of dispute resolution.**

A. **Informal negotiation was the delivery technique before excessive legal systems were imposed upon the industry (or were accepted by us)**

B. **Varies with the time.**

1. **In periods of exceptionally high economic activity, speculative money can be spent on expensive resolution methods to gamble for a high return on the investment.**
2. **In periods of low economic activity money is usually not be spent on high risk, uncontrollable methods of expensive resolution, hoping for a favorable result.**

C. **Today we cannot afford to spend our, nor our client's, money on high risk gambles. Therefore relatively low cost, non binding resolution processes have become popular.**

D. **The long lasting acrimonious atmosphere surrounding binding resolution methods has proven demeaning, unpopular, negative, and harmful to the design and construction professional who wants to practice effectively.**

E. **Temporary adversarial positions taken during short time alternative dispute resolution often helps heal business and professional wounds very rapidly,.**

V. **ADR guidelines for effective project use**

A. **A basic ADR principle - The earlier in a construction project that the participants employ alternative dispute resolution techniques, the more these techniques will contribute to project success.**

B. **Even when problems turn into disputes, litigation should not be the initial method used to resolve them.**
C. **Non-binding dispute resolution should be attempted before resorting to binding dispute resolution.**
D. **Advance commitment to ADR methods, contributes to effectively and fairly solving problems as they arise.**
E. **A cooperative project environment helps prevent disputes.**
F. **Job site dispute resolution often helps dispose of problems as they arise & before they multiply.**
G. **Dispute resolution proceedings should be conducted expertly, and effectively by experienced *design and construction* practitioners.**

VI. **What is needed for success in resolving disputes?**
A. **A comprehensive, clearly written initial program statement that clearly defines measurement yardsticks for the entire project.**
1. **The character and needs of the proposed user operation.**
2. **The requirements of the user and owner**
3. **The nature of the environment to be planned, designed and built**
4. **The characteristics of the space that will satisfy the user and owner's needs and requirements.**
5. **A proforma analysis and project budget that properly accommodates three levels of user and owner needs.**
a) Must list
Those items that must be included in the scope of work to make the project a go. If any of the items in the must list are not able to be included the project is a no-go.
b) Want list
Those items that are wanted and might be possible to include in the scope of work, over and above the must list items, since they provide a definable and acceptable rate of return on their cost.
c) Wish list
Those items that the owner and the user wish they could include but might not be able to due to budgetary or other reasons.
(1) Note that affordable wish list items are best added, not deleted, as the project moves into construction.
6. **An analysis and preliminary recommendation of the project delivery system best suited to the project.**
B. **A strong desire for a fair resolution, equitable for all involved.**
C. **People in charge who want a fair resolution.**
D. **A dispute resolution technique that is acceptable to those involved.**
E. **The knowledge of how to arrive at a resolution system that can produce a decision.**
F. **An understanding and agreement with the belief that *if you aren't entitled to it don't try to get it!***

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SECTION 2

CONFLICT

Standing Neutral 2 Seminar

Work Book

date printed: 7/4/97

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Conflict and risk in the design and construction profession- its nature and source

I. **Definitions**

A. ***Adversarial***
Taking the position of an opponent or enemy. Opposing another's interests or desires.

B. ***Authority***
The prerogatives, either vested or acquired over a long period of time, that allow an individual to carry out their responsibilities and duties. This includes the right to determine, adjudicate, or otherwise settle issues or disputes; the right to control, command, or determine.

C. ***Conflict***
A state of disagreement and disharmony.

D. ***Destructive conflict***
Animosity or disagreement which results in lowering the potential for an individual or organization to succeed.

E. ***Dispute***
To engage in argument or discussion. To quarrel or fight. An expressed disagreement.

F. ***Partnering***
A method of conducting business in the planning, design, and construction profession without the need for unnecessary, excessive and/or debilitating external party involvement.

G. ***Positive conflict***
Hostility that is managed so its resolution raises the potential for well intentioned individuals or organizations to succeed at being excellent.

H. ***Program***
A narrative oriented statement of the needs and character of the proposed user operation, the requirements of the user and owner, the nature of the environment to be planned, designed and built, and the corresponding characteristics of the space that will satisfy these needs and requirements. Sometimes called the brief.

I. ***Quality***
A characteristic of superior excellence.

J. ***Responsibility***
The assignment, spoken or understood, that a person in an organization has as their part in maintaining the organization's health and vitality.

K. ***Resolution***
A course of action determined or decided upon that can result in clearing conflict or dispute.

L. ***Risk***
Any exposure to the possibility of harm, danger, loss or damage to people, property, or other interest. To expose to a chance of loss or damage.

M. ***Third party***
An individual or group that is not primarily engaged in facilities programming, design, construction, or operations.

II. **Why has construction become so adversarial?**

A. The process of dispute resolution is not well understood.

B. We are having increasing difficulty controlling the indirect predictable, and the unpredictable impacts on our jobs.

C. Professional success requires we consider the following:

1. Our obligations as professional planners, designers, and constructors -- hierarchy of professional obligations as formulated by Dean Freund.
   a) First - Protection of the public health, welfare, and safety.

b) Second - Your employer or client.
c) Third - Your peers.

2. The design and construction professional is obliged, above all, to protect the health, welfare and safety of the public.
3. The legal professional is obliged, above all, to protect the interest of his or her client. These interests are defined by the body of law. Thus the body of law, not the law professional, is depended upon in legal resolutions to protect the health, welfare & safety of the public.
4. The legal process has moved too far outside the control of those depending on its proper use to fairly resolve damaging conflict.

D. Business success requires we take these business actions.
1. Profitably produce services and facilities.
2. Provide solutions.
3. Measure the quality of the process we provide.
4. Help manage destructive conflict.
5. Encourage early action on potentially damaging events.
6. Reduce professional liability costs.
7. Provide a quality management process leading to a well constructed facility.

III. **Why are disputes often not resolved promptly and fairly.**
A. Differences in goals and objectives of parties to the project.
B. Lack of clear understandings about the design and construction industry needs.
C. Lack of value-added for third party interests through prompt and fair settlements.
D. Excessive resort to legal based delays and road blocks to resolution.
E. Excessive demands on resolution resources (courts, arbitrators, judges and other agencies involved).
F. Greed.

IV. **Some causes of conflict in construction**
A. Lack of understanding that conflicts lead directly to results, bad or good
B. Frustration over a lack of control of events affecting performance
C. Differences in goals and objectives of parties in the project
D. Lack of understanding about the needs of others also involved in the planning, design, and construction process
E. Resentment or dislike resulting from a perceived lack of value being added to projects by those responsible for adding value
F. Excessive technical and legal delays to resolution of conflict
G. Excessive demands on resources normally depended on to assist in the resolution of conflict
H. Greed
I. Incorrect assumptions made from biased perceptions
J. Demands for higher quality than specified
K. Failure to meet commitments
L. Insufficient time to make required decisions
M. Lack of ability to do the job
N. Poor or inadequate training
O. Inadequate credentials to do the job
P. Indifferent leadership
Q. Actual or perceived overwork
R. Bad blood among participants
S. Desire to take advantage of those in weaker positions

T. Misplaced attempts to demonstrate who is in charge
U. and many, many others.

V. **Seven actions to help resolve potentially destructive conflict.**
A. Understand the cause of the conflict.
B. Put yourself in the other person's shoes.
C. Understand the relative importance of resolution versus nonresolution.
D. Become competent in proper application of the technical and professional tools of our profession.
E. Don't lie - tell the full truth.
F. Understand thoroughly the obligations you have to society and to your clients, your employer, and your peers.
G. Understand everything you can -not just your own field-and work to be effective in managing intersections of diverse interests.

VI. **How to recognize risk on a project (adapted from Mr. Papageorge, R. A.'s comments on risk)**
A. Identify as many potential threats to project success as early as possible.
B. Identify where problems will be caused by taking risks to help assure project success.
C. Evaluate and analyze the project team's ability to take the risks identified.
D. Evaluate and analyze the project team member's abilities to take the needed risks.
E. Identify the impact of legal contractual obligations on the risks being considered.
F. Evaluate and analyze existing project conditions and the restraints they exert on the project.
G. Establish and implement a systematic procedure for identifying and adjusting risk to acceptable levels to assure a high probability of project success.

VII. **Hints to help manage risk properly-these apply to all phases of the line of action, to all functions, and to all participants expected to encounter and assume risk:**
A. Start the job at the right time.
B. Profile the job before committing resources.
C. Remember--good management is risk control.
D. Don't lose your personal and intellectual grasp of risk on your job.
E. Evaluate the quality of the total contract documents.
F. Obtain and read all pertinent contract documents.
G. Match your price to the project delivery system being used.
H. Avoid being made a limited agent on a hard money job.
I. Avoid over-the-wall management.
J. Keep abreast and aware of current industry trends, particularly organizational patterns.
K. Be aware of your client's must, want, and wish list and respect it.
L. Understand and account for other project participant's profit needs and desires.
M. Don't hesitate to scrub your proposal if the risk is excessive relative to the rewards.
N. Negotiate deadlines of high-risk tasks to accommodate potential slippage.
O. Schedule tasks that can be postponed or canceled, if necessary, to later in the project.
P. Be conservative in estimating task durations and costs.
Q. Insert contingencies as recognizable elements of the plan and schedule.
R. Assign strong staff to high-risk jobs.
S. Assign back-up staff, however minimal, to any task where the loss of a team member would be damaging.
T. Plan preventive actions that will be taken to reduce or remove risk.
U. Plan contingency actions that can be implemented if a problem occurs.

V. Identify circumstances that might trigger each contingency plan into action.
W. Retain your optimism, solve problems, and keep morale strong despite setbacks caused by the winds of risk. This is your job as a leader and a manager.

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DESTRUCTIVE CONFLICT

Animosity or disagreement which results in lowering the potential for an individual or organization to succeed.

date printed: 7/4/97

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PEOPLE

Most people are honest, concerned, desirous of challenge, need attention, and welcome help in times of turmoil.

POSITIVE CONFLICT

Hostility that is managed so that its resolution raises the potential for individuals or organizations to succeed at being excellent.

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An Altenative Dispute Resolution Overview

I. What are some of the ingredients of a successful business and technical relationship ?
   A. Develop and maintain a strong desire to achieve project success for all.
   B. Make intelligent commitments.
   C. Avoid accepting or imposing unreasonable risk.
   D. Work and act ethically, morally, and with integrity.
   E. Work and act from a position of fairness rather than a position of power.
   F. Suppress greed.
   G. Try to establish an honest feeling of trust among participants.
   H. Assign experience, competent people to responsible management positions.
   I. Have empathy.
   J. Prepare a good charter, a good partnership evaluation system, and a good issue resolution process.

II. Alternative dispute resolution (ADR) systems and their application in construction.
   A. Some ADR methods available
      1. *Prevention methods* - produces maximum harmony - usually least cost.
         a) Intelligent and proper risk allocation
            (1) Risk should be assigned to the parties that can best manage or control the risk, i.e.
               (a) The owner, if the architect/engineer is expected to assemble and write the program.
               (b) The architect/engineer, if the owner has prepared a well conceived and clearly stated program.
               (c) The owner, where construction is expected to begin before construction documents are complete.
               (d) The contractor, where full, well prepared, and checked construction documents are available prior to the start of construction.
            (2) Attempts to shift risks to architects, engineers or contractors not able to absorb these risks is not cost-effective
               (a) Reduces competition
               (b) Increases costs due to greater contingency allowances.
               (c) Increases costs and reduces effectiveness because of the potential for increased numbers and intensity of design & construction project disputes.
         b) Incentives for cooperation
            (1) Incentives or bonus provisions
            (2) Disincentives or penalty provisions
         c) Partnering
            (1) Stresses good faith agreements
            (2) Emphasizes teamwork
            (3) Encourages good communications
      2. *Internal negotiation methods* - parties involved conduct negotiations - requires consensus - relatively cost free.
         a) Step negotiations (starts at dispute originating level)
         b) Direct negotiations (often starts at UDM level)

3. *Informal external neutral methods* - preselected external neutral serves as a informal dispute-resolver - relatively low cost.
   a) Architect/engineer rulings
      (1) May be respected even though not legally binding.
      (2) Must be impartial
   b) Dispute resolution board
      (1) One member selected by owner and approved by contractor; one by the contractor and approved by the owner; a third by the first two members. Third selection usually acts as chairman.
      (2) Those selected should be from the design & construction industry.
      (3) Must have no conflict of interest.
      (4) Conduct investigations and hearings on disputes and publish prompt opinions re the dispute.
   c) Independent advisory opinion.
      (1) Mutually agreed upon neutral expert meets informally with interested parties, obtains information from both, and render prediction as to the ultimate outcome if not resolved at meeting level.
4. *Formal external neutral method* - preselected external neutral(s) serves as formal dispute resolver - relatively low cost - usually requires considerable preparation, and may require legal assistance.
   a) Mediation - settlement conferences and informal hearings conducted by a neutral third party.
   b) Minitrial - private settlement method usually initiated by an agreement between the parties - less formal than mediation.
   c) Advisory opinion - neutral expert meets with both parties, obtains information from both, and render prediction as to the ultimate outcome if adjudicated.
   d) Advisory arbitration - abbreviated hearing before neutral expert(s). Arbitrator(s) issue advisory award, and render prediction as to ultimate outcome if adjudicated.

III. To achieve successful dispute resolution requires:
   A. A desire for a win - win result;
   B. A desire for a fair settlement;
   C. People in charge who want a fair resolution;
   D. A negotiation technique that is acceptable to those involved;
   E. Knowledge of how to arrive at a resolution system that can produce a decision;
   F. Understanding that unresolved conflict and disputes often requires that a neutral view be considered as a tool for positive change;
   G. A belief that if you aren't entitled to it don't try to get it!

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Alternative Dispute Resolution for Design Projects - Standing Neutral Workshop #2

Reference Material

Purpose of standing neutral workshop (STN) #2:

To provide specialized training for prospective standing neutrals through Alternative Dispute Resolution workshops. These workshops are also designed to introduce standing neutrals to issue resolution methods proposed for use by the Michigan Department of Transportation in future design contracts with their design consultants.

Abbreviations:

AAGC - Assistant Attorney General in Charge - Transportation Division
ADR - Alternative dispute resolution
ADS - Assisted Design Services Contracts
ACEC/M - American Consulting Engineers Council - Michigan
CA - Contract Administrator
CDS - Construction Division Field Staff
DCO - Design consultant
DPM - Design Division Project Managers/Consultant Coordinators
DEE - Design error
DEI - Design issue
DOM - Design omission
DPL - Design plans
DPM - Design Project Manager
DRP - Dispute resolution process
EOD - Engineer of Design
EOP - Errors and omissions policy
M/A - Mediator/Arbitrator
MDOT - Michigan Department of Transportation
OAG - Office of Attorney General
OCA - Office of Commission Audits
SAB - State Administrative Board

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Definitions - a starter list to be discussed and edited -
* definition from MDOT Operating Instruction for New Procedures

Advisory arbitration
An abbreviated hearing before a neutral expert or a group of neutral experts acting as arbitrators. The neutral arbitrator or arbitrators issues an advisory award and renders prediction of the ultimate outcome if the matter is adjudicated.

Advisory opinion
An abbreviated hearing before a neutral expert or a group of neutral experts acting as advisors. The neutrals render an advisory opinion and often predict the ultimate outcome if the matter is moved to binding resolution.

Alternative dispute resolution - adr
In its generic form, a method of resolving disputed construction claims outside the courtroom. Includes systems of resolving disputes in planning, design and construction by cooperative, internal, or third party assistance methods that are alternatives to conventional dispute resolution methods currently in common use. Conventional dispute resolution methods are usually considered to be litigation and binding arbitration. Alternative dispute resolution may make use of non traditional combinations of conventional dispute methods.

*Arbitration
A method for settling disputes whereby an officially designated third party (usually one to three people) hears and considers arguments and determines an equitable settlement.

Architect, engineer ruling
The ruling of the architect or engineer in an issue or dispute on a construction project on which he or she is the design professional of record. Where specified the ruling may be binding if accepted as specified in the contract.

Bench trial
A trial before a judge without the benefit of a jury.

Binding arbitration
A process in which opposing parties submit disputes to binding determinations by a neutral third person or panel.

Binding resolution
A third-party imposed solution to a contested claim in which the conditions are legally binding on the parties.

Claim
A demand for something as due; an assertion of a right or an alleged right. In construction generally a demand for something as due, or in which the demand is disputed.

Claim avoidance
A technique and procedure for generation of situations in which the demand for what is due as a result of a contract agreement is honored without formal dispute, or in which the dispute is settled by an administrative settlement.

*Construction Division Staff
Construction Division field staff including Project Engineers and Resident Engineers responsible for the supervision and inspection of the construction of the project.

Contested claim
A demand or claim in which the demand is disputed.

Contract documents
Usually considered to be the construction documents which provide the full definition of the scope of work for which the parties are legally responsible. Could include the agreement, the drawings, the specifications, instructions to bidders, addendum, and any other material included by mutual agreement and clearly identified as part of the contract.

Department
The Michigan Department of Transportation.

*Design Consultant
The corporation, partnership or individual having a contract with the Department and responsible for preparing the plans and other contract documents used for the construction of a project. This includes Consultant-provided survey information as well as products from other engineering and/or architectural disciplines included as part of the plans and contract documents. As used in this procedure the Design Consultant is the Engineer of Record and is fully responsible for work performed by any and all sub-contractors. (Note: In order to be prequalified by MDOT, consultants must sign a statement that they

meet the professional registration requirements for Michigan.)

*Design Error
Deficiencies with the Design Plans that are the result of miscalculations, incorrect details, etc. Essentially, design error is when the Design Plans as prepared by the Design Consultant cannot be built as shown or would not adequately serve the intended purpose if built as shown.

*Design Issue
For purposes of focusing on resolving problems and not attempting to place blame in the first stages after a problem is encountered, all such problems will be referred to as "Design Issues." Such problems will not be referred to as Design Errors or Design Omissions until such a time that the problem has been fully addressed and resolved and the cause and responsibility has been determined. Design Issues may include but are not limited to the following: instances where the Design Plans do not adequately reflect actual field conditions, do not adequately portray what needs to be built, or are unclear.

*Design Omission
Design Plans as prepared by the Design Consultant are missing entries, bid items, quantities, calculations or have errors that are the result of missing data that was reasonably available.

*Design Plans
All of the work product provided by the Design Consultant for use in bidding and constructing the project. This would include but not be limited to: design plans, calculations, survey notes, special provisions, bid quantities, etc.

*Design Project Manager
Design Division staff including Project Managers, Unit Leaders and Consultant Coordinators responsible for managing the Design Consultant.

Direct negotiations
Conflict in which the matter in dispute is taken immediately to those that have the authority to make a final binding decision in any project related matter. These are called the ultimate decision makers.

Disincentive
A penalty imposed on a contract party for less-than-satisfactory performance on a project. The disincentive is usually coupled to a bonus or incentive.

Dispute
To engage in argument or discussion. To quarrel or fight about.

Dispute resolution board - drb
A method of dispute resolution where project participants establish procedures, by contract, to proactively settle disputes as they arise during the course of the project. DRB's seek to anticipate problems and get the parties to resolve them before the problems harden into formal claims.

*Dispute Resolution Process
The process whereby the Michigan Department of Transportation and the Design Consultant establish procedures, by contract, to pro-actively settle disputes as they arise during the course of the project.

Incentive
A bonus paid to a contract party for performing its work in a superior manner to that specified. The incentive is usually coupled to a penalty or disincentive.

Incentive-disincentive system
A payment system used in construction to pay a bonus or incentive to a contract party for performing their work in a superior manner to that specified. The bonus may relate to cost, time, quality, safety, or other such measurable component of the total job performance. If the standards set are not reached by a measurable point on the project, a disincentive is triggered where the contract party is penalized for inferior performance on the project.

Independent advisory opinion
An opinion rendered by a qualified neutral of what outcomes can be expected if certain courses of action are followed.

Issue resolution
A method of reaching agreement and closing out disputes and problems at the lowest possible management level, in the shortest possible time, and with the lowest potential for residual hard feelings.

Jury trial
A trial before a jury.

Liquidated damages
The amount established by the parties to a contract which must be paid, by one or either of the parties, in the event of a default or a breach. Is related to the

damages suffered by late performance.

Litigation
The process of contending in court, either as a plaintiff or a defendant.

Mediation
An attempt to effect a settlement between disputing parties through the unbiased efforts of an objective third party, usually well known to those in dispute and acceptable to them. Mediation differs from arbitration in that it generally involves a single individual as the ruling party, is less formal, and is generally not binding. (This definition of mediation varies with the degree of legal significance attached the resolution of disputes, and the dispute location.)

*Mediation
An attempt to effect a settlement between disputing parties through the unbiased efforts of an objective third party.

Mediator/Arbitrator
Selected Standing Neutral(s) that make up the Panel which acts either as mediator(s) or arbitrator(s) in any Dispute Resolution Process between MDOT and their Design Consultants.

Minitrial
A private process where opposing parties present condensed versions of their cases, both to designated executive representatives, and to an impartial advisor, and then negotiate.

The executives hear both sides, thus gaining a first hand perspective of the parties positions. The impartial advisor then points out possible outcomes an helps the parties to settle, if possible. Minitrials provide a structure to negotiate and ground rules to facilitate settlement.

Mission
A statement of the most important result to be achieved by the project being successfully completed.

Neutral
An unbiased outside expert capable of objectively listening, analyzing, and evaluating construction-related demands or claims which are in dispute and rendering an opinion or decision as to its disposition.

Nonbinding arbitration
Involves an evidentiary hearing before one or more third parties who draw conclusions regarding issues in dispute. The presentations may be condensed, as in a minitrial. The third renders a decision, but the decision is not binding on the parties. The intent is to predict the probable adjudicated outcome of the case as an stimulus to a settlement.

Nonbinding resolution
A suggested solution to a contested claim or problem in which the conditions are not legally binding on the parties but are an expert's recommendations for resolution.

*Panel
The name assigned to the one or three Mediators/Arbitrators while participating in the Dispute Resolution Process. The size of this Panel is mutually decided by the Department and the Design Consultant depending on the expense and risk associated with the project. A Panel of one Mediator/Arbitrator is mutually selected by both the Department and the Design Consultant. A Panel of three has one member selected by the Department and one selected by the Design Consultant although each has to agree to the selection of the other. These two Mediators/Arbitrators select the third member at the time that a dispute arises.

Partnering - a base statement
A method of conducting business in the planning, design, and construction profession without the need for unnecessary, excessive and/or debilitating external party involvement.

Partnering - organizational
The application of partnering systems and methods to the ongoing work and staff activities of an organization. An internal partnering system within an organization as applied to the internal work effort of the company staff.

Partnering - project or tactical
A method of applying project-specific management in the planning, design, and construction profession without the need for unnecessary, excessive and/or debilitating external party involvement.

Partnering - strategic
A formal partnering relationship that is designed to enhance the success of multi-project experiences on a long term basis. As each individual project must be maintained, a strategic partnership must also be maintained by periodic

review of all projects currently being performed - Ida B. Brooker 1994 WEX

Partnering Charter
The basic manual for operating a partnering system. Contains at a minimum, the mission of the project team, and their objectives for the project. Usually is signed by those writing the document. The charter is an agreement in principle and must not supersede or supplant the design and construction contracts in place or to be written.

Position paper
A written statement by the respective parties to a dispute outlining their positions in regard to the disputed issue.

Professional services contract
A consulting agreement which defines the relationship between a client and an advisor, usually a technically qualified individual, who is retained to do a specific amount of work for a clearly defined fee.

Resolution
A course of action determined or decided upon that can result in clearing conflict or dispute.

Scope of Design Services
A description of the services to be provided by the Design Consultant. This would include, but not be limited to, the project location and boundaries, a listing of responsibilities, a listing of duties, reporting requirements, and project deliverables.

Stakeholders
The parties at risk financially and legally or in an extended sense, those affected and potentially put at risk during the execution of a planning, design, or construction contract. Stakeholders are also those who participate in writing a partnering charter and are a signatory to the charter.

Standing neutral
A technically trained, educated, and credentialed professional who is active in the planning, design, and construction disciplines. The standing neutral must be capable of objectively listening, analyzing, and evaluating construction related demands or claims which are in dispute.

Standing neutral system
A process where neutral third parties are available to assist with resolution of all disputes arising during the course of a contractual relationship. The intent which includes dispute review boards and standing neutrals is to have one or more individuals on call to address disputes as they arise. It usually requires the neutral to render a nonbinding determination of the issues in dispute, although in some cases, and upon request, the neutral can act as a binding arbitrator.

Statement of the facts
A statement of conditions prepared and exchanged by each party if resolution of a dispute is not reached in the Level 1 negotiations. These statements are intended to fully disclose the events and supporting documentation from the perspective of each organization. As a result of the exchange of the Statements, the participants should gain a better understanding of each other's position designed to better prepare for the Level 2 meeting.

Training
The teaching and learning process by which specific, explicit methods and systems of doing something, usually by rote, are conveyed to the learner.

Ultimate decision maker (UDM)
The individual or group at the lowest management level that has the authority to make a final binding decision in any job related matter.

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Guidelines for the Application and Use of Partnering Concepts

I. **Definitions**

A. ***Ethics***
The study of the general nature of morals and of the specific moral choices to be made by the individual in his relation with others.

B. ***Goals***
The unquantified desires of an organization or individual expressed without time or other resources assigned.

C. ***Leadership***
The process of persuasion or example by which an individual induces a group to pursue objectives held by the leader or shared by the leader and his or her followers.

D. ***Mission***
A statement of the most important result to be achieved by the project being successfully completed.

E. ***Moral***
Of or concerned with the judgment principles of right and wrong in relation to human action and character.

F. ***Objectives***
Quantified targets derived from established goals. The most commonly used resources in converting goals to objectives are money, time, human abilities, human actions, equipment, and space.

G. ***Sum zero***
A situation in which there is a winner and a loser. The loser often usually loses what the winner wins.

H. ***System***
An assemblage or combination of things or parts forming a complex or unitary whole.

II. **Determine the need for a partnering system.**

A. Suggestions and ideas to help in deciding about the use of partnering.

1. Litigation *should not* be considered as an initial method used to resolve construction disputes.
2. Partnering is most effective when used early in the project.
3. Advance commitment to partnering methods helps solve problems at their source and as they arise.
4. Support for partnering must be gained at all project team levels, particularly at the senior management level in those organizations involved.
5. Non-binding dispute resolution methods should be considered before resorting to binding dispute resolution.
6. Job site dispute resolution helps dispose of problems before they multiply.
7. All partnering participants must take responsibility for their thoughts and actions.
8. All managers must provide leadership where they can, or where they are expected to lead.
9. Don't play sum zero games.
10. Understand and use ethical principles to gauge your behavior
11. Partnering assumes most people are honest, concerned, desirous of challenge, need attention, and welcome help in times of turmoil.

III. **Obtain management commitment for use of a partnering system.**
   A. Top management commitment to non binding resolution of conflict issues is vital to partnering success.
   B. All levels of management and operations must be shown where value is added for them by use of the partnering process.

IV. **Develop a partnering plan of action (the charter).**
   A. Tips for planning the partnering process.
      1. During the project programming period, encourage the owner, user, and design team to learn about, and consider, a partnering effort.
      2. During the construction proposal period, encourage prospective prime contractors, vendors and specialty contractors to learn about, and consider a partnering effort.
      3. Alert all parties that the project staff may, or will, be expected to be operate within a partnering system by which the facility is built.
      4. May be desirable to hold some early partnering orientation sessions to insure adequate understanding of partnering assumptions and requirements.
      5. Award contracts on the basis of well thought out partnering principles and guidelines.
      6. Gain and display the owner/user team support for the use of partnering to all involved.
      7. Adopt and display the design team support for the use of partnering to all involved.
      8. Inform and gain as much support for partnering from associations and other trade organizations as may influence the project implementation
      9. Continually review the partnering guidelines and assumptions for improvement.
   B. Tips for writing the basic partnering document - the charter.
      1. Staff assistance recommended - you may not have all of these people available, but somebody has to do the following if you are going to write the charter in a single day.
         a) Someone to introduce the subject - these are the top managers of the project team organizations.
         b) Someone to chair the meeting - usually an outside neutral individual, a leader who is knowledgeable about the design and construction profession.
         c) Someone to help take notes during combined group discussions.
         d) Someone to help break out and reassemble groups.
         e) Someone to display flip charts and other material as needed.
         f) Someone to tend, as needed, to the break out groups.
         g) Someone to make and distribute copies.
      2. Equipment recommended
         a) Lap top or portable word processor & someone who knows how to use it.
            (1) The meeting chair may type notes and other material as the meeting proceeds.
         b) Copier near at hand - must be capable of quickly producing high quality copies of material prepared in the charter meeting.
         c) Flip charts - probably as many as 5 to 7 with felt pens of various colors available for each.
         d) Marker boards, markers, & erasers.
         e) Wall space for display of charts.
         f) Drafting tape - non paint destructive.
         g) Push pins.
         h) Transparent scotch tape.
         i) Overhead transparency projector with spare bulb.
         j) Large screen - 6′ x 6′ at least

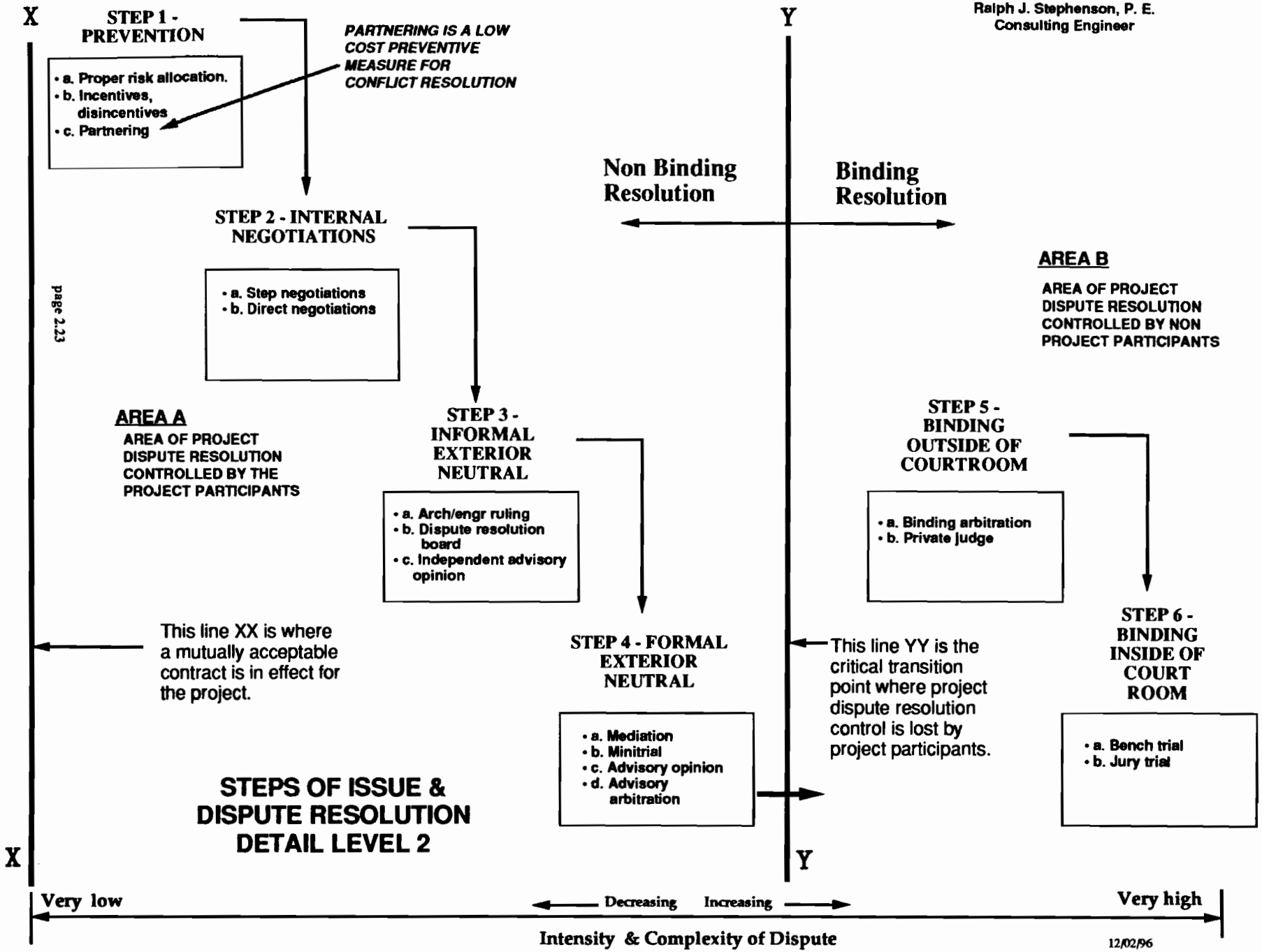
3. Select who is to be in charge of the initial organizing effort
   a) Owner?
   b) User?
   c) Designer?
   d) Contractor?
   e) Neutral party?
   f) Other?
4. Set the date, time and place of the charter meeting.
   a) Make certain all key people can attend!
5. Invite all involved in responsible project decision making and operations actions to the charter meeting.
   a) Owner.
   b) Users.
   c) Financing sources.
   d) Planners.
   e) Architects.
   f) Engineers.
   g) Specialty designers.
   h) Prime contractors.
   i) Sub contractors.
   j) Key vendors.
   k) Key suppliers.
   l) Operators of the facility.
   m) Regulatory representatives - who among these benefits from a good project?
   n) Guests - who do you want to see you in action? Who might benefit from observing the session?
6. Provide a briefing document to all expected to attend - to be sent over signature of senior management executive (of the owner, designer, or principal contractor).
   a) State objectives of the meeting.
   b) Explain who is invited and expected to attend.
   c) Present an agenda - well thought out & well written.
7. Conduct the partnering meeting & write the charter in one day.

C. Set goals and objectives to be gained from the partnering system.
   1. The goals of a partnering system should be broadly stated by the project mission defined during a charter meeting.
      a) Typical mission statements - from actual charters
         (1) We seek to work together as a team producing valuable, accurate , high-quality hydrographic surveys at a fairly negotiated price.
         (2) We, the partners for construction of the Bonneville Navigation Lock, commit to trust, cooperation an excellence for the benefit of all stakeholders.
         (3) We, the Project Team commit to construct a quality facility, on time and within budget, maximizing safety, communications, & cooperation so that all participants can be proud and profitable in their accomplishments.
         (4) Our mission is to work together in a trustworthy and professional manner to produce a quality project completed within budget, safely, and on time.

2. The objectives of a partnering system should be specific, understandable, and possible. The objectives are set during the charter meeting and after the mission statement is formulated.
   a) Typical partnering goals and objectives at random - from actual charters (some paraphrased).
      (1) Address the problem not the person.
      (2) Construction employees should maintain professional relationship with the client's employees and the public.
      (3) Be a good construction neighborhood.
      (4) Build it right the first time.
      (5) Close out the job in a proper and timely manner.
      (6) Define and clearly communicate quality expectations.
      (7) Encourage value engineering.
      (8) Have fun.
      (9) Hold changes to a minimum.
      (10) Hold regular team progress meetings and prepare and publish minutes.
      (11) Limit cost growth to less than 5 %.
      (12) Make timely release of retainage.
      (13) Minimize paperwork.
      (14) Minimize submittal and approval times for shop drawings.
      (15) No litigation.
      (16) Pay promptly.
      (17) Plan, organize and publish site layout and organization.
      (18) Prepare and implement a partnering evaluation system.
      (19) Prepare and implement an effective alternative dispute resolution system.
      (20) Prepare and publish close out procedures for all trades
      (21) Prepare and publish organizational chain of command (with phone and fax numbers).
      (22) Prepare and publish program to regularly monitor and report on job quality.
      (23) Prepare and publish progress schedule and update regularly.
      (24) Prepare and publish standard procedures for payment, changes, questions and other documentation.
      (25) Prepare and submit complete and accurate submittals and shop drawings in a timely manner.
      (26) Prepare, approve, and commit to a total quality management program.
      (27) Promptly resolve conflicts at the lowest possible level.
      (28) Stress and encourage pride in good workmanship.
      (29) Treat this project as if you were the owner.

V. **Award a memento of the day's work to all participants.**
   A. Specially lettered celebration coffee cup.
   B. Baseball cap with name of project.
   C. Calculation tablet in windproof folder lettered with the project name and the event.
   D. Special badges with partnering meeting lettering and a message.
   E. Certificate, specially lettered to celebrate the event.
   F. Lettered T shirts (may be expensive).
   G. Pen knife.
   H. Later, a special parchment copy of the signed charter.

Ralph J. Stephenson, P. E.
Consulting Engineer



Ralph J. Stephenson, P. E., P.C.
Consulting Engineer

SECTION 3

CASE STUDIES

Standing Neutral 2 Seminar

Work Book

date printed: 7/4/97

Ralph J. Stephenson, P. E., P.C.
Consulting Engineer

TABLE # ____

Name of person playing role

- **Construction Division Staff -**
- **Contract Administrator -**
- **Design Consultant -**
- **Design Project Manager -**
- **Engineer of Design -**
- **Lead Mediator/Arbitrator -**
- **Panel (Other Mediator/Arbitrators) -**

GENERAL STEPS TO BE TAKEN IN CASE STUDY WORK

Step 1 - Introduce yourselves and individually read assigned case study.

Step 2 - Table staff select one person to act as a mediator/arbitrator and be the case study recorder.

Step 3 - Others at tables volunteer for roles to be played.

Step 4 - Follow and implement procedural steps outlined on page 34, 35, and 36 in the seminar notebook.

Step 5 - Where case study information is missing or assumptions must be made, the mediator/arbitrator will use his or her best judgment and will provide the missing information by making reasonable assumptions about the situation. This information should be made a part of the case study record for future reference in Level 3 of the dispute resolution process.

<u>Project Design Phase</u> - Procedural steps and responsibilities for resolving design issues arising during the project design phase - preliminary draft

I. **As outlined in the MDOT Procedure for Resolving Disputes with Design Consultants - dated 02/11/97 - minor modifications made for clarity**

II. **Purpose of establishing procedural steps and responsibilities**

A. To establish processes for resolving disputes that arise during the project design period with design consultants. Such disputes may include but not be limited to determining whether or not certain work is within the scope of design services. These procedures also provide the criteria and methods to proceed with such work, where necessary, while resolving the dispute.

III. **Background of issues which may arise during the design of a project**

A. From time to time disputes may arise between MDOT and the Design Consultant. The resolution of such disputes is integral to the successful completion of a project. If disputes are not resolved quickly and fairly, then the project may be delayed, costs may rise, and the long term relationship between the Department and the Design Consultant may be irrevocably harmed. The dispute resolution process outlined in this procedure provides a stepped negotiation mechanism that is controlled by the participants. Typical causes of such disputes are as follows:

1. Disagreement regarding whether or not certain work is within the existing scope of design services.
2. Disagreement over the price or hours for additional work. (additional work in this case is work that is not currently included in the contract or authorization's scope of design services.)

B. The work in question may not be urgent. In the event that delaying the work in question would result in material costs to the Department, this procedure provides the steps required to proceed with such work while simultaneously resolving the dispute.

IV. **Process steps**

A. LEVEL ONE

This level of meetings is the first step in the resolution process. The people involved at these meetings are the operational staff directly involved in the project. The staff involved will be the Design Project Manager and the Design Consultant, and other MDOT staff as determined to be needed by the Design Project Manager. In the event that an agreement on a solution is not reached in LEVEL ONE, the

decision is then appealed to upper management within MDOT and the consulting firm. The staff involved in LEVEL ONE are not involved in the decision on LEVEL TWO; however, they are included in this level for informational purposes.

B. LEVEL TWO

This level of meetings is an appeal level and includes the upper management of the same organizations that were involved in LEVEL ONE. These meetings shall include the staff from the LEVEL ONE meeting for informational purposes. This step begins with an exchange of information and then meetings/negotiations.

C. LEVEL THREE

In the event that some or all of the dispute is not resolved in LEVEL TWO, the Dispute Resolution Process will move to LEVEL THREE. The Department and Design Consultant will notify the preselected PANEL that their services are required. The PANEL will first function as mediators; that is, the PANEL will attempt to guide the Department and the Design Consultant towards an agreement. Later the PANEL may function as arbitrators. Issues that are not resolved in a reasonable time, as determined by the PANEL, will be decided by the PANEL.

V. **Responsibilities and procedure**

A. Actions prior to entering into Level 1 of the Dispute Resolution Process:

1. **Step 1 -** (action to be taken by the Engineer of Design and the Design Consultant)

Select a Mediator/Arbitrator(s) to be on a standby basis for the project as follows:

a. For projects that are considered less expensive and/or low risk, the Department and the Design Consultant will mutually select a single Mediator/Arbitrator.

b. For projects that are considered more expensive and/or higher risk the Department and the Design Consultant will each select one Mediator/Arbitrator each. Each such Mediator/Arbitrator must be acceptable to both the Department and the Design Consultant. These people are selected and agreed upon during the price negotiation process prior to contract/authorization execution.

2. **Step 2 -** (action to be taken by the Engineer of Design and the Design Consultant)

Agree to follow this Dispute Resolution Process, the terms of which are incorporated into the contract between these parties for the design of the project .

3. **Step 3** - (action to be taken by the Design Project Manager)
   At such time that the Design Project Manager and the Design Consultant disagree on a material matter related to the project, the Design Project Manager requests the Design Consultant's involvement in the Dispute Resolution Process.
4. **Step 4** - (action to be taken by the Design Project Manager and the Design Consultant)
   Prepare a "Statement of the Facts." These statements are intended to fully disclose the events and provide supporting documentation from the perspective of each organization. As a result, the participants will better understand each other's position in order to better prepare for the resolution process.

B. Level 1 of the Dispute Resolution Process

1. **Step 5** - (action to be taken by the Design Project Manager, the Design Consultant, and others as requested)
   The Design Project Manager and the Design Consultant meet to resolve the dispute. One of the first orders of business will be to determine whether any other participants are required. For further information on this step see the Project Manager's manual chapter [?].
2. **Step 6** - (action to be taken by the Design Project Manager and the Contract Administrator)
   In the event that the dispute meets both of the following criteria - A.) The subject of the dispute is whether or not certain work is within the existing scope of design services, and B.) The disputed work is urgent and the Department will incur material additional costs as a result of the delay in the performance of this work - the Contract Administrator will provide notification to the State Administrative Board (SAB). This notification will be through the regular agenda process and will be submitted for the next scheduled meeting. In the event the dispute does not meet these criteria, proceed to step [?].
3. **Step 7** - (action to be taken by the Engineer of Design)
   Provide written authorization to the Design Consultant to proceed with the work that is subject to dispute. This action need not wait for approval from the State Administrative Board according to State Administrative Board resolution [?]. Payment may not be made for such work until the following occurs:

a) The Department and the Design Consultant reach agreement, possibly as a result of a Dispute Resolution Process.
b) That the result of such agreement is as follows:
   (1) The Design Consultant agrees that some or all of the disputed work is within the existing scope of design services; therefore, contract progress payment may be made for services performed for that work which has been agreed to be within the scope of design services.
   (2) The work must be added to the scope of design services in the contract via an amendment or other available contractual mechanism for that portion of the disputed work which is not within the existing scope of design services as agreed to by the Department and the Design Consultant. The addition of this work to the contract will include State Administrative Board approval of such revisions to the contract dollar total for that portion of the work agreed to be outside the scope of design services.

4. **Step 8** - (action to be taken by the Design Project Manager and the Design Consultant)
   In the event that the Design Project Manager and the Design Consultant are not able to reach an agreement, the dispute is submitted immediately to Level Two.

C. Level 2 of the Dispute Resolution Process

1. **Step 9** - (actions to be taken by the [Construction Division Staff?], the Design Project Manager, and the Design Consultant)
   Each prepares "Statement of the Facts." These statements are intended to fully disclose the events and provide supporting documentation from the perspective of each organization. As a result, the participants will better understand each other's position in order to better prepare for the Level 2 meeting. These statements are distributed to each organization participating in the resolution process plus the Assistant Attorney General in Charge - Transportation Division.
2. **Step 10** - (actions to be taken by the Engineer of Design and a Principal of the Design Consultant)
   Meet to resolve the dispute. Staff involved in the Level 1 meetings will be included in Level 2 for information purposes.
3. **Step 11** - (actions to be taken by Engineer of Design)
   Processes a letter of agreement setting forth the resolution of the dispute.

4. **Step 12** - (actions to be taken by the Engineer of Design and a Principal of the the Design Consultant)
   In the event that this group is not able to agree on the cause, responsibility and financial implications, the unresolved issues move to Level 3.

D. Level 3 of the Dispute Resolution Process

1. **Step 13** - (actions to be taken by the Engineer of Design and the Principal of the Design Consultant)
   The preselected Mediator/Arbitrator(s) is/are informed their services are required.
2. **Step 14** - (actions to be taken by the Mediator/Arbitrator(s))
   In the event that the Department and the Design Consultant mutually selected one Mediator/Arbitrator, this Mediator/Arbitrator will be referred to as the Panel. In the event that the Department and the Design Consultant each selected a Mediator/Arbitrator, these two Mediator/Arbitrators select a third Mediator/Arbitrator to complete the three person Panel.
3. **Step 15** - (actions to be taken by the Panel)
   Mediates with the Engineer of Design, and a Principal of the Design Consultant. Staff involved in the Level 1 meetings will be included in Level 2 for information purposes. The purpose of these sessions is to assist MDOT and the Design Consultant to reach agreement on the cause, responsibility, and the resultant financial implications of the Design Issues.
4. **Step 16** - (actions to be taken by the Panel)
   At such time that the Panel determines that sufficient time has passed and that adequate progress is not being made, the Panel will act as arbitrators and render a decision.
5. **Step 17** - (actions to be taken by the Design Project Manager)
   Takes such action as determined by the Dispute Resolution Process.

Project Construction Phase - Procedural steps and responsibilities for resolving design issues arising during the project construction phase - preliminary draft

I. **As outlined in the MDOT Procedures - dated 02/06/97 - minor modifications made for clarity**

II. **Purpose of establishing procedural steps and responsibilities**

A. To establish processes for identifying and resolving design issues that arise during the construction period from the use of Consultant prepared plans, and contract documents, and for determining the resultant financial responsibility.

III. **Background of issues which may arise during the design of a project**

A. During the design phase of projects there are quality assessment procedures required of Consultants which are intended to minimize the occurrence of errors and/or omissions in the plans and contract documents. Even so, there are often valid changes required during construction to accomplish completion of the project. These changes may or may not be the result of errors or omissions in the design.

B. Some of the changes may be due to errors and/or omissions in the plans and contract documents resulting in cost increases to the project. When there are changes to a project that cause additional costs resulting from errors and/or omissions, an assessment must be made to determine the extent of the Design Consultant's responsibility for the errors and/or omissions, including the Consultant's share of additional costs.

C. Department personnel must keep in mind that plans and other contract documents will normally contain minor deficiencies that do not materially affect the cost of the project. The steps to assign responsibility are intended to be used in those cases where Department personnel have reason to believe that, in their professional judgment, a Design Consultant did not adhere to recognized professional standards of care in the performance of their duties, resulting in substantial additional costs to the Department.

D. A problem may appear as substandard consultant design work when the problem could have been due to restrictions in the Consultant's scope of work or due to information and/or direction provided by the department. For example, a construction change may be necessary due to unexpected subsurface soil conditions, and may be initially labeled as a deficient site investigation, however, if the Design Consultant performed the investigation in accordance with standards and criteria established by the Department and

contained in the Consultant agreement, and adhered to professional standards, then the Consultant can not be held accountable for the resulting change.

E. It is also important to understand that the cost of correcting an error and/or omission should be compared to the estimated first-time cost that would have occurred if the contract documents had been originally correct. For example, the omission of a pay item that has to be added during construction will cause and increase in the construction cost, but the cost would have been higher if the pay item was included from the beginning. In this case, the cost of the omission is how much more it costs to include the item during construction than it would have cost had the item been included when the project was bid.

IV. **Process overview**

A. The new policy of the Bureau of Highways is that projects will be built as designed and let. Further, that field staff will not revise the design for purposes of enhancement or personal choice. In the event that the project cannot be practically built as designed and let, then the steps of this procedure will take control.

B. Whenever potential errors, omissions or questions of a material nature are encountered on design plans, the Construction Division Staff (CDS) shall contact the Design Project Manager (DPM). These will be referred to as "Design Issues" until such a time that the cause, effect and responsibility have been determined. A Design Issue is considered material when the cost of the error and/or omission is perceived to be greater than the administrative cost of the dispute resolution process. The Design Project Manager will contact the Design Consultant. It is imperative that the Design Project Manager and the Design Consultant participate in the resolution of the problem. This group will invite other parties, such as the construction contractor, Traffic and Safety Division, etc., into this process as needed. The intent of this procedure is that there will not be any repeat reviews after the Design Issue is resolved by this group. If the Design Issue or its solution impact the area of responsibility of a MDOT review organization, they shall be included in the resolution process, and not brought in for review afterwards. The construction contractor should be involved in the choice of solution for the Design Issue when their schedule, staffing or available equipment would influence this choice.

C. In the event that the Construction Division Staff decides that the issue is not material and the Construction Division Staff proceeds unilaterally, a copy of all decisions, changes, etc. must be sent immediately to the Design Project Manager. Typically this will be a facsimile of the work order. The Design Project Manager will forward these decisions, changes, etc. to the Design Consultant. This step is important for two reasons. First, the Design Project Manager and the Design Consultant have an opportunity to review the change

and take action if they disagree. Second, the Design Project Manager and the Design Consultant learn of the deficiencies in order to improve their product in the future.

D. In the event that the Construction Division Staff is uncertain regarding the designer's intent, Construction Division Staff must contact the Design Project Manager to determine that intent. The Design Project Manager will contact the Consultant staff when appropriate.

E. The process will focus on solving the problem first. After that, the process will focus on responsibility according to the multi step procedure that follows. The step of determining responsibility must occur anytime the Design Consultant is brought into the process and incurs costs, or any time errors and/or omissions in Consultant prepared plans or contract documents result in increased cost during construction.

F. The determination of the degree of responsibility for substandard work must include a review of the Consultant's scope of work, the standards in effect when the work was done, design information provided to the Consultant, and directions provided by the Department. In making this determination, the Design Project Manager and the Construction Division Staff must discuss the error and/or omission with the Consultant and and involved department personnel to obtain all information and points of view. The Design Project Manager and the Construction Division Staff are to make a record of conversations and other documentation which support whatever determination is made, and place copies of those records in the project files.

G. Separate budgets will be created for the payment of Design Consultants for their correction of Design Issues that are judged not to be their responsibility and another budget for charges by the Design Project Manager for their activities during this Dispute Resolution Process. These funds will be "A" phase but separate from the Construction Engineering funds.

V. **Process steps**

A. Issue Resolution

1. At each level of these proceedings the first focus should be on resolving the Design Issue and, after that is accomplished and more information is available, the focus shifts to cause, effect, responsibility and financial implications. MDOT and the Consultant will attempt to determine the solution. However, in the event that such agreement cannot be reached, MDOT alone will decide on the appropriate solution. In the event that the Design Consultant does not agree with any of these decisions, they may appeal their financial responsibility to the next level.

a) LEVEL ONE

This level of meetings is the first step in the resolution process. The people involved at these meetings are the operational staff that are directly involved in the project. Staff from the Construction Design Staff, Design Project Manager, and the Design Consultant should be included. This group is empowered to resolve Design Issues, alter construction or the project and assign responsibility for the Design Issue, this issue moves immediately to LEVEL TWO.

(1) A - Find the solution first, focus only on the problem and resolution of that problem. In the event that this group agrees on the solution, they then proceed to cause, responsibility and financial implications. In the event that the Construction Division Staff and the Design Project Manager do not agree on a solution to the Design issue, this issue moves immediately to LEVEL TWO.

(2) B - After the solutions is agreed upon and information is available, focus, with the same people, on the cause, responsibility, and financial implications. This step begins with an exchange of information and then meetings/negotiations. In the event that agreement is reached on these matters, the Design unit leader processes letter of agreement to be signed by both parties. Design unit leader signs for MDOT.

2. MDOT will be represented by the Design and Construction Divisions at these meetings. All decisions must be completely agreed upon by the same representatives of both divisions. The dollar limits for decisions authority are the same as those established by the State Administrative Board and the State Transportation Commission for the Construction Contract "Overrun & Extra" process.

a) LEVEL TWO

This level of meetings is an appeal level and includes the upper management of the same three organizations, the Construction Division, Design Division and the Design Consultant. These meetings shall include the staff from the LEVEL ONE meeting for informational purposes.

(1) A - In the event that agreement on the responsibility is not reached in LEVEL ONE, the decision is appealed to upper level management within MDOT and the consulting firm. The staff involved in LEVEL ONE are not involved in the decision at this level; however, in the event that such agreement cannot be reached, MDOT alone will decide on the appropriate solution.

(2) B - In the event that the agreement on the responsibility is not reached in LEVEL ONE, the decision is appealed to upper level management within MDOT and the consulting firm. The staff involved in LEVEL ONE are not involved in the decision at this level; however, they are included in this process for information purposes. In the event that the Consultant and MDOT agree on responsibility, the Engineer of Design processes a letter of agreement to be signed by both parties. In the event that agreement regarding responsibility is not reached at this level, the issue is appealed to LEVEL THREE.

b) LEVEL THREE

In the event that some or all of the dispute is not resolved in LEVEL TWO, the Design Resolution Process will move to LEVEL THREE. The Department and Design Consultant will notify the preselected PANEL that their services are required. The PANEL will first function as mediators, that is, the PANEL will attempt to guide the Department and the Design Consultant towards an agreement. Later the PANEL may function as arbitrators. Issues that are not resolved in a reasonable time, as determined by the PANEL, will be decided by the PANEL.

3. The PANEL will first function as mediators to the people involved in LEVEL TWO. Whatever issues are not resolved in a reasonable time, as determined by the Dispute Resolution Process, the PANEL will assume the role of arbitrators and render a decision.
4. Upon the conclusion of the Dispute Resolution Process, the Design Project Manager will do one of the following in accordance with the results of the Dispute Resolution Process:
   a) The MDOT will prepare a payment to the Design Consultant for a share of their costs incurred for work performed during the Dispute Resolution Process, in accordance with their determined share of responsibility; or
   b) The MDOT will prepare a billing to the Design Consultant for their share of the MDOT costs incurred for work performed during the Dispute Resolution Process, plus their share of any increased costs of construction, in accordance with the Design Consultant's determined share of responsibility.

VI. **Responsibilties and procedures**

A. Actions prior to entering into Level 1 of the Dispute Resolution Process:

1. **Step 1** - (action to be taken by the Engineer of Design and the Design Consultant)
   Select a Mediator/Arbitrator(s) to be on a stand-by basis for the project as follows:
   a) For projects that are considered less expensive and/or low risk, the Department and the Design Consultant will mutually select one Mediator/Arbitrator.
   b) For projects that are considered more expensive and/or higher risk, the Department and the Design Consultant will select one Mediator/Arbitrator. Each such Mediator/Arbitrator must be acceptable to both the Department and the Consultant. These people are selected and agreed upon during the price negotiation process prior to contract/authorization execution.
2. **Step 2** - (action to be taken by the Engineer of Design and the Design Consultant)
   Agree to follow this Dispute Resolution Process, the terms of which are incorporated into the contract between these parties for the design of the project .
3. **Step 3** - (action to be taken by the Construction Division Staff)
   Responsible for the supervision of the construction of the project. In the course of such activities, the Construction Division Staff may encounter Design Issues. Upon the discovery of a potentially material Design Issue, the Construction Division Staff immediately contacts the Design Project Manager and other Construction Division Staff as necessary.
   a) (action to be taken by the Construction Division Staff)
      In the event that the Construction Division Staff decides in their professional opinion that the Design Issue is material, the Construction Division Staff immediately notifies the Design Project Manager. This procedure continues with step five; or
   b) (action to be taken by the Construction Division Staff)
      In the event that the Construction Division Staff decides that, in their professional opinion, the Design Issue is not material and can be resolved without assistance from the Design Project Manager or the Design Consultant, the Construction Division Staff documents the decisions, changes, etc. and immediately provides copies to the Design Project Manager. This procedure continues in STEP FOUR.

4. **Step 4** - (action to be taken by the Design Project Manager)
   Reviews decisions and changes from the Construction Division Staff. Provides copy to the Design Consultant. In the event that the Design Project Manager agrees with the actions of the Construction Division Staff, the Design Project Manager so notes and files. In the event that the Design Project Manager and/or the Design Consultant does not agree with the decisions, changes, etc., of the Construction Division Staff, immediately notifies the Construction Division Staff and initiates the Dispute Resolution Process in step eight.
5. **Step 5** - (action to be taken by the Construction Division Staff and Design Project Manager)
   The Construction Division Staff and Design Project Manager jointly decide the severity of the Design Issue, the extent of documentation to be required and the necessity of the involvement of the Design Consultant in the resolution of the Design Issue.
6. **Step 6** - (action to be taken by the Design Project Manager)
   Contacts the Design Consultant and requests their involvement in the Dispute Resolution Process.
7. **Step 7** - (action to be taken by the Construction Division Staff, Design Project Manager, the Design Consultant)
   Mutually decide the necessity of involving the Construction Contractor, Traffic and Safety Division, Material and Technology Division, or Maintenance Division in the Design Issue.

B. Level 1 of the Dispute Resolution Process
   1. Level one A
      a) **Step 8** - (action to be taken by the Construction Division Staff, Design Project Manager, the Design Consultant, and others as requested)
         The Construction Division Staff and the Design Project Manager, with the assistance of the Design Consultant, meet to resolve the Design Issue. One of the first orders of business will be to determine whether the participation of any other organizations is necessary. The focus of these meetings will be to resolve each Design Issue with the objective of minimizing the impact on the construction of the project. Discussion on the subject of responsibility for a Design Issue will not occur until that Design Issue has been resolved to the satisfaction of the Construction Division Staff and the Design Project Manager.

b) **Step 9** - (action to be taken by the Construction Division Staff, Design Project Manager, and the Design Consultant)

In the event that the Construction Division Staff and the Design Project Manager, with the assistance of the Design Consultants, are not able to agree on a solution to the Design Issue within the necessary time frame, the Design Issue is submitted immediately to LEVEL TWO. The "necessary time frame" is dictated by the individual circumstances of each Design Issue. For example, the urgency increases if construction is being delayed, and more so depending on the cost of the equipment that is idled and the impact on the construction season. The decision on the proper solution of the Design Issue is MDOT's alone. The Design Consultant participates in this as an advisor only. In the event that the Design Consultant disagrees with the selection and proposes a different and less expensive solution, their financial obligation for the higher cost would be determined by subsequent steps of the Dispute Resolution Process.

2. Level one B

a) **Step 10** - (action to be taken by the Construction Division Staff, Design Project Manager, and the Design Consultant)

After a solution is determined for each Design Issue and, if in the "A" phase, the construction of the project has been revised, these meetings shift focus to determining cause, responsibility and financial implications. This determination would include not only the cost of resolving the Design Issue but also any resultant increased cost of construction.

b) **Step 11** - (action to be taken by the Construction Division Staff, Design Project Manager, and the Design Consultant)

Each prepares "Statement of the Facts." These statements are intended to fully disclose the events and provide supporting documentation from the perspective of each organization. As a result, the participants will better understand each other's position in order to better prepare for the Level one-b meeting. These statements are distributed to each organization participating in the resolution process plus the Assistant Attorney General in Charge - Transportation Division.

c) **Step 12** - (action to be taken by the Construction Division Staff, Design Project Manager, and the Design Consultant)

Meet to determine the cause, responsibility and financial implications of the Design Issues.

d) **Step 13** - (action to be taken by the Design Project Manager)
Processes a letter of agreement setting forth the cause, responsibility and financial implications of the Design Issues. This letter is signed by the principal representative of the Design Division, Construction Division and the Design Consultant.

e) **Step 14** - (action to be taken by the Construction Division Staff, Design Project Manager, and the Design Consultant)
In the event that the LEVEL ONE- B meetings do not resolve the cause, responsibility and financial implications of the Design Issues each participant prepares "Position Paper" Disclosing the events, supporting documentation and position for submittal to LEVEL TWO.

C. Level 2 of the Dispute Resolution Process

1. Level two A

a) **Step 15** - (action to be taken by Engineer of Design, District/Region Engineer and a Principal of the Design Consultant)
Meet to resolve the Design Issue. The focus of these meetings will be to resolve each Design issue with the objective of minimizing the impact on the construction of the project. Discussion on the subject of responsibility for a Design Issue will not occur until that Design Issue has been resolved to the satisfaction of the Engineer of Design and the District/Regional Engineer. Staff involved in the LEVEL ONE meetings will be included in LEVEL TWO for information purposes.

2. Level two B

a) **Step 16** - (action to be taken by Engineer of Design, District/Region Engineer and a Principal of the Design Consultant)
After a solution is determined for each Design issue and, if an the "A" phase, the construction of the project has been revised, these meetings shift focus to determine cause, responsibility, and financial implications. Staff involved in the LEVEL ONE meetings will be included in LEVEL TWO for information purposes.

b) **Step 17** - (action to be taken by Engineer of Design, District/Region Engineer and a Principal of the Design Consultant)
Each prepares "Statement of the Facts." These statements are intended to fully disclose the events and supporting documentation from the perspective of each organization. These statements are distributed to each organization participating in

the resolution process plus the Assistant Attorney General in Charge - Transportation Division.

c) **Step 18** - (action to be taken by Engineer of Design, District/Region Engineer and a Principal of the Design Consultant)
Meet to determine the cause, responsibility, and financial implications of the Design Issues.

d) **Step 19** - (action to be taken by Engineer of Design)
Processes a letter of agreement setting forth the cause, responsibility, and financial implications of the Design Issues. This letter is signed by the Engineer of Design, the District/Region Engineer and the Principal of Design Consultant.

e) **Step 20** - (action to be taken by Engineer of Design, District/Region Engineer and a Principal of the Design Consultant)
In the event that this group is not able to agree on the cause, responsibility and financial implications, the unresolved issues move to LEVEL THREE.

D. Level 3 of the Dispute Resolution Process

1. **Step 21** - (actions to be taken by the Engineer of Design and the Principal of the Design Consultant)
Each contact the two Mediator/Arbitrator(s) that were previously selected for this project.
2. **Step 22** - (actions to be taken by the Mediator/Arbitrator(s))
These two M/As select a third M/A to complete three person panel.
3. **Step 23** - (actions to be taken by the Panel)
Mediates with the Engineer of Design, the District/Regional Engineer and a Principal of the Design Consultant. Staff involved in the Level 1 meetings will be included in Level 2 for information purposes. The purpose of these sessions is to assist MDOT and the Design Consultant to reach agreement on the cause, responsibility and the resultant financial implications of the Design Issues.
4. **Step 24** - (actions to be taken by the Panel)
At such time that the Panel determines that sufficient time has passed, and that adequate progress is not being made, the Panel will act as arbitrators and render a decision.
5. **Step 25** - (actions to be taken by the Design Project Manager)
Depending on the outcome of the Dispute Resolution Process the Design Project Manager performs one of the following steps:

a) Prepares a payment to the Design Consultant for a share of their costs incurred for work performed during the Dispute Resolution Process, in

accordance with their determined responsibility; or

b) Prepares a billing to the Design Consultant for their share of the cost of resolving and resulting from Design Issue. This cost would include MDOT's cost of participating in this process, construction delays/idled equipment, Construction overruns or extras, and Construction re-work.

Ralph J. Stephenson, P. E., P.C.
Consulting Engineer

Case Study #1 - The Battle of the Trout River Bridge

Project description:

Replacement of a rural area structural steel bridge spanning 80 feet. Present structure is two lanes.

Two lanes must be maintained to full traffic at all times during construction. Existing bridge foundation to be renovated and reused for new structure. Bridge spans the Trout River flowing at about 6 knots, carrying clean water. Maximum depth of water at bridge site about 7 feet. New construction includes a complete reconstruction of bridge approaches.

The bridge is in heavy daily use particularly from 6:30 A.M. to 8:30 A.M, from 12:00 noon to 1:30 P.M., and from 4:30 P.M. to 6:00 P.M.

The new structure is to consist of three new concrete paved lanes of which two are to make use of the existing structure. The third lane is to be built on a new steel frame addition with contiguous roadway surface matching rebuilt decks. Total allocated construction time 9 months.

Nature of issue:

Status of job when dispute arose - Design construction documents about 30% complete.

J. J. Royal and Sons, design engineers, claim that the design conditions which require maintenance of two traffic lanes at all times has caused them considerable design cost overrun from their estimated hard money fee. They further claim that the design scope of work did not clearly identify the need for two full lanes of traffic at all times and has particularly affected design of the approaches.

J. J. Royal is requesting the Highway Department reimburse them for the incurred and the expected overrun costs In addition they are requesting an increase in design time of four months. The time extension would move start of construction from the expected start date in early March to mid July. Time of construction due to the design delay would be extended by about 5 months.

Ralph J. Stephenson, P. E., P.C.
Consulting Engineer

Case study #2 - Confusion Along Franklin Street

Project description:

Reconstruction of 2 miles of urban State Highway 102 (Franklin Street) in the town of Mission, a community of 27,000 people.

The Franklin right of way contains 3 lanes of badly deteriorated concrete roadway which is to be removed along with the existing subbase, and completely rebuilt to 4 concrete lanes. The project has been delayed by community opposition for about 10 years during which time the pavement has become almost impassable.

During the 18 months of construction, traffic is to be detoured through adjoining residential and secondary business streets. Construction subsurface is largely rock and most utility work will have to installed using blasting and heavy lifting and transport vehicles.

No traffic is to be allowed on new road surface until 2 adjoining lanes have been constructed, cured, fully signed and temporary protective barriers are in place. At that time 2 lanes can be opened to limited traffic.

Nature of issue:

Design work is about 60% complete when an intermediate design review reveals that many of the existing utilities shown on the design documents have been incorrectly located from faulty and superseded record drawings still on file in the City Engineer's office. FRI Inc., the design team, claims they will have to completely redo the 2 miles of utility systems that allows servicing of the new roadway and the adjoining properties, many of whose utilities must be relocated. Nobody at FRI or with the Department of Transportation seems to know how the faulty reference documents came to be used as a design base.

FRI Inc. has requested the Highway Department to reimburse them for all expenses connected with correcting the erroneous work and to extend the length of their design period for two months.

There is serious doubt on the part of the Highway Department staff about the scope of revisions to FRI's current design that will be required to correct the locations and flow characteristics. Considerable confusion also exists about who was to blame for using the faulty reference documents, and much finger pointing is transpiring between the Department and the FRI staff.

Case study #3 - The Unexpected New Plant

Project description:

Construction of a new $25 million interchange at the new major entrance and exit to and from Grand Island Road.

The location is currently a very busy at-grade intersection and will have to be built under part to full traffic conditions. The Highway Department has settled on two structural schemes which are to be evaluated by their design consultants for the project, Marsh and White, Consulting Engineers.

The evaluation required consists of a cost-benefit analysis of a cast-in-place structural system as compared to a precast system. The analysis is to be predicated on a preliminary design prepared by the Department staff and is to be refined further as needed by Marsh and White. The system selected will form the basis of a final design to be executed by Marsh and White.

Construction of the new interchange is to start within the next 16 months.

Nature of issue:

The cost-benefit analysis is about 90% complete according to the Marsh and White project manager. However they have found that the estimated costs as of today will be strongly affected by the entrance into the local market of a national precast firm that plans to build a new plant about 5 miles from the interchange site.

A reevaluation of the costs taking this new factor into account will require about 500 hours of design and evaluation time since there is an added risk factor taking into account the probability that the plant will or will not be built. The Highway Department is balking at the extra charge because some of the staff feel this kind of evaluation is what they have paid Marsh and White to do and the risk of the work should be absorbed by Marsh and White.

The design consultant has already spent about 100 hours of what they claim is extra time in evaluating this added influence on the project.

Case study #4 - An Expensive Bike Ride

Project description:

Construction of a new bike path along the I 48 Freeway.

The bike path is 32 miles long, 10 feet wide and is to be paved with deep strength asphalt paving. Three rest stops, specifically designed to service pedal bikers are to be built along the path. The construction contract includes all rest stop buildings, site improvements, bridges, and miscellaneous structures to be constructed along the 32 mile path.

Construction time is 14 months and construction was begun on the projected start date of July 5th. The construction contractor is Eagan Construction and they are working from design plans prepared by Logan Engineering for the Highway Department. It is now July 28 and Eagan is about to start earthwork for the first major structure on the path, a 40 foot suspension bridge over Biker's Creek, and construction of the adjoining rest stop facility.

Nature of issue:

Eagan has encountered unexpectedly poor soil conditions at the bridge and rest stop site. They ask for additional information before proceeding. A quick check of the design documents shows that Logan Engineering had used subsoil information from a superseded soils report furnished them by the Highway Department's soils laboratory. Logan claims the report was not identified as being superseded and was represented to them as current and accurate.

The actual soil conditions will obviously require considerable redesign of the bridge and the foundations for the rest stop. Logan is told they will have to do this redesign at their cost. In addition they may be assessed a charge for the delay to construction.

Case study #5 - The Underground Conflict

Project description:

Reconstruction of 2.0 miles of urban state highway in the city of Janesville, a Lake Superior coastal community.

The existing 3 lanes of pavement is to be removed down through the existing sub-base and rebuilt to a 5 lane cross section. Due to political considerations and public pressure the construction time schedule for the project was compressed from 10 months to 6 months, requiring that some of the construction work proceed before contract documents were totally complete. Traffic during construction is to be maintained by part-width construction.

The design consultant, Jones & Associates agreed that they would be able to survey the project, design and complete the necessary working drawing to start construction in March. The contract documents needed to begin work in the field were completed as promised. However due to funding issues the project was put on hold for a month. The money was available in June and the project was let to Ace Construction. Due to the time constraints and disruptions no full document check was made.

Nature of issues:

During construction several discrepancies surfaced. These included:

1.) A proposed storm sewer location conflicted with an existing 18" sanitary sewer. Elevation modifications were needed to achieve needed clearances.

2.) The elevation of an existing pedestrian tunnel was not shown on the drawings. The tunnel prevented constructing a 42" storm sewer above it.

3.) Detailed stationing, grades, and centerline bearings were not shown on the drawings for 3 major intersections. This required additional field surveys and design time.

4.) Additional trenching and bituminous paving was required due to mismatch of cross sections and actual conditions. Cost to contractor was $60,000 and a proven delay of 10 working days.

The job is now being closed out. To date the DOT has paid the extra costs and is reviewing claims by the designer and the contractor for additional time and general conditions costs. Their problem is to decide who is to pay for the problems caused by the discrepancies.

Ralph J. Stephenson, P. E., P.C.
Consulting Engineer

Case study #6 - The Metric Lift Span

Project description:

Construction of a new high lift bridge over the Technical River in Metric, a medium sized city of 180,000 population in southern Michigan.

The existing 50 year old bascule span over the Technical River has finally broken down and has been judged not repairable by the Department. The river crossing will be detoured to an alternate route 2 miles north and a new lift span will be installed.

Department standards on projects of this size and importance require all dimensioning to be in metric. The construction documents have been prepared by Tarley Brothers, bridge experts with nearly 100 years of experience, and a spotless reputation. The contractor, Lilting Construction, has an equally good record and the project looks to be off on a good start.

Nature of issue:

Early in the construction Lilting has found that the lift bridge mechanisms to be designed by their equipment sub contractor cannot be designed in metric without major changes to the contract. For instance linkages, bolts, screws, nuts, motors and many other components will have to manufactured elsewhere than in the United States. This will have a cost and time impact on the project.

The investigation made during the design period by Tarley and the DOT indicated that these components and the equipment was available in the U. S. However the low bid by Lilting was based on a proposal made by a supplier which was not consulted during the design period.

Presently the job is in the first month of construction and Lilting has had to shut down work on the foundations and abutments due to lack of embed information.

Ralph J. Stephenson, P. E., P.C.
Consulting Engineer

SECTION 4

REFERENCE MATERIAL

Standing Neutral 2 Seminar

Work Book

date printed: 7/4/97

2. Professional Service Contract Characteristics

Ralph J. Stephenson PE
Consulting Engineer

A. Agreement premises

1. Totally negotiated - broad multivalue competition
2. Partially qualified - moderate multivalue competition
3. Totally qualified - narrow multivalue value competition

B. Authority limits

1. As agent
2. As limited agent
3. As contractor

C. Payment methods

1. Fixed total including payroll + overhead + profit + (expenses)
   a. Expenses included
   b. Expenses separate
2. (Payroll costs) x multiplier + fixed fee + expenses
   a. Limit on
   1.) Payroll hours
   2.) Expenses
   b. No limit on
   1.) Payroll hours
   2.) Expenses
3. (Payroll costs) x multiplier for payroll costs & overhead
   a. Expenses included
   b. Expenses separate
4. % of total construction cost
   a. Expenses included
   b. Expenses separate

D. Scope of services

1. Single responsibility
   a. All in house
   b. In house & outside consultants
2. Split responsibility
   a. In house, client & other prime consultants
   b. In house & other prime consultants
   c. In house & client

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3. Construction Contract Characteristics

Ralph J. Stephenson PE
Consulting Engineer

A. Agreement premises
1. Totally negotiated - broad multivalue competition
2. Partially qualified - moderate multivalue competition
3. Totally qualified - narrow multi valuevalue competition

B. Authority limits
1. As full agent
2. As limited agent
3. As contractor

C. Payment methods
1. Fixed cost (hard money)
2. Time & material + fixed fee
   a. Limit on
      1.) Time & material (gmp) with no shared savings
      2.) Time & material (gmp) with shared savings
   b. No limit on time & material
3. Time & material + % fee
   a. Limit on
      1.) Time & material (gmp) with no shared savings
      2.) Time & material (gmp) with shared savings
   b. No limit on time & material
4. Conditional payments or penalties
   a. Incentive/disincentive
   b. Liquidated damages

D. Scope of services
1. Single responsibility - in house & subcontractors
   a. All trades
      1.) Provide management
      2.) Provide design
      3.) Provide construction labor
      4.) Provide construction materials
   b. Limited trades
      1.) Provide management
      2.) Provide design
      3.) Provide construction labor
      4.) Provide construction materials
2. Split responsibility - in house, subcontractors & other primes
   a. All trades in contract
      1.) Provide management
      2.) Provide design
      3.) Provide construction labor
      4.) Provide construction materials
   b. Limited trades in contract
      1.) Provide management
      2.) Provide design
      3.) Provide construction labor
      4.) Provide construction materials

Ralph J. Stephenson ,P.E., P.C.
Consulting Engineer

General Steps Taken in Processing A Construction Claim

Review and study draft only

The starting point of most construction related claims is when one of the parties involved feels they have been harmed in some manner by the actions of another involved party. Of course there are many variations on this basic theme. Due to the number, complexity and combinations of circumstances under which a contested claim may arise, let us first take a specific set of project delivery criteria and examine the steps that might be followed in resolving a typical dispute.

Assumptions - The project is a hard money, fixed time job in which the construction firm doing the work is considered a prime contractor, with a conventional construction contract with the owner. The owner has had his design team prepare a relatively complete set of contract documents from which contractor selection was made by competitive bidding from a short list.

Further assume that at some point in the construction process the owner takes an action that seems to interfere with the right of the contractor to enjoy a maximum profit from his construction efforts (sometimes called maladministration), while, in the contractor's opinion, he is still performing in accordance with his contract obligations.

To describe an instance where this could actually happen, suppose the contract calls for completion of the total facility by September 1st with no specified intermediate dates for owner occupancy of the facility. Part way through the job the owner makes it known to the contractor that he wants the upper floors delivered by July 1st, but will still take the lower floors on September 1st. The owner says this should be at no additional cost to him since the contractor was planning to be done about that time anyway. The contractor proceeds to try and accommodate the owner.

Usually in a good contractor/owner relation a matter of this nature can be worked out amiably and to the mutual operational and financial satisfaction of both parties, the owner and the contractor.

However in this case, assume the revisions apparently cause considerable disruption of sequencing, delivery commitments and manpower assignment to the project over what had been planned by the contractor. An effort to resolve the matter equitably for both parties has been made and was unsuccessful. Clearly, where the financial and other losses of the contractor, real or imagined, is sizable, another method of approaching a settlement must be found.Now, the first step in a formal resolution takes place - making a decision on the preferred or specified method to use to settle. Usual methods are:

- Administrative settlement
- Mediation

- Arbitration
- Modifications or combinations of the above

Usually the preferred solution by most parties to a dispute is by some type of administrative settlement through discussion among the operational and executive staffs of the owner and the contractor. Where this proves difficult or impossible, succeeding steps are usually taken.

For our example let us start by considering litigation.

Litigation is the settlement of a dispute through the efforts of a third party operating under legal rules governing the presentation, consideration and judgments rendered in the case. It is to be emphasized that the steps outlined below are not to be considered the formal legal steps to be taken, but within the writer's experience are steps most contested claims in which he has been involved with follow to their resolution.

There may be considerable variation in the sequence in which the steps are taken. However at some time in the process each of the following actions must be considered, and if appropriate, taken. The steps are lettered for convenience of reference, but are not necessarily listed in the sequence in which they may be taken.

• **Step A** - The need for a claim emerges and the parties involved discuss the matter. There is either a resolution, a decision to pursue the matter further administratively, or a decision to file for formal action resulting from the discussions.

• **Step B** - If a resolution is not achieved, the contractor will probably prepare additional submittal material identifying the circumstances, the effects, the impacts and the approximate reimbursement felt due him as a result of imposition of other than contract conditions on his work.

• **Step C** - This submittal material is then presented by the contractor to the owner and further discussions are held. These hopefully will lead to an administrative settlement. If not, the contractor may file through his legal advisors, a request for one of several kinds of formal third party decision actions, such as mediation, arbitration or litigation. The discussion in this paper deals primarily with the technical steps usually followed in litigation.

• **Step D** - The contractor through his legal advisors, then actually files for litigation. This is a complex and formal process, a description of which is beyond the scope of this essay.

• **Step E** - As the petition for litigation is being filed, the contractor selects the issues to be addressed that have contributed to the claim, and the level of documentation he and his technical and legal counsel feel appropriate.

• **Step F** - If a relatively low level of documentation has been deemed adequate, since

the causes and proof of the contested claim issues seem apparent, the contractor's staff will usually assemble the claim file and estimate the cost of the damages caused by the owner's apparent interference.

If the nature of the claim is such that many complex and obscure factors have contributed to the claimed loss, or the proof of loss appears excessively complex, the contractor may call in an outside qualified and objective expert to help assemble the documents, the facts and the amounts to be claimed.

• **Step G** - The backup documentation concerning correspondence, transmittals, estimates, change processing, directives, and other pertinent historical records is assembled into a data system which allows the location, printing, abstracting and relative rapid analysis of groups of documents or records relating to any subject, chronology, organization or other classification system desired.

• **Step H** - Concurrent with preparation of detailed document files, the discovery of evidence by both parties is pursued. This discovery period is often characterized by demands for what are called interrogatories and depositions. It is to be emphasized that the discovery period in litigation is primarily to uncover evidence, its source, its existence and its nature.

Because of the often difficult nature of activities during discovery in the litigation process it is usually an advantage for the contractor to have his outside experts work directly for the legal advisor. This may provide some protection to the consultant work product and thus shield it from those not friendly to the contractor.

• **Step I** - As discovery proceeds, the parties to the dispute should be, and usually are, trying to agree on an administrative settlement as the various claims and counter claims statements emerge.

Also, during the discovery period face to face attempts to uncover evidence are accomplished most commonly by deposition. The deposition consists of testimony and questioning, again aimed at evidence location. The deposition period will usually continue over a period specified loosely by the governing judicial body in the matter.

From depositions, additional documentation is found, and if wanted by a party to the dispute, subject to acquisition by the subpoena process. This process usually does not allow material prepared by a consultant for an attorney to be acquired through subpoena. This is the main reason for having the legal consultant work directly for the legal consultant and prepare confidential data and analyses for the attorneys. This material is sometimes known as a protected work product.

An important feature of the discovery/subpoena process is that few if any documents prepared during the course of the job can be totally shielded from acquisition by the opposition. Therefore there is a strong need for good, intelligently written documentation of the job during its construction.

• **Step I** - At some point, usually determined by the governing legal body, the discovery period is declared closed and formal legal hearings now begin. By this time a selection and settlement on the type of litigation decision making process has been made. The two most common methods are the bench trial and the jury trial.

A bench trial is conducted by a judge only, and he makes the decision in the matter after the hearings have been completed. The jury trial uses a jury of lay individuals to hear the testimony and to judge the merits of the case.

In technical matters, such as construction, it is most often found that a bench trial is preferable to the jury trial due to the difficulty in presenting understandable evidence to a group of lay people, who often are not acquainted either with the legal process or the design and construction industry.

• **Step K** - During the formal trial process the parties to the contested claim present their respective views in arguments, displays of evidence, direct questioning and cross examination of witnesses. The judge, in a bench trial, or the jury, in a jury trial, listens to the presentation of evidence until the arguments are exhausted, and both sides or the judge calls it quits.

During the hearing process many people may be called to the witness stand to answer questions. Those who have given depositions may be closely questioned on statements made by them during the deposition, particularly in relation to additional information that has come out during subsequent depositions, interrogatories or in court.

• **Step L** - Once the governing legal body declares the trial completed, the case is closed and either the judge, in a bench trial, or the jury, in a jury trial, retire to review the evidence, think about the testimony and the evidence, and to make a decision from the choices presented during the trial.

• **Step M** - When a decision as to the relative merits of each party's case is reached by the judge or the jury, the decision is announced and the settlement of claim is decided on by the governing legal body. This then closes out the case as originally heard and judged upon. From this point on there are several legal actions possible that could reopen the matter of the contested claim and its merits. A discussion of these is beyond the scope of this paper.

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About Ralph J. Stephenson, P.E.

Ralph J. Stephenson, P.E., is an engineering consultant who has a diversified background in land planning , facilities location, building design, and construction.

Mr. Stephenson earned degrees at Lawrence Institute of Technology (Bachelor of Science, Mechanical Engineering), and Michigan State University (Master of Science, Civil Engineering). He has been associated with such firms as Smith, Hinchman, and Grylls, Victor Gruen Associates, Benjamin Schulz Associates, and the H. F. Campbell Company. With the latter three organizations Mr. Stephenson occupied executive positions as vice president. In 1962 he started his own consulting practice, specializing primarily in providing operational and management direction to owners, designers, and contracting firms.

He is a registered professional engineer in Michigan, Wisconsin, Illinois, Indiana, Ohio, Pennsylvania, West Virginia, Virginia, Florida, and Minnesota. He is a member of the Engineering Society of Detroit, the Michigan and National Society of Professional Engineers, the American Planning Association, the Detroit Area Economic Forum, and the Mid-America Economic Development Council.

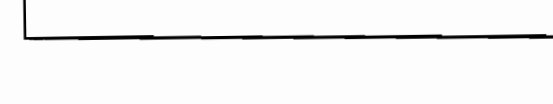
Since 1952 Mr. Stephenson has been involved at middle and upper management levels in the planning, programming, design, construction, and operation of several billion dollars worth of construction related projects. These include work on industrial, commercial, and institutional programs throughout North America.

Mr. Stephenson has chaired more than 30 project partnering charter meetings for both public and private sector projects, and has lectured extensively on the subjects of alternative dispute resolution and partnering. He has also recently completed a book on Design and Construction Project Partnering for John Wiley & Sons.

He has also taught hundreds of technical and management seminars in the United States, Canada, and Europe and is the author of several magazine articles and is the co-author of a book on critical path method. His broad experience has given him an understanding of the nature of small, medium, and large size companies, and of the need to solve their management problems through creative, systematic, and workable approaches.

ADR Training - Mediation Neutrals

John R. Spittler, PE
PMA Consultants LLC



Bruce Tuckman's Phases of Group Development

Forming
Norming
Storming
Performing

Forming

- Trust, orientation, what is going to happen? What will the experience be like?
- Characteristics:
  - anxiety
  - search for structure
  - silence
- Leader should:
  - explain purpose and goals
  - allow members to get to know each other
  - be aware of nonverbal behaviors

Norming

- Norms are how the group will make decisions, structure participation, confront problems, etc.
- Characteristics:
  - power struggles
  - silence
  - frequent logic changes
- Leader should:
  - encourage
  - redirect questions
  - exercise positive listening
  - build consensus

Storming

- Increased conflict from openly confronting problems, increased participation, less reliance on leader, testing norms
- Characteristics:
  - challenges to leader
  - polarization of members
  - fight or flight behavior
- Leader should:
  - legitimize conflict -- examine response to challenges
  - reinforce resolution efforts
  - acknowledge conditions for change
  - NOT be authoritarian

Performing

- Productive groups monitor own accomplishments, use a range of task and process behaviors, and are goal oriented while attending to the members' interpersonal needs
- Characteristics:
  - increased interpersonal awareness
  - active participation and conflict resolution
  - discussion of here and now information
- Leaders should:
  - maintain group skills by being prepared for temporary digressions
  - provide feedback, assist and reinforce

Model Agreement for Parties and Neutral

- Confidentiality
- Conflicts
- Compensation
- Duties/Obligations

Model Form Neutral Findings and Recommendation

- Statement of Dispute
- Analysis and Findings
- Specific Recommendations

Mediation: Why it Works

- Voluntary
- Private and Confidential
- Non-binding
- Flexible and informal
- Less time consuming and costly
- Preserves and maintains relationships

Mediation: How it Works

- **Opening Statement** - role clarification, ground rules, disclosures
- **Disputant's Statement of Facts** - telling the story without interruption
- **Discussion** - frame issues; identify interests, positions, needs
- **Caucus** - weigh and consider options; explore concessions and solutions; determine overlaps
- **Negotiation and Decision Making** - potential solutions; reality check; evolution of settlement
- **Closure** - summarize agreements; memorialize agreements; follow-up

Mediation: Facilitative v. Evaluative

- Facilitative
  - help parties clarify and communicate
  - invent options for mutual gain
- Evaluative
  - help parties clarify factual and legal issues driving dispute
  - is more interventionist
  - runs some risks

APPENDIX A
FORM AND INSTRUCTIONS FOR
DISPUTES REVIEW BOARD FINDINGS AND RECOMMENDATIONS

I. INTRODUCTION

This section should contain the following information about the Contract:

- Name, Number, and Effective Date of Contract
- General Scope of Contract
- General Contract Background Information (as appropriate to facilitate the parties' understanding of these Findings and Recommendations)

II. STATEMENT OF DISPUTE

This section should include a description of each Dispute(s) as presented by each party. It should set forth each element of the relief requested (e.g., adjustments to Contract Time or Contract Price) and the basis of each claim and each defense maintained by the parties.

III. ANALYSIS AND FINDINGS

This section should include, where appropriate, the DRB's findings on the merit of each material element of the claim(s), and, if merit is found, (a) each material element of cost constituting an adjustment to the Contract Price, (b) each material element of time constituting an adjustment in Contract Time, and (c) each material element of any other relief found due to a party. This section should provide the analysis of, justification for, and findings supporting the DRB's recommendations in Section IV. This section should include where appropriate references to contractual, statutory, or other applicable authority relief upon by the DRB in making its findings and recommendations.

IV. RECOMMENDATIONS

This section should contain the DRB's specific recommendation(s) for resolution of the dispute. The recommendation(s) should be consistent with and follow from the analysis and findings set forth in Section III.

V. DISSENTING OPINION

This section should contain any dissent to the findings and recommendations made by the majority of the DRB. Any dissent should explain the dissenting Member's reasons for disagreeing with the findings and recommendations made by the majority of the DRB.

VI. CERTIFICATION

The following certification shall be included above the DRB members' signature(s):

"I certify that I participated in all of the meetings of the DRB regarding the dispute indicated above and concur with the findings and recommendations made in Sections III and IV except as I may have stated in my dissent in Section V."

_____

Chairperson

[Name]

_____

Member

[Name]

_____

Member

[Name]

Date: _____

§ 11.10 Contract with Neutrals

A cornerstone of self-administered ADR is the parties' agreement to enlist a neutral. Form 11–7 or adaptations of it should be used by the parties and the neutral once the neutral has been engaged to address critical concerns such as confidentiality, conflicts, and compensation.

FORM 11–7
MODEL AGREEMENT FOR PARTIES AND NEUTRAL IN ADR PROCEEDING

Agreement made _____, 19___

between _____

represented by _____

and _____

epresented by _____

nd _____
he Neutral)

A dispute has arisen between the parties (the "Dispute"). The parties have agreed to participate in a [mediation] [minitrial] [arbitration] proceeding (the "Proceeding") under the [CPR Model Mediation Procedure for Business Disputes] CPR Model Minitrial Procedure] [CPR Non-Administered Arbitration Rules], [as modified by mutual agreement] (the "Procedure"). The parties have chosen the eutral for the Proceeding. The parties and the Neutral agree as follows:

A. Duties and Obligations

. The Neutral and each of the parties agree to be bound by and to comply ithfully with the Procedure, including without limitation the provisions regard- g confidentiality.

The Neutral has no previous commitments that may significantly delay the expeditious conduct of the proceeding and will not make any such commitments.

The Neutral, the CPR Institute for Dispute Resolution ("CPR") and their employees, agents and partners shall not be liable for any act or omission in connection with the Proceeding, other than as a result of its/his/her own willful misconduct.

B. Disclosure of Prior Relationships

. The Neutral has made a reasonable effort to learn and has disclosed to the

the Neutral's firm have had with the parties or their law firms within the past five years, including all instances in which the Neutral or the Neutral's firm served as an attorney for any party or adverse to any party; (b) any financial interest the Neutral has in any party; (c) any significant social, business or professional relationship the Neutral has had with an officer or employee of a party or with an individual representing a party in the Proceeding; and (d) any other circumstances that may create doubt regarding the Neutral's impartiality in the Proceeding.

2. Each party and its law firm has made a reasonable effort to learn and has disclosed to every other party and the Neutral in writing any relationships of a nature described in paragraph B.1. not previously identified and disclosed by the Neutral.

3. The parties and the Neutral are satisfied that any relationships disclosed pursuant to paragraphs B.1. and B.2. will not affect the Neutral's independence or impartiality. Notwithstanding such relationships or others the Neutral and the parties did not discover despite good faith efforts, the parties wish the Neutral to serve in the Proceeding, waiving any claim based on said relationships, and the Neutral agrees to so serve.

4. The disclosure obligations in paragraphs B.1. and B.2. are continuing until the Proceeding is concluded. The ability of the Neutral to continue serving in this capacity shall be explored with each such disclosure.

C. Future Relationships

1. Neither the Neutral nor the Neutral's firm shall undertake any work for or against a party regarding the Dispute.

2. Neither the Neutral nor any person assisting the Neutral with this Proceeding shall personally work on any matter for or against a party, regardless of specific subject matter, prior to six months following cessation of the Neutral's services in the Proceeding.

3. The Neutral's firm may work on matters for or against a party during the pendency of the Proceeding if such matters are unrelated to the Dispute. The Neutral shall establish appropriate safeguards to insure that other members and employees of the Neutral's firm working on the Dispute do not have access to any confidential information obtained by the Neutral during the course of the Proceeding.

D. Compensation

1. The Neutral shall be compensated for time expended in connection with the Proceeding at the rate of $_____, plus reasonable travel and other out-of-pocket expenses. The Neutral's fee shall be shared equally by the parties. No part of such fee shall accrue to CPR.

2. The Neutral may utilize members and employees of the Neutral's firm to assist in connection with the Proceeding and may bill the parties for the time expended by any such persons, to the extent and at a rate agreed upon in advance by the parties.

_____
Party

by _____
Party's Attorney

_____
Party

by _____
Party's Attorney

_____
Neutral

Detailed commentary on these provisions appears in CPR's *Non-Administered Arbitration Rules & Commentary,* which contains the model procedures and is available on diskette from CPR at a nominal cost.

CHAPTER 5

MEDIATION*

Eric D. Green

§ 5.1 Introduction

Mediation is a voluntary, nonbinding, private dispute resolution process in which a neutral person helps the parties try to reach a negotiated settlement. It is used frequently in construction cases to resolve disputes that have reached impasse in negotiations. Mediation is well suited to the resolution of construction disputes because of its capacity to produce flexible, cost-effective, speedy, and optimal solutions in complex, technical, multiparty situations.

Mediation and negotiation are the processes favored and most often used by people in the construction industry and by leading construction lawyers to resolve disputes that arise in connection with the design and construction of projects. Undoubtedly, most construction disputes are resolved through direct negotiation, whether the dispute is over how to resolve an interference between the work of two trades, whether a design change should result in additional payment or time to the contractor, or any of the numerous problems, large and small, that arise during the design and construction of a project. Nothing could

* The development of good dispute resolution forms and "best practice" guidelines is an iterative and experiential process. Many individuals at J·A·M·S/ENDISPUTE contributed over the years to the development of these forms, especially Jonathan B. Marks and Michael D. Young. Special mention should be made of James Ryan for his major contribution to the contract clauses and to Carmin C. Reiss for her major contribution to the Mediation Checklist for practitioners.

be built within acceptable time, cost, and quality limits if most conflicts were not worked out directly, face-to-face, by the individuals involved. Most construction experts agree that over 95 percent of construction disputes are resolved in negotiation, often without lawyers ever becoming involved.

Negotiation is the best process for construction disputes because it normally is the fastest, least expensive, most private, most flexible, and most party-empowering process of all the dispute resolution alternatives. But despite its advantages and typical successes, some construction disputes cannot be resolved through face-to-face negotiations. Why? Sometimes there is a failure of communication—misunderstandings or a total lack of communication. Sometimes the parties just do not have sufficient information about the problem, possible solutions, costs, and alternatives to be able to resolve the problem. Sometimes the individuals involved in the dispute are too close to the problem, too emotional, or have too much invested in their own position to be able to see the other side or make adjustments. They become entrenched into firm positions and develop single-solution myopia. Or, they may simply lack the authority to resolve the problem on a basis acceptable to the other parties. In some cases, the parties become locked in primitive positional bargaining stances or display other poor negotiation skills which drive what otherwise might be a successful negotiation into an impasse. And sometimes, even when the communication is good, the information is sufficient, the right people are at the table, and the negotiation skills are excellent, a sincere good-faith disagreement about what happened, who is right, who is wrong, and who will win if the dispute goes to court (or arbitration) causes the parties to assess their no-agreement alternatives in such a way that there is no "zone of agreement"—that is, their predictions of what they will win if they go to court or arbitration are so far apart that it just does not make economic sense for them to settle for anything close to what the other side may offer.

When negotiations reach an impasse, something must be done to change the terms and conditions of the negotiation in order to overcome whatever barrier is preventing successful resolution. The simplest, most effective, and least expensive way to change the negotiation dynamics is to add a mediator to the negotiations. Good mediation builds on negotiation, but adds and subtracts things as needed to break through the negotiation impasse. Depending on what the problems are with the negotiations, mediation will

- Facilitate better communication
- Make sure that the necessary information is obtained and transferred fairly, cost effectively, and timely
- Get the right people to the bargaining table
- Overcome any emotional blockages
- Focus the parties on their problem

- Create a face-saving structure that allows parties to escape from entrenched positions
- Put the negotiation process back on track and keep it there
- Help the parties create new solutions and find "win-win" results, creating and fairly distributing joint gains
- Help the parties reassess their no-agreement alternatives in a more realistic way
- Legitimize the bargaining process.

Of course, not all of these things take place in every mediation. Some disputes require more of one kind of help than another. Thus, the first task of the parties and the mediator is to identify what the principal barriers to a negotiated resolution are and to design a mediation that addresses those specific barriers. This is essentially a *diagnostic and design* function. Very often, success or failure of the mediation process depends on this diagnosis and design being done properly at the front-end of the mediation process. Therefore, it is very important that the mediation be structured to permit if not require up-front discussion and agreement on the design and format of the process, and that the mediation forms and documents support this approach.

§ 5.2 Facilitative Mediation and Evaluative Mediation

Although mediation designs and formats may vary considerably in detail from case to case and mediator to mediator, construction dispute mediations generally may be divided into two categories: (1) Facilitative Mediation; and (2) Evaluative Mediation.

In *facilitative* mediation, the mediator helps the parties reach a negotiated resolution by promoting and furthering better communication (by serving, alternatively, as a communication channel or as a repository of more open, yet confidential communications), helping the parties clarify their interests, priorities, and values, and handling in a safe way any emotion or "people" issues. A facilitative mediator will also help the parties by inventing options for mutual gain, floating suggestions, easing compromises, and running an efficient and fair process. In purely facilitative mediation, the mediator never expresses a view, not even in a subtle way, about the right and wrong—the merits—of the underlying dispute.

In *evaluative* mediation, the mediator helps the parties reach a negotiated resolution by helping them to clarify the factual and legal issues (not interests) driving the dispute (in facilitative mediation, the mediator may want to deemphasize or even fudge the legal and factual issues). The mediator will help the parties get the necessary information about the issues developed and exchanged

and will help them focus on the crux of the dispute by getting them to streamline their arguments. This is all in service of the evaluative mediator's ultimate task of helping the parties to reevaluate their predictions of the likely outcome of an arbitration or trial, so that they more realistically assess their no-agreement alternatives and adjust their "reservation price" (that is, their settle/no-settle break point, usually referred to as the "bottom line") for a settlement.

What kind of mediation is most appropriate for construction disputes? There is no clear answer for all cases. It depends on the nature of the dispute and the barriers to settlement. When the barriers to settlement are communication, information, people, emotion, structure, or process-based, and an interest-based resolution is possible, the dispute is best resolved through facilitative mediation. But when the barrier is a strong disagreement on the likely legal outcome and the parties want a rights-based, principled resolution, evaluative mediation is likely to be necessary. In fact, in most cases a blend of facilitative and evaluative mediation is necessary because there are several barriers to successful negotiation, including a mix of those that are best addressed by facilitative mediation and those that require evaluative mediation. For example, in a typical dispute over a delay claim, change orders, defective work, and changed site conditions, the communication may have broken down, the individuals (especially at the project level) may no longer trust each other, information about the claim, schedule, and impacts may be lacking, and the lawyers and consultants for each side may be advising their clients that they have a 70 percent chance of winning in court. Both facilitation *and* evaluation may be needed in this mediation.

Moreover, complicating the mediation design phase further, there is a wide continuum comprising the degree, or aggressiveness, of the evaluation that may be applied. Evaluation in mediation can range from rather gentle questioning (for example, "Who are your (their) witnesses going to be on that point?) to more aggressive playing devil's advocate ("Yes, but isn't there overwhelming evidence of concurrent delay?"), to a detailed and very specific quantification of the net expected value of the case derived from litigation risk analysis or other analytic tools.

Although traditional mediators emphasize facilitative mediation—indeed, some "pure" facilitative mediators contend that evaluative mediation should not be regarded as mediation at all—it is commonly accepted by principals, lawyers, consultants, and others expert in construction disputes that evaluative mediation will often be necessary to resolve construction dispute impasses. An experienced construction dispute mediator, with the parties, must decide in each case whether, when, and how to evaluate. Thus, it is important that the mediation agreement and other forms used in construction disputes permit the full range of mediation functions and clearly set forth what may occur during the mediation.

This is crucial because engaging in evaluative mediation runs some risks. Evaluative mediation is more interventionist than facilitative mediation and thus diminishes party control and empowerment (benefits of mediation generally).

An evaluation may cause one or more parties to feel, at best, that the mediator does not understand the dispute, or, at worst, is biased. Thus, an ill-timed or clumsily delivered evaluation may terminate the mediator's effectiveness as a facilitator. Moreover, formulating and delivering an evaluation requires a high level of expertise about construction matters in general and about the facts, law, and technical merits of the specific issues in dispute.

Best mediation practice is to try a facilitative approach leading to an interest-based solution first, then, if (1) necessary, (2) the mediation documents permit it, and (3) at least one of the parties requests it, the mediator should be prepared to offer a principled, informed, nonbiased, consistent, and articulate evaluation. To be able to offer such an evaluation, however, the mediator must obtain the information necessary to support such an evaluation. This is possible only if the mediation process, from the start of mediation design through the execution of a mediation agreement, pre-mediation submissions, and the mediation hearing, has been structured to develop the information.

The Mediation Agreement, standard Mediation Contract Clauses, and the Mediator's Checklist in the following sections have been designed and used in thousands of successful construction disputes to support the best mediation practices. These forms have been used in multiparty, multi-issue, technical high-stakes litigation: a dispute between hundreds of unit owners against the developers, owners, design professionals, general contractor, and multiple subcontractors relating to construction and design defects in a condominium hotel project; reciprocal delay claims by the owner and general and subcontractors relating to a complex power plant project; multiple change order, delay, acceleration, and defective design claims relating to highways and bridges; and relatively small stakes, two-party, single-issue disputes such as a dispute between a home owner and a builder for the overall price to be paid. The forms are designed to be suitable for any construction or design dispute.

The accompanying comments point out the most important features of these forms and places where options or alternative approaches should be considered. One of the primary advantages of mediation as a dispute resolution process is its flexibility, and one of the keys to the success of mediation in construction cases is to carefully adapt the process to the unique facts and circumstances of the case. Thus, principals, counsel, and other advisors should not blindly use any form, but rather, in each case, should use the forms as a starting point and alter them as necessary to suit their specific needs.

§ 5.3 The Standard Construction Dispute Mediation Agreement

Form 5–1 is the Standard J·A·M·S/ENDISPUTE Construction Mediation Agreement used in many but not all J·A·M·S/ENDISPUTE offices. It covers all of the key elements of a typical construction dispute mediation. The following points bear