



Recommended Procedures for Settlement of Underground Construction Disputes: Report of a Study (1977)

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Recommended Procedures for Settlement of Underground Construction Disputes

**Report of a Study Conducted by
The Subcommittee on Contracting Practices
of the
U.S. National Committee on Tunneling Technology**

**• Assembly of Engineering
National Research Council**

**NATIONAL ACADEMY OF SCIENCES
Washington, D.C. 1977**

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This report has been reviewed by a group other than the authors according to procedures approved by the Report Review Committee consisting of members of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine.

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PREFACE

In 1973 and 1974 the Subcommittee on Contracting Practices of the U.S. National Committee on Tunneling Technology conducted an intensive study of practices in contracting for underground construction in the United States and in 7 other countries. The results of that study were set forth in a report, *Better Contracting for Underground Construction*.¹

One of the most important objectives of the subcommittee that conducted the study was to recommend actions that would minimize the adversary relationship between the owner and contractor that has developed on most underground construction projects in the United States. The subcommittee observed in the course of its study that the adversary relationship had caused great losses of time and increases in cost. It also diverted the attention of the owner and contracting personnel from management of the job to management of disputes.

Among the subcommittee's recommendations to abate the widespread adversary relationship was the development of a system of arbitration, for use throughout the United States, that would achieve prompt and equitable settlement of disputes. The recommendation for establishing an arbitration system and panels of full-time arbitrators was discussed in the report *Better Contracting for Underground Construction*. The discussion, excerpted from the report, is attached as Appendix A.

Following the 1973-74 study, a Task Group on Arbitration was appointed within the Subcommittee on Contracting Practices to study the settlement of disputes and to prepare recommendations for the organization and procedures for the prompt and efficient resolution of disputes arising in underground construction projects.

This report discusses only the settlement of disputes. In it, the subcommittee has emphasized the urgent need for reducing the frequency and the magnitude of disputes. The subcommittee has observed that the majority of the recommendations found in the previous report, *Better Contracting for Underground Construction*, if implemented, will go far toward eliminating disputes entirely. These recommendations are therefore not covered in this report.

The subcommittee gratefully acknowledges the contributions of many owners, engineers, geologists, contractors, lawyers, and others who gave their views on the settlement of disputes by means of questionnaires, interviews, and workshop discussions in the 1973-74 study and those who discussed and reviewed the task group's proposals during the course of preparing this report.

¹National Research Council (1974), *Better Contracting for Underground Construction*. A report prepared by the Subcommittee on Contracting Practices of the U.S. National Committee on Tunneling Technology. Washington, D.C.: National Academy of Sciences. The report is available from the National Technical Information Services, Springfield, Virginia 22161, under Order No. PB 236 973. The price is \$6.00 for paper copy and \$3.00 for microfiche (for foreign orders the price is \$12.00 for paper copy and \$4.50 for microfiche).

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OBJECTIVES

Because serious losses of time and money have resulted from the adversary relations between owners, contractors, and engineers engaged in underground construction projects in the United States, the Subcommittee on Contracting Practices is making an effort to improve the relationships among management personnel. While doing this, the subcommittee also seeks to improve the quality of decisions related to the settlement of disputes – and the speed with which they are made – through the use of specifically qualified adjudicators and simplified procedures rather than through the current system of adjudication and procedures connected with court litigation.

To achieve the above objectives, the subcommittee recommends the procedures proposed by its Task Group on Arbitration and presented in this report.

METHODOLOGY

The task group reviewed methods other than court litigation currently used for the settlement of disputes in the United States, particularly in the construction industry. None of the methods currently available in the dispute-settlement process seemed suitable for settling underground construction disputes because they do not provide for participation of individuals skilled in the geotechnical issues that often cause underground construction disputes. Therefore, the task group considered it important to prepare recommended procedures for settlement of disputes and an organizational arrangement under which such procedures could be administered effectively.

In drafting the procedures, the task group decided that the Construction Industry Arbitration Rules established by the American Arbitration Association would be a suitable model on which to base a set of similar procedures for the settlement of underground construction disputes.

Initiated in 1964, these rules have stood the test of time throughout the construction industry, and have served well in the settlement of disputes. Accordingly, the president of the American Arbitration Association was invited to serve on the subcommittee and the task group and to assist in drafting the procedures that are recommended in this report.

In its work the task group also was assisted by other members of the subcommittee, who provided technical expertise and legal knowledge. Based on such knowledge and experience, the proposed rules have been adapted from the time-tested rules of the construction industry to accommodate the special conditions and circumstances of underground projects.

The task group decided that for the proposed procedures to be effective, some organization would have to provide administrative services. Such services would include arranging for competent people to serve as arbitrators, helping interested parties to prepare contracts with provisions for settlement of disputes, and providing the educational services needed to make the procedures known to the underground construction community. The task group observed that the American Arbitration Association is organized to provide

the required administrative services. The Association is permanent, national in scope, service oriented, and nonprofit – all prerequisites of the desired type of administrative organization. The American Arbitration Association would, however, need some assistance from professional and technical organizations in selecting experts.²

In attempting to determine how the American Arbitration Association could obtain this assistance in identifying capable people to serve as experts, the task group considered it necessary that the Association consult with professional and technical organizations in the fields of mining, civil engineering, engineering geology, and contracting. Organizations in these fields include the American Institute of Mining, Metallurgical and Petroleum Engineers, American Society of Civil Engineers, Geological Society of America, Association of Engineering Geologists, and Associated General Contractors of America. The task group recommends that procedures be developed to provide for such assistance to the Association from organizations such as those listed, when requested by the Association.

RECOMMENDATIONS

The procedures recommended in this section should be administered by a permanent, nonprofit organization, experienced in the handling of such matters and not susceptible to a charge of bias toward any segment of the underground construction community. Because the American Arbitration Association is such an organization, the Task Group on Arbitration recommends that the Association assume this task.

MANNER OF IMPLEMENTATION

Assuming that the above recommendation is acceptable, the subcommittee proposes that the procedures be implemented by the following steps:

1. A panel of highly qualified experts should be established, from which impartial advisors, mediators, and arbitrators are selected. The panel roster should be established and maintained by the Association and should be composed of experts suggested or approved by professional and technical organizations in the fields of mining, civil engineering, engineering geology and contracting as such suggestions and approvals are requested by the Association. Those selected should be experts in the fields of construction contracting practices or of underground-construction technology and should have demonstrated characteristics of integrity and a sense of justice. If the nominee is not an expert in both fields of construction contracting and underground-construction technology, he should have a good working knowledge of the field in which he is not an expert. The experts should be used as needed, and should be required to commit themselves to the Association in one or the other of the following categories:

²The term "expert" is used throughout this report to refer to an impartial advisor, mediator, mediator-arbitrator, or arbitrator.

● Category #1

Each expert in this category must be in a position to commit himself to a long-term assignment whenever such an assignment is offered and accepted by him. He shall commence, conduct, and conclude the matter involved, whether it be an advisory function, mediation of a dispute, or arbitration with or without previous efforts at mediation. All of the above functions are to be performed expeditiously and with consecutive hearings, except as desired by all parties involved or as determined by the expert for good cause. A written decision shall be promptly issued. At the request of either or both of the parties it shall be accompanied by a written opinion setting forth in concise detail the issues in dispute, the pertinent facts relating thereto, the finding or findings, and the reasoning in support thereof. In consideration of such commitment the expert shall be paid on a *per diem* basis for actual time spent in preparing for and handling the matter, and for the time spent in preparing a written opinion or decision.

● Category #2

Each expert in this category must commit himself to perform in the same manner as a Category #1 expert, except that such commitment may be only for short-term assignments. Such times are to be agreed on between the expert and the Association when the assignment is made. When serving, however, an expert in this category shall be paid on the same basis as above indicated for an expert in Category #1.

2. When the services of an expert or experts are desired, the Association should provide the services on the basis requested, viz., as impartial advisor, mediator, mediator-arbitrator. If an arbitrator is specified, his services should be provided either for a final and binding arbitration or for a nonbinding arbitration, as agreed on by the parties involved or as agreed by such parties at the time of request.

3. The Association should publish a set of rules, to be called the Underground Construction Dispute Settlement Rules. A preliminary draft of these rules, with suggested provisions whereby contracting parties could avail themselves of the various settlement procedures, is included in this section. Fee schedules covering the services of the experts utilized and the administrative services to be provided by the Association should also be set forth in such rules.

4. The Association should, without further compensation, supplement its administrative role, described above, by ensuring a clear understanding and successful implementation of the parties' chosen procedure. Specifically, it should perform the following tasks:

● Help explain the general principles and specific procedures outlined in the Underground Construction Dispute Settlement Rules to the underground construction community.

- Conduct training programs to familiarize impartial advisors, mediators, and arbitrators with the duties and responsibilities of the particular role involved.
- Make available manuals, training films, and explanatory publications concerning the techniques peculiar to the particular role involved.
- Provide speakers at national and local meetings to explain the various procedures and to encourage their use.
- If necessary, testify concerning the operation of these procedures and serve in negotiations with the insurance industry and with financial institutions.

The Functions of the American Arbitration Association

The procedures recommended by the subcommittee, adapted from the American Arbitration Association's Construction Industry Arbitration Rules, are given in the following section. The functions of the Association are first described to demonstrate the manner in which it can administer the procedures.

With the assistance of the Association, an emerging problem or existing claim or controversy may be settled by voluntary submission to a disinterested competent person or persons having a demonstrated sense of justice. To make possible an orderly, economical, and expeditious settlement in accordance with federal and state laws, the Association provides a mechanism to resolve potential disputes and to administer appropriate procedures under various specialized rules. When an agreement to use such rules is written into a construction contract, it may expedite a peaceful settlement without the necessity of submitting to arbitration or going to court.

The Association maintains a national panel of experts in underground construction practices and construction technology who are available to serve as arbitrators-mediators throughout the United States. By arranging for settlements under the Underground Construction Dispute Settlement Rules, the parties in a dispute may obtain the service of experts familiar with underground construction.

The Association does not act as an expert. Its function is to administer a settlement procedure in accordance with the agreement of the parties and to maintain panels from which experts may be chosen by parties. Once designated, the expert advises, mediates, or arbitrates the issues.

RECOMMENDED PROCEDURES

Section 1. AGREEMENT OF PARTIES — The parties shall deem to have made these rules a part of their agreement covering settlement of emerging problems or existing claims or controversies (hereinafter called "settlement procedures") whenever they have provided for such settlement under the Association's Underground Construction Dispute Settlement Rules. These rules and any amendment thereof shall apply in the form obtaining at the time a settlement procedure is agreed upon.

Either in their original contract or by submission, the parties may agree to use any one or more of the optional settlement procedures hereinafter described.

Section 2. NAME OF TRIBUNAL — Any expert or experts selected for a settlement procedure under these rules shall be called the Underground Construction Dispute Settlement Tribunal (hereinafter "Tribunal").

Section 3. ADMINISTRATOR — When parties agree to implement a settlement procedure under these rules, they thereby designate the American Arbitration Association (hereinafter "AAA") the administrator of the procedure. The authority and duties of the administrator are prescribed in the agreement of the parties and in these rules.

Section 4. DELEGATION OF DUTIES — The duties of the AAA under these rules may be carried out through Tribunal administrators, or such other officers or committees as the AAA may direct.

Section 5. NATIONAL PANEL OF EXPERTS AND OPTIONAL SETTLEMENT PROCEDURES —

A. Experts:

The AAA shall establish and maintain a National Panel of Underground Construction Experts, in two categories as described in Paragraph 1, "Manner of Implementation," above. An expert or experts shall be appointed from the national panel. A neutral expert selected unilaterally by one party is hereinafter called the "party-appointed expert." The term "expert" may hereinafter be used to refer to one expert or to a Tribunal of more than one expert.

B. Optional Settlement Procedures:

Impartial or Advisory Committee for Emerging Problems

Exceptionally large or complicated projects as well as those having unprecedented features are almost certain to encounter unexpected problems during their execution. These problems emerge slowly, with the job-level management of both the owner and the contractor failing to appreciate their gravity immediately. By the time their full implications become apparent, both parties may have made mistakes and assumed positions that are difficult to reconcile.

It is fairly common practice for the owner or the engineer to engage a standing board of consultants to review the technical aspects of the work from time to time. Such a board can make a significant contribution to the technical success of the project, but it seldom becomes involved in contractual problems. Moreover, because it is the creation only of the owner or his engineer, its advice on both technical and contractual problems is understandably not as well received as advice from a board jointly selected by both contracting parties.

On many projects, an impartial advisor or advisory committee representing various disciplines could not only provide technical assistance but could promote cooperation between the contractor and the owner/engineer in the solution of contractual problems before they become unmanageable at job level. By

anticipating problems and proposing both technical and contractual solutions before the problems become serious, the use of such a committee could, in the long run, prove much less expensive than other methods of dispute adjudication.

The AAA will, if desired, appoint impartial advisors from either Category #1 or #2, as desired by the parties, and assist in the administration of the advisory program. When the parties wish to incorporate provisions for an impartial advisor or advisors in their agreement, the following clause, or a clause to like effect, should be inserted therein:

"Any potential controversies or claims arising under or relating to the terms and conditions of this contract, or the breach thereof, shall, upon written request of either party, be submitted to an Impartial Advisor or Impartial Advisory Committee to be appointed by the American Arbitration Association under the Underground Construction Dispute Settlement Rules. Such appointment shall be made promptly following execution of the contract. The advice of such Advisor or Committee shall be nonbinding on the parties involved."

Mediation

Mediation constitutes the effort of an individual or individuals to assist the parties in reaching a settlement of a controversy or claim by direct negotiations between or among themselves. A mediator participates in the negotiations, and acts as an impartial advisor and consultant to the various parties involved. He cannot impose a settlement and can only seek to guide the parties to direct settlement between or among themselves.

Where parties wish to use mediation, the following clause, or a clause to like effect, should be inserted in the agreement:

"Any controversy or claim arising out of or relating to this contract, or the breach thereof, shall be submitted to mediation in accordance with the Underground Construction Dispute Settlement Rules of the American Arbitration Association."

Mediation-Arbitration

This method of resolving disputes involves the designation of an impartial expert, called a mediator-arbitrator, either in the original contract, through mutual agreement of all parties at the beginning of the contractual relation, or by selection by the AAA. As agreed to by the parties or incorporated in the original contract, the mediator-arbitrator may be given specific powers such as the following:

(a) In the event that the parties are unable to resolve a dispute he may meet at any time with anyone connected with the matter in dispute, to investigate, inspect, or discover facts relevant to the controversy.

(b) Thereafter, he may call together all interested persons or parties for negotiating sessions.

(c) He may retain engineers, attorneys, and technical experts for the purpose of obtaining independent advice concerning the issues in dispute.

(d) He may engage in mediation with the parties, either separately or together.

(e) He may determine that certain issues are appropriate for arbitration, hold hearings concerning such issues under the Underground Construction Dispute Settlement Rules, and determine such issues and incorporate such determinations in an award that is final and binding on the parties involved.

Where parties desire to use a mediator-arbitrator the following clause, or a clause to like effect, should be inserted in the agreement:

"Any controversy or claim arising out of or relating to* this contract, or the breach thereof, shall be settled by a mediator-arbitrator in accordance with the Underground Construction Dispute Settlement Rules of the American Arbitration Association. The mediator-arbitrator shall endeavor to secure settlement of the controversy or claim by and between the parties themselves, with the aid and advice of the mediator. In the event that the mediator-arbitrator deems it appropriate, or upon demand of any party to such controversy or claim made to the American Arbitration Association, the matter shall be settled by final and binding arbitration conducted by the mediator-arbitrator in accordance with the rules hereinabove referred to, and judgment upon the award rendered by the arbitrator may be entered in any court having jurisdiction thereof."

Final and Binding Arbitration

Under final and binding arbitration, the award to the Tribunal will settle all controversies or claims arising under or relating to the contract or the breach thereof, pursuant to the terms and provisions of applicable arbitration law.

Where parties wish to use final and binding arbitration, the following clause, or a clause to like effect, should be inserted in the agreement:

*One of the subcommittee members, a lawyer, recommended deleting the phrase "or relating to" from this clause, suggesting that with this phrase the clause permits an arbitrator to bind a party to matters concerning which he is not bound by any clause in the contract. The members of the task group noted that the clause, including the phrase "or relating to," had been used in the Construction Industry Arbitration Rules established by the American Arbitration Association and that experience in testing this clause over time had proven that it did not create problems in extending the arbitrators' jurisdiction. Therefore, the subcommittee consensus was to maintain the clause in the Recommended Procedures for Settlement of Underground Construction Disputes in the same form as it has been used in the Construction Industry Arbitration Rules.

"Any controversy or claim arising out of or relating to* this contract, or the breach thereof, shall be settled by arbitration in accordance with the Underground Construction Dispute Settlement Rules of the American Arbitration Association, and judgment upon the award rendered by the arbitrator(s) may be entered in any court having jurisdiction thereof."

Nonbinding Arbitration

Under nonbinding arbitration, the award of the arbitrator does not legally bind the parties but may be introduced as evidence as a matter of right in any subsequent proceeding.

Where parties wish to use nonbinding arbitration, the following clause, or a clause to like effect, should be inserted in the agreement:

"Any controversy or claim arising out of or relating to this contract, or the breach thereof, shall be submitted to nonbinding arbitration in accordance with the Underground Construction Dispute Settlement Rules of the American Arbitration Association. The award of the arbitrator shall not legally bind the parties, but may be introduced as a matter of right in any subsequent proceeding."

Section 6. OFFICE OF TRIBUNAL — The general office of a Tribunal is the headquarters of the AAA, which may, however, assign the administration of a settlement procedure to any of its regional offices.

Section 7. INITIATION UNDER A SETTLEMENT PROCEDURE PROVISION IN A CONTRACT — A dispute settlement procedure under a provision in a contract providing for recourse under these rules shall be initiated in the following manner:

The initiating party shall, within the time specified by the contract, if any, file with the other party a notice of intention to initiate a specified procedure (demand), which notice shall contain a statement setting forth the nature of the dispute, the amount involved, if any, and the remedy sought. The initiating party shall file two copies of said notice with any regional office of the AAA, together with two copies of the dispute settlement provisions of the contract and the appropriate filing fee as provided in Section 47 hereunder.

The AAA shall give notice of such filing to the other party. If desired, the party upon whom the demand is made may file an answering statement in duplicate with the AAA within 10 days after notice from the AAA, in which event a copy shall be simultaneously sent to the other party. If a monetary claim is made in the answer, the appropriate administrative fee provided in the fee schedule shall be forwarded to the AAA with the answer. If no answer is filed within the stated time, it will be treated as a denial of the claim. Failure to file an answer shall not delay the proceeding.

*Ibid

Section 8. CHANGE OF CLAIM — After filing of the claim, if either party desires to make any new or different claim, such claim shall be made in writing and filed with the AAA, and a copy thereof shall be mailed to the other party who shall have a period of 10 days from the date of such mailing within which to file an answer with the AAA. However, after the expert is appointed, no new or different claim may be submitted, except with his consent.

Section 9. INITIATION UNDER A SUBMISSION — Parties to any existing dispute may commence a settlement proceeding under these rules by filing at any regional office two copies of a written agreement under these rules (submission), signed by the parties. The written agreement shall contain a statement of the matter in dispute, the amount of money involved, if any, and the remedy sought, together with the appropriate filing fee as provided in the fee schedule.

Section 10. FIXING OF LOCALE — The parties may mutually agree on the locale where the proceeding shall be conducted. If any party requests a specific locale and the other party files no objection thereto within 10 days after notice of the request is mailed to such party, the locale shall be the one requested. If a party objects to the locale requested by the other party, the AAA shall have power to determine the locale, and its decision shall be final and binding.

Section 11. QUALIFICATIONS OF EXPERT — No person appointed as a neutral shall serve if he has any financial or personal interest in the result of the proceeding, unless the parties, in writing, waive such disqualification.

Section 12. APPOINTMENT FROM PANEL — If the parties have not appointed an expert and have not provided any other method of appointment, the expert shall be appointed in the following manner: Immediately after the filing of the demand or submission, the AAA shall submit simultaneously to each party to the dispute an identical list of names of persons chosen from the panel. Each party to the dispute shall have 10 days from the mailing date in which to cross off any names to which he objects, number the remaining names indicating the order of preference, and return the list to the AAA. If a party does not return the list within the time specified, all persons named therein shall be deemed acceptable. From among the persons who have been approved on both lists, and in accordance with the designated order of mutual preference, the AAA shall invite the acceptance of an expert to serve. If the parties fail to agree on any of the persons named, or if acceptable experts are unable to act, or if for any other reason the appointment cannot be made from the submitted lists, the AAA shall have the power to make the appointment from other members of the panel without the submission of any additional lists.

Section 13. DIRECT APPOINTMENT BY PARTIES — If the agreement of the parties names an expert or specifies a method of appointing an expert, that designation or method shall be followed. The notice of appointment, with name and address of such expert, shall be filed with the AAA by the appointing party. Upon the request of any such appointing party, the AAA shall submit a list of members from the panel from which the party may, if he desires, make the appointment.

If the agreement specifies a period of time within which an expert shall be appointed, and any party fails to make such appointment within the period, the AAA shall make the appointment.

If no period of time is specified in the agreement, the AAA shall notify the parties to make the appointment, and if within 10 days after mailing of such notice such expert has not been so appointed, the AAA shall make the appointment.

Section 14. APPOINTMENT OF EXPERT BY PARTY-APPOINTED EXPERTS — If the parties have appointed their party-appointed experts, or if either or both of them have been appointed as provided in Section 13 and have authorized such experts to appoint an expert within a specified time, and no appointment is made within such time or any agreed extension thereof, the AAA shall appoint the expert who shall act as chairman.

If no period of time is specified for appointment of the third expert and the party-appointed experts do not make the appointment within 10 days from the date of the appointment of the last party-appointed expert, the AAA shall appoint the expert who shall act as chairman.

If the parties have agreed that their party-appointed expert shall appoint the expert from the panel, the AAA shall furnish to the party-appointed experts, in the manner prescribed in Section 12, a list selected from the panel, and the appointment of the expert shall be made as prescribed in such section.

Section 15. NATIONALITY OF ARBITRATOR IN INTERNATIONAL ARBITRATION — If one of the parties is a national or resident of a country other than the United States, the expert shall, upon request of either party, be appointed from among the nationals of a country other than that of any of the parties.

Section 16. NUMBER OF EXPERTS — If the dispute settlement agreement does not specify, or the parties are unable to agree upon the number of experts, the proceeding concerning the dispute shall be conducted by three experts, unless the AAA, in its discretion, directs that a single expert or a greater number of experts be appointed.

Section 17. NOTICE TO EXPERT OF HIS APPOINTMENT — Notice of the appointment of the expert, whether mutually appointed by the parties or by the AAA, shall be mailed to the expert by the AAA, together with a copy of these rules, and the signed acceptance of the expert shall be filed prior to the commencement of the proceeding.

Section 18. DISCLOSURE AND CHALLENGE PROCEDURE — A person appointed as a neutral expert shall disclose any circumstances likely to create a presumption of bias, or which might disqualify him as a neutral expert, including any past or present relationship with the parties or their counsel. Upon receipt of such information from any source, the AAA shall immediately communicate it to the parties. If a party challenges a neutral expert, he shall be replaced, unless the AAA determines that the circumstances do not disqualify the expert from serving as a neutral.

Section 19. VACANCIES — If any expert should resign, die, withdraw, refuse, be disqualified, or be unable to perform the duties of his office, the AAA shall, on proof satisfactory to it, declare the office vacant. Vacancies shall be filled in accordance with the applicable provisions of these rules and the proceeding shall be recommenced unless the parties shall agree otherwise.

Section 20. TIME AND PLACE — The expert shall fix the time and place for each meeting he conducts. The AAA shall mail to each party notice thereof at least 5 days in advance, unless the parties by mutual agreement waive such notice or modify the terms thereof.

Section 21. REPRESENTATION BY COUNSEL — Any party may be represented by counsel. A party intending to be so represented shall notify the other party and the AAA of the name and address of counsel at least 3 days prior to the date set for meeting at which counsel is first to appear. When a proceeding is initiated by counsel, or where an attorney replies for the other party, such notice is deemed to have been given.

Section 22. STENOGRAPHIC RECORD — The AAA shall make the necessary arrangements for taking a stenographic record whenever such record is requested by a party. The requesting party or parties shall pay the cost of such record as provided in Section 49.

Section 23. INTERPRETER — The AAA shall make the necessary arrangements for the services of an interpreter upon the request of one or both parties, who shall assume the cost of such service.

Section 24. ATTENDANCE AT HEARINGS — Persons having a direct interest in an arbitration matter are entitled to attend hearings. The expert shall otherwise have the power to require the retirement of any witness or witnesses during the testimony of other witnesses. It shall be discretionary with the expert to determine the propriety of the attendance of any other persons.

Section 25. ADJOURNMENTS — The expert may take adjournments upon the request of a party or upon his own initiative and shall take such adjournment when all of the parties agree thereto.

Section 26. OATHS — Before proceeding with the first hearing, if the procedure is an arbitration, or with the examination of the file, each expert may take an oath of office, and if required by law, shall do so. The expert may, at his discretion, require witnesses to testify under oath administered by any duly qualified person or, if required by law or demanded by either party, shall do so.

Section 27. MAJORITY DECISION — Whenever there is more than one expert, all decisions of the experts must be by at least a majority. The award must also be made by at least a majority unless the concurrence of all is expressly required by the agreement or by law.

Section 28. ORDER OF PROCEEDINGS — An arbitration hearing shall be opened by the filing of the oath of the arbitrator, where required, and by

the recording of the place, time, and date of the hearing, the presence of the arbitrator and parties, and counsel, if any, and by the receipt by the arbitrator of the statement of the claim and answer, if any.

The arbitrator may, at the beginning of the hearing, ask for statements clarifying the issues involved.

The complaining party shall then present his claim and proofs and his witnesses, who shall submit to questions or other examination. The defending party shall then present his defense and proofs and his witnesses, who shall submit to questions or other examination. The arbitrator may, at his discretion, vary this procedure, but he shall afford full and equal opportunity to the parties for the presentation of any material or relevant proofs.

Exhibits, when offered by either party, may be received in evidence by the arbitrator.

The names and addresses of all witnesses and exhibits in order received shall be made a part of the record.

Section 29. ARBITRATION IN THE ABSENCE OF A PARTY — Unless the law provides to the contrary, an arbitration may proceed in the absence of any party, who, after due notice, fails to be present or fails to obtain an adjournment. An award shall not be made solely on the default of a party. The arbitrator shall require the party who is present to submit such evidence as he may require for the making of an award.

Section 30. ARBITRATION PROCEEDING EVIDENCE — The parties may offer such evidence as they desire and shall produce such additional evidence as the arbitrator may deem necessary to an understanding and determination of the dispute. When the arbitrator is authorized by law to subpoena witnesses or documents, he may do so upon his own initiative or upon the request of any party. The arbitrator shall be the judge of the admissibility of the evidence offered and conformity to legal rules of evidence shall not be necessary. All evidence shall be taken in the presence of all of the arbitrators and all of the parties, except where any of the parties is absent in default or has waived his right to be present.

Section 31. EVIDENCE BY AFFIDAVIT AND FILING OF DOCUMENTS — An arbitrator may receive and consider the evidence of witnesses by affidavit, but shall give it only such weight as he deems it is entitled to after consideration of any objections made to its admission.

All documents not filed with the arbitrator at the hearing, but arranged for at the hearing or subsequently by agreement of the parties, shall be filed with the AAA for transmission to the arbitrator. All parties shall be afforded an opportunity to examine such documents.

Section 32. INSPECTION OR INVESTIGATION — Whenever an arbitrator deems it necessary to make an inspection or investigation in connection with the arbitration, he shall direct the AAA to advise the parties of his intention. The arbitrator shall set the time, and the AAA shall notify the parties thereof. Any party who so desires may be present at such inspection or

investigation. In the event that one or both parties are not present at the inspection or investigation, the arbitrator shall make a verbal or written report to the parties and afford them an opportunity to comment.

Section 33. CONSERVATION OF PROPERTY — An arbitrator may issue such orders as may be deemed necessary to safeguard the property which is the subject matter of the arbitration without prejudice to the rights of the parties or to the final determination of the dispute.

Section 34. CLOSING OF HEARINGS — An arbitrator shall specifically inquire of the parties whether they have any further proofs to offer or witnesses to be heard. Upon receiving negative replies, the arbitrator shall declare the hearings closed, and a minute thereof shall be recorded. If briefs are to be filed, the hearings shall be declared closed as of the final date set by the arbitrator for the receipt of briefs. If documents are to be filed as provided for in Section 31, and the date set for their receipt is later than that set for the receipt of briefs, the later date shall be the date of closing the hearing. The time limit within which the arbitrator is required to make his award shall commence to run, in the absence of other agreements by the parties, upon the closing of the hearings.

Section 35. REOPENING OF HEARINGS — Arbitration hearings may be reopened by the arbitrator on his own motion, or upon application of a party at any time before the award is made. If the reopening of the hearing would prevent the making of the award within the specific time agreed upon by the parties in the contract out of which the controversy has arisen, the matter may not be reopened unless the parties agree upon the extension of such time limit. When no specific date is fixed in the contract, the arbitrator may reopen the hearings, and the arbitrator shall have 30 days from the closing of the reopened hearings within which to make an award.

Section 36. WAIVER OF ORAL ARBITRATION HEARING — The parties may provide, by written agreement, for the waiver of an oral arbitration hearing. If the parties are unable to agree on the procedure, the AAA shall specify a fair and equitable procedure.

Section 37. WAIVER OF RULES — Any party who proceeds with an arbitration after knowledge that any provision or requirement of these rules has not been complied with and who fails to state his objection thereto in writing, shall be deemed to have waived his right to object.

Section 38. EXTENSIONS OF TIME — The parties may modify any period of time by mutual agreement. The AAA for good cause may extend any period of time established by these rules, except the time for making the award. The AAA shall notify the parties of any such extension of time and its reason therefor.

Section 39. COMMUNICATION WITH ARBITRATOR AND SERVING OF NOTICES — There shall be no communication between the parties and an arbitrator other than at oral hearings. Any other oral or written communications from the parties to the arbitrator shall be directed to the AAA for transmittal to the arbitrator.

Each party to an agreement that provides for a settlement procedure under these rules shall be deemed to have agreed that any papers, notices, or process necessary or proper for the initiation or continuation of the procedure, and for any court action in connection therewith or for the entry of judgment, if provided for in such procedure, on any award made thereunder, may be served on such party by mail addressed to such party or his attorney at his last known address or by personal service, within or without the state wherein the proceeding is to be held (whether such party be within or without the United States), provided that reasonable opportunity to be heard with regard thereto has been granted such party.

Section 40. TIME OF AWARD — Award shall be made promptly by the expert and, unless otherwise agreed by the parties, or specified by law, not later than 30 days from the date of closing the proceeding.

Section 41. FORM OF AWARD — The award shall be in writing and shall be signed either by the sole expert or by at least a majority if there be more than one. It shall be executed in the manner required by law.

Section 42. SCOPE OF AWARD — The expert may grant any remedy or relief which he deems just and equitable and within the terms of the agreement of the parties. The expert, in his award, shall assess fees and expenses as provided in Sections 47 and 49, equally or in favor of any party, and in the event any administrative fees or expenses are due the AAA, in favor of the AAA.

Section 43. AWARD UPON SETTLEMENT — If the parties settle their dispute during the course of proceeding, the expert, upon their request, may set forth the terms of the agreed settlement in an award.

Section 44. DELIVERY AND AWARD TO PARTIES — Parties shall accept as legal delivery of the award the placing of the award or a true copy thereof in the mail by the AAA, addressed to such party at his last known address or to his attorney, or personal service of the award, or the filing of the award in any manner which may be prescribed by law.

Section 45. RELEASE OF DOCUMENTS FOR JUDICIAL PROCEEDINGS — The AAA shall, upon written request of a party, furnish to such party, at his expense, certified facsimiles of any papers in the AAA's possession that may be required in judicial proceedings relating to the proceeding.

Section 46. APPLICATIONS TO COURT — No judicial proceedings by a party relating to the subject matter of the proceeding shall be deemed a waiver of the party's right to a proceeding under these laws.

The AAA is not a necessary party in judicial proceedings relating to a proceeding under these rules.

Parties to these rules shall be deemed to have consented that judgment upon the award rendered by the arbitrator(s) under a final and binding arbitration proceeding may be entered in any federal or state court having jurisdiction thereof.

Section 47. ADMINISTRATIVE FEES — As a nonprofit organization, the AAA shall prescribe an administrative fee schedule and a refund schedule to compensate it for the cost of providing administrative services. The schedule in effect at the time of filing or the time of refund shall be applicable.

The administrative fees shall be advanced by the initiating party or parties in accordance with the administrative fee schedule, subject to final apportionment by the expert in his award.

When a matter is withdrawn or settled, the refund shall be made in accordance with the refund schedule.

The AAA, in the event of extreme hardship on the part of any party, may defer or reduce the administrative fee.

Section 48. FEE WHEN ORAL HEARINGS ARE WAIVED — Where all oral hearings are waived under Section 36, the administrative fee schedule shall apply.

Section 49. EXPENSES — The expenses of witnesses for either side shall be paid by the party producing such witnesses.

The cost of the stenographic record, if any is made, and all transcripts thereof, shall be prorated equally between the parties ordering copies unless they shall otherwise agree and shall be paid for by the responsible parties directly to the reporting agency.

All other expenses of the proceeding, including required traveling and other expenses of the expert and of AAA representatives, and the expenses of any witness or the cost of any proofs produced at the direct request of the expert, shall be borne equally by the parties, unless they agree otherwise, or unless the expert in his award assesses such expenses or any part thereof against any specified party or parties.

Section 50. EXPERT'S FEE — Each expert shall, regardless of the type of settlement procedure upon which engaged, be paid \$_____ for each day of service. Partial days of service shall be paid for *pro rata*.

Section 51. DEPOSITS — The AAA may require the parties to deposit in advance such sums of money as it deems necessary to defray the expense of the proceeding, including the expert's fee, and shall render an accounting to the parties and return any unexpended balance.

Section 52. INTERPRETATION AND APPLICATION OF RULES — The expert shall interpret and apply these rules insofar as they relate to his powers and duties. When there is more than one expert and a difference arises among them concerning the meaning or application of any such rules it shall be decided by a majority vote. If that is unobtainable, either an expert or a party may refer the question to the AAA for final decision. All other rules shall be interpreted and applied by the AAA.

ADMINISTRATIVE FEE SCHEDULE

Administrative fee schedules may be established by the AAA for arbitration cases and for advisory and mediation services, based on the AAA experience in administering similar services in other fields, in formats as follows:

Arbitration Cases

A filing fee of \$100 will be paid at the time the proceeding is initiated.

The balance of the administrative fee of the AAA is based on the amount of each claim as disclosed when the claim is filed, and is due and payable prior to the notice of appointment of the neutral expert or experts.

In those controversies and claims that are not for a monetary amount, an appropriate administrative fee will be fixed by the AAA, payable prior to such notice of appointment.

<u>Amount of Claim</u>	<u>Fee</u>
Up to \$10,000	3% (minimum \$100.00)
\$10,000 to \$25,000	\$300, plus 2% of excess over \$10,000
\$25,000 to \$100,000	\$600, plus 1% of excess over \$25,000
\$100,000 to \$200,000	\$1,350, plus 1/2% of excess over \$100,000
\$200,000 to \$1,000,000	\$1,850, plus 1/5% of excess over \$200,000
\$1,000,000 to \$5,000,000	\$3,450, plus 1/10% of excess over \$1,000,000
\$5,000,000 to \$10,000,000	\$7,450, plus 1/20% of excess over \$5,000,000

Where the controversy or claim exceeds \$10,000,000, an appropriate fee will be fixed by the AAA.

If more than two parties are represented in the proceeding, an additional 10 percent of the administrative fee will be due for each additional represented party.

Other Service Charges

A party causing an adjournment of any scheduled hearing shall pay a \$50 fee.

Each party shall pay a fee of \$25 for each second and subsequent hearing which is either clerked by the AAA or held in a hearing room provided by the AAA.

Refund Schedule

If the AAA is notified that a dispute has been settled or withdrawn before it mails a notice of appointment to a neutral expert or experts, all of the fee in excess of \$100 will be refunded.

If the AAA is notified that a dispute is settled or withdrawn thereafter but at least 48 hours before the date and time set for the first meeting or hearing, one-half of the fee in excess of \$100 will be refunded.

Advisory Expert and Mediation Services

An administrative fee of \$_____ per calendar year will be charged by the AAA for support of services performed by one or more impartial advisory experts or mediators appointed by the AAA. The fee for a partial calendar year will be assessed on a *pro rata* basis. The AAA will, in addition to making appointments, provide meeting rooms and clerical assistance, to the extent that they are reasonably available, for the duration of such services. Such charge will be in addition to any fee charged with respect to administrative services performed by the AAA in connection with an arbitration case.

APPENDIX A

EXCERPT —

BETTER CONTRACTING FOR UNDERGROUND CONSTRUCTION*

ARBITRATION

One of the most important objectives of this study is to minimize the adversary relationship between owner and contractor that is causing so much loss of time, particularly of top management personnel, and increasing the cost of projects. All entities involved know that too much time and money is spent in disputation and litigation. All should accept a share of the responsibility for the situation that exists today. Owners are not spending sufficient money or providing sufficient time for the procurement of adequate subsurface information; engineers are making insufficient use of the information received. Complete information covering subsurface data, interpretative opinions, and the effect of geological investigations on design are not being provided to prospective contractors. Subsurface information, when provided, is often accompanied by exculpatory language, even in cases where relief under a changed-conditions clause is promised. Owners and their engineers are not giving objective consideration to claims received concerning changed conditions or inadequacy or errors in design. Contractors are prosecuting claims that far exceed the amount of their actual additional costs, particularly when they have a losing job or have at least contributed to the problems complained of, and lawyers often engage in delaying tactics, with consequent loss and expense to both sides.

Although everyone agrees that problems should be resolved at the lowest level in the entities involved, and although everyone realizes the great expense involved in the event that this does not happen, personalities intrude, with the result that some matters develop into lengthy, costly disputes and court litigation. The extent of contribution to the situation that exists in the United States today is not important — what is important is that there is too much of an adversary relationship, and steps must be taken to minimize it.

As an alternative to court litigation, it is considered that a significant reduction in the cost and time expended in disputes and litigation can be achieved by the use of binding arbitration before an arbitrator or panel of qualified persons familiar with construction practices and costs in the industry, and who would be empowered to develop an improved arbitration practice. Courts, with certain exceptions, have exhibited limited experience in the handling of construction litigation, and their decisions, based on conflicting testimony or evidence concerning construction practices and problems, are often unsatisfactory to both owner and contractor.

*National Research Council (1974), *Better Contracting for Underground Construction*. A report prepared by the Subcommittee on Contracting Practices of the U.S. National Committee on Tunneling Technology. Washington, D.C.: National Academy of Sciences. Excerpt from the section "Recommendations to Improve United States Contracting Practices," pages 44-45.

The difficulty that arises with arbitration proceedings as they are now conducted is that controversy over construction matters usually requires an extended time for submission of the evidence required. The best-qualified and knowledgeable arbitrators are too busy to give extensive and continuous time to the required hearings; consequently, those arbitrators who are able to sit for extended periods too often are less experienced. Even when qualified arbitrators are obtained, they cannot sit continuously through the hearings, because they cannot absent themselves from their businesses or professions for too long. Accordingly, hearings are held on one or two days in a week, then postponed for a week, a month, or even more. Hearings are therefore held sporadically, extending over a period of a year or longer; when hearings are resumed, it is necessary to review the facts and problems to understand the evidence about to be presented. In sum, a construction arbitration proceeding, as now conducted, is time-consuming and costly, particularly in an involved controversy.

It is suggested that arbitration proceedings are preferable to court litigation. Such proceedings would be improved by an organization of competent, adequately paid, full-time arbitrators, appointed to serve for a term of several years, who could sit on consecutive days during the entire course of a hearing. Their specialized knowledge would unquestionably be reflected in quicker and better decisions.

Funding for such an organization and selection of the membership could be arranged between contractor associations and owner organizations interested. One suggestion is that a small percentage of the contract price might be paid into the fund. Another suggestion might be that mass-transit authorities, for example, could join together in the creation of such a fund. Provisions requiring reference to the special group of full-time arbitrators would then be incorporated into their contracts. However, to promote resolution of disputes by negotiation directly between the parties involved, and thereby obviate resort even to arbitration, the parties should be required to pay into any such fund an arbitration fee on a sliding scale based on the amounts involved, in a manner similar to that at present employed by the American Arbitration Association. Irrespective of the manner in which such a fund were created, the cost would be far less than the current cost of litigation in courts or extended arbitration proceedings as now conducted.

Nonbinding arbitration, preferably conducted by specially qualified and long-term employed arbitrators as we have recommended, but, in any event, provided for in the contract, is another method that should be given consideration. This procedure has been adopted in Europe with a provision that, although the determinations of such arbitrators are not binding, they are agreed to be admissible in any subsequent proceedings between the parties involved. The European experience is that both parties to such an arbitration put their best foot forward in presenting their cases, and although the findings and conclusions are not binding, they usually accept them because they are admissible in any future court proceedings. Further, and this is no small consideration to the European construction community, an owner who refuses to accept an arbitration determination acquires the reputation of being arbitrary and unreasonable, and a contractor who so refuses and takes the matter to a court becomes branded as a hardhead.

APPENDIX B

MEMBERSHIP 1975 - 1976, U.S. NATIONAL COMMITTEE ON TUNNELING TECHNOLOGY

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