



Identifying, Assessing, and Managing Project Risk

Suggestions for Using the Risk Matrix

Why use a risk management matrix? The risk management professionals at Victor and CNA believe that a matrix provides you with a systematic approach to analyzing and assessing risk. This matrix is designed to help you identify and quantify risk and then describe the techniques available to manage that risk. When properly implemented, a matrix can help individual members of the same firm address risk management from a common perspective.

Completing the Matrix

The basic structure of the matrix corresponds to the fundamental four-part approach to risk management: identification, assessment, response, and control. Each title box identifies the basic categories of risk inherent in most projects: client, project, consultants, contractor, other parties, your fee, your firm, and the contract. Client-related issues are identified and assessed first because the majority of claims (more than 50 percent each year) are brought by clients.

The bold subtitles identify specific types of issues within each broad category. We have identified some of the more risk-intensive issues—in other words, those previously demonstrated to start or aggravate claims. This matrix can be customized for individual firms and for each project. The description under the subtitle contains details on the issues we have defined.

Moving to the first column, risk is first assessed quantitatively. We think it will be beneficial to rank each risk identified on a scale from 1 to 10—1 signifying a very low-risk issue and 10 signifying a very high-risk issue. Using the numeric scale should enable a summary of the intensity of the risk when analyzing the project as a whole because risk intensity “scores” from each category can be added up. However, please feel free to develop your own system—perhaps a simpler “low,” “medium,” and “high” scale. Over time, you will find the rating system that works best for you.

The second column permits you to take the risk assessment just a little bit further. We believe the best use of this column is to view it as an opportunity to clarify your response in the preceding column by adding any notes, questions, or concerns you may have about each issue. Few issues are simple enough to be categorized effectively using only a quantitative scale.

The third and last column is probably the most important, because it is here that you determine how to respond to each of the risks previously identified and assessed. Risk management strategies you might employ include: (1) following your firm’s policy to concentrate on specific project types in order to garner expertise; (2) seeking repeat clients with whom you have already established a rapport; (3) creating a system of effectively communicating with your client on a regular basis; and (4) consistently documenting that communication to confirm your mutual understanding in writing.

Some of the information you will need to complete the matrix may not be available in its entirety as you begin to consider undertaking a new project. However, the matrix is designed to facilitate the fourth step of risk management: control. The matrix can be updated and reassessed as the project progresses.

Analyzing the Matrix

There are summary lines (“Overall Assessment”) within each broad category of risk identified. These lines permit two types of analysis. First, you may determine after looking at the first category or two that a project is simply too risky—even with all of the risk management tools available to you, you cannot find a way to effectively manage all of the risks present. If you find this to be the case, your best risk management strategy is to avoid the project altogether. The other reason for the individual summary lines is that once you have completed the entire matrix, you will be able to go back and assess which aspects of the project are most risky. This will help you in devising your overall risk management strategy.

The final step in completing this matrix is to carry each of the summary lines down to the last section, “Overall Assessment.” This allows you to have a clear, concise picture of the risks associated with the project. Your final analysis can be entered in the line labeled “RESULT.” Then, based on this final analysis, you can complete the “RECOMMENDATION” section.

The “Recommendation” section is analogous to a traffic light:

- **“PROCEED” IS A GREEN LIGHT**—this project should go smoothly as long as you follow the risk management strategies you have defined.
- **“PROCEED WITH RESERVATION(S)” IS A YELLOW LIGHT**—in this case, you have some concerns, but no clear plan yet for addressing these concerns. This may happen because you do not have enough information to effectively complete the matrix. You have two options: (1) obtain the needed information, or (2) establish appropriate contingencies to assess and manage the risk as the project progresses.
- **“PROCEED ONLY WITH CHANGE(S)” IS ANOTHER YELLOW LIGHT**—in this case there are a few issues that concern you, but these can be addressed with a few changes. You can check these recommended changes off right on the matrix as they are made.
- **“DO NOT PROCEED” IS A RED LIGHT**—there are too many risks or not enough strategies to manage the risks to consider contracting for this project.

We hope this matrix provides you with a helpful tool in managing your firm’s risk. You can refine it and update it over time to make it most useful to you. Remember: the firm that profits the most is the firm that learns to most effectively manage its risk.



| CLIENT | QUANTITATIVE | QUALITATIVE | RISK RESPONSE |
|--|--------------|-------------|---------------|
| <p>1. FINANCIAL STRENGTH: Will the client be able to afford your firm’s services? The project? You may be able to obtain a Dun & Bradstreet or other financial report on your client to help you assess its financial strength.</p> | | | |
| <p>2. CLEAR PROJECT OBJECTIVES: Are the client’s objectives for the project clear? It may be prudent to assist the client in defining objectives in order to avoid “shooting at a moving target” later.</p> | | | |
| <p>3. EXPERIENCE WITH PROJECT TYPE: Is the client familiar with the construction process in general? This type of project specifically? You have probably already found that some clients require more attention than others.</p> | | | |
| <p>4. EXPERIENCE WITH YOUR FIRM: Is the client familiar with the construction process in general? This type of project specifically? You have probably already found that some clients require more attention than others.</p> | | | |
| <p>5. CLAIMS HISTORY: Does this client have a reputation or being difficult to work with or for making claims against design professionals? Investigating how the client has handled other projects or business disputes can give you a feel for how cooperative the client may be.</p> | | | |
| <p>6. SINGLE DECISIVE DECISION MAKER: Clients that comprise a committee (school boards, homeowners associations, civic or religious groups, or even a couple) can be troublesome unless a single decisive decision maker is appointed.</p> | | | |
| <p>7. ATTITUDE TOWARD PROJECT AND YOU: Are the client’s expectations realistic? Do you have a good feeling about the client? Are there open lines of communication between you and the client?</p> | | | |
| <p>8. OTHER</p> | | | |

OVERALL CLIENT ASSESSMENT

| PROJECT | QUANTITATIVE | QUALITATIVE | RISK RESPONSE |
|---------|--------------|-------------|---------------|
|---------|--------------|-------------|---------------|

1. PROJECT TYPE: Certain project types have more risk than others. Residential (particularly condominium) projects, large public-use centers, and land/site development projects bring about the highest number of claims.

2. PROJECT SIZE AND DURATION: Does the size or duration of the project pose additional risks? In general, the larger the project or the longer its duration, the greater the risk will be.

3. ADEQUATE FINANCING: Does the client have adequate funding or is it attainable? How does the client anticipate managing cash flow?

4. DESIGN COMPLEXITY: Is your firm capable of managing the required complexity of the design?

5. CONSTRUCTION COMPLEXITY: Is the project team capable of managing the complexity of the construction?

6. UNIQUE REQUIREMENTS: Are there unique project requirements that could pose more risk? For example, is it a new or state-of-the-art type of project?

7. SCOPE OF SERVICES: Will you be hired to provide the full scope of services you think is needed for the project? Will you be providing at least some construction phase services? Often, your presence at the construction site can help to mitigate potential problems or losses.

8. SCHEDULE: Are there particular scheduling issues, such as meeting a developer's projections for selling the property, that may increase the risk? Is the overall project timeframe adequate?

9. NEW PRODUCTS AND TECHNOLOGIES: Will new products or technologies be required or expected in the design and construction of the project? Have these products or technologies been adequately researched and tested?

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

| PROJECT | QUANTITATIVE | QUALITATIVE | RISK RESPONSE |
|---------|--------------|-------------|---------------|
|---------|--------------|-------------|---------------|

10. DELIVERY MODE: Are you comfortable with the mode of project delivery (design-bid-build, design-build, etc.)? Have the roles and responsibilities of the parties been adequately defined?

11. GEOGRAPHIC CONSIDERATIONS: Are there geographic considerations (e.g., earthquakes, hurricanes, mudslides, freezing temperatures, etc.) that may increase the risk?

12. ENVIRONMENTAL CONCERNS: Are there environmental issues that you know or suspect may arise in the course of the project? Is the project team prepared to address these issues?

13. USER ATTRIBUTES: Is this project the type from which users may generate future claims? Is there a likelihood of dissatisfied end-users? Are class-action lawsuits possible?

14. COMMUNITY SENSITIVITY: Is there any perceived opposition or sensitivity in the community that could pose problems?

15. OTHER

| | | |
|--|--|--|
| | | |
| | | |
| | | |

OVERALL PROJECT ASSESSMENT

| CONSULTANTS | QUANTITATIVE | QUALITATIVE | RISK RESPONSE |
|--|--------------|-------------|---------------|
| <p>1. AVAILABILITY OF QUALIFIED CONSULTANTS: Are there qualified consultants available when you will need their services?</p> | | | |
| <p>2. YOUR EXPERIENCE WITH CONSULTANTS: Does your firm have experience with these consultants? Are these consultants with whom your firm has or can develop compatible working relationships?</p> | | | |
| <p>3. REPUTATION: Do these consultants have strong, positive reputations?</p> | | | |
| <p>4. ADEQUATELY INSURED: Are these consultants adequately insured? The gap created by an uninsured or under-insured consultant will most likely have to be filled by your firm's insurance.</p> | | | |
| <p>5. CAPACITY: Do these consultants have the needed capacity to undertake the project?</p> | | | |
| <p>6. COMPATIBLE SYSTEMS: Are your firm's systems compatible with those of your consultants?</p> | | | |
| <p>7. SHARED VALUES: Do your consultants share the same values as your firm? How much time will you have to devote to team building?</p> | | | |
| <p>8. CLIENT-CONTROLLED: Are you being asked to work with consultants selected by the client? Will you have coordination responsibilities for consultants not under your control?</p> | | | |
| <p>9. OTHER</p> | | | |
| <p>OVERALL CONSULTANTS ASSESSMENT</p> | | | |

| CONTRACTOR* | QUANTITATIVE | QUALITATIVE | RISK RESPONSE |
|-------------|--------------|-------------|---------------|
|-------------|--------------|-------------|---------------|

1. PREQUALIFICATIONS LIST: Will some contractors be prequalified? If so, in your professional opinion, are there acceptable considerations in formulating the list of prequalified firms?

| | | | |
|---|--|--|--|
| <p>2. BIDDING PROCESS: How will the bidding process be undertaken? How will the bid(s) be awarded?</p> | | | |
|---|--|--|--|

3. YOUR INVOLVEMENT IN SELECTION: Do you believe you will have sufficient input to assist the client in reviewing the bids and selecting the contractor?

| | | | |
|---|--|--|--|
| <p>4. ADEQUATE BID: Is the contractor bidding responsibly?</p> | | | |
|---|--|--|--|

5. ADEQUATE FINANCIAL STRENGTH: Has the contractor demonstrated adequate financial strength to procure the necessary bonds and to complete the project?

| | | | |
|---|--|--|--|
| <p>6. EXPERIENCE WITH PROJECT TYPE: Does the contractor have sufficient experience with this project type and the anticipated site conditions?</p> | | | |
|---|--|--|--|

7. OTHER

| | | | |
|---|--|--|--|
| <p>OVERALL CONTRACTOR ASSESSMENT</p> | | | |
|---|--|--|--|

**If you do not know initially who the Contractor is, it is essential to complete this analysis once the Contractor is known.*

| OTHER PARTIES | QUANTITATIVE | QUALITATIVE | RISK RESPONSE |
|---------------|--------------|-------------|---------------|
|---------------|--------------|-------------|---------------|

1. CONSTRUCTION MANAGER: Will there be a construction manager? Has the construction manager’s role been adequately defined? Is the construction manager sufficiently qualified to undertake this role?

2. SPECIAL CONSULTANTS: Are any special (e.g., geotechnical or abatement) consultants required? To the best of your knowledge, are these consultants capable? Are you accepting vicarious liability for these consultants? If so, are you appropriately compensated and protected?

3. OTHER

| | | | |
|---|--|--|--|
| OVERALL OTHER PARTIES ASSESSMENT | | | |
|---|--|--|--|

| FEE | QUANTITATIVE | QUALITATIVE | RISK RESPONSE |
|-----|--------------|-------------|---------------|
|-----|--------------|-------------|---------------|

1. ADEQUATE FEE: Is your fee adequate for the required services? Will it cover costs and provide a profit?

2. ADDITIONAL SERVICES: Are there fee provisions for contingent additional services?

3. OTHER

| | | | |
|-------------------------------|--|--|--|
| OVERALL FEE ASSESSMENT | | | |
|-------------------------------|--|--|--|

| YOUR FIRM | QUANTITATIVE | QUALITATIVE | RISK RESPONSE |
|-----------|--------------|-------------|---------------|
|-----------|--------------|-------------|---------------|

1. CAPACITY: Does your firm have the capacity to undertake the project? If you do not have a sufficient number of qualified employees, can you supplement your existing staff by hiring additional employees or consultants?

2. EXPERIENCE WITH PROJECT TYPE: Does your firm—and do the available project team members—have sufficient positive experience with this project type? Under similar conditions?

3. OTHER

OVERALL YOUR FIRM ASSESSMENT

| | | |
|--|--|--|
| | | |
| | | |

| CONTRACT | QUANTITATIVE | QUALITATIVE | RISK RESPONSE |
|---|--------------|-------------|---------------|
| <p>1. CLEAR SCOPE OF SERVICES: Does the proposed professional services agreement provide a clear and sufficiently detailed scope of services?</p> | | | |
| <p>2. BALANCE OF RESPONSIBILITY AND AUTHORITY: Do all of the proposed contract forms (e.g., client/prime consultant, prime consultant/subconsultant, client/general contractor) establish clear and distinct responsibilities balanced by the authority to carry out those responsibilities?</p> | | | |
| <p>3. CLEAR PAYMENT TERMS: Are the payment terms clearly delineated, including terms for additional services and reimbursable expenses?</p> | | | |
| <p>4. CLEAR, EQUITABLE TERMINATION PROVISION: Is there a provision that establishes fair terms for terminating the contract should that become necessary?</p> | | | |
| <p>5. EQUITABLE DISPUTE RESOLUTION PROVISION: Does the contract contain dispute resolution provisions (e.g., good faith negotiation or mediation) that are fair and balanced?</p> | | | |
| <p>6. BALANCE OF RISKS AND REWARDS: Does the overall contract fairly allocate risks and rewards? Imbalances may be addressed by negotiating well-drafted indemnity, limitation of liability, or waiver of damages clauses.</p> | | | |
| <p>7. INSURANCE ISSUES: Are there provisions that create insurance coverage questions or uninsurable professional or general liability exposures? You may wish to ask a representative of your insurance carrier to review any questionable provisions.</p> | | | |
| <p>8. CLIENT-CONTROLLED: Are you being asked to work with consultants selected by the client? Will you have coordination responsibilities for consultants not under your control?</p> | | | |
| <p>9. OTHER</p> | | | |
| <p>OVERALL CONTRACT ASSESSMENT</p> | | | |

| OVERALL | QUANTITATIVE | QUALITATIVE | RISK RESPONSE |
|---------|--------------|-------------|---------------|
|---------|--------------|-------------|---------------|

1. CLIENT

| | | | |
|------------|--|--|--|
| 2. PROJECT | | | |
|------------|--|--|--|

3. CONSULTANTS

| | | | |
|---------------|--|--|--|
| 4. CONTRACTOR | | | |
|---------------|--|--|--|

5. OTHER PARTIES

| | | | |
|--------|--|--|--|
| 6. FEE | | | |
|--------|--|--|--|

7. YOUR FIRM

| | | | |
|-------------|--|--|--|
| 8. CONTRACT | | | |
|-------------|--|--|--|



Visit us at victorinsuranceus.com/schoolfriskmanagement to learn more.

This document is for illustrative purposes only and is not a contract. It is intended to provide a general overview of the program described. Please remember only the insurance policy can give actual terms, coverage, amounts, conditions and exclusions. Program availability and coverage are subject to individual underwriting criteria.

*Victor Insurance Managers Inc. (fka Victor O. Schinnerer & Company, Inc.) recently filed in all U.S. jurisdictions to re-brand and change its name. This name change has become effective in almost all states while still pending in several states, which we expect will complete their approval processes shortly. In CA, dba Victor Insurance Services | CA Ins. Lic. # 0156109

© 2020 Victor Insurance Managers Inc. |