

RiskTopics

Managing construction project suspension and restart risks

The project team faces numerous challenges in the event a construction project is suspended (or terminated), and even more issues when restarting a dormant project.

Introduction

An order to suspend or terminate a project may result from a variety of circumstances – owner, economic, political/public, environmental or other imminent threat. There are project-related risks that should be managed, generally falling into two categories: 1) liability and property risks and 2) project execution risks. However, there are ways to address and mitigate the potential impacts to profitability, reputation, long-term relationships, and other key measures of success.

Discussion

The following guidelines may assist in mitigating exposures associated with projects that have been suspended, at any stage of construction, for a designated or unknown period of time. Minimizing risks before and during work suspension, especially through a check list approach, may lessen the impacts of complex project execution issues when re-starting construction.

Liability and property risks:

- Attractive nuisance, as in those areas or parts of construction that the public would deem desirable
- Continued operation of critical systems or equipment, such as fire suppression, HVAC, dewatering, etc.
- Unlawful occupancy, by persons or entities that have no legal right to occupy the property
- Environmental – such as groundwater contamination, erosion, etc.
- Increased potential for weather-related damage
- Theft
- Vandalism

- Arson

Project execution risks:

- Degradation of partially completed or temporary supports, structures, equipment and materials
- Cost escalation
- Increased mobilization and demobilization costs
- Extended overhead
- Potential loss of key individuals and project knowledge
- Potential loss of labor resources
- Expiration of permits and/or the need to obtain new approvals
- Extensive coordination required for re-start; increased potential for conflicts between parties
- Potential need for partial acceptance/partial occupancy

Guidance

Any plan, or course of action in the absence of a plan, should address: people, property and documentation. The project team should proactively create a plan for each of its key functional areas, such as material supply, quality control, equipment and labor.

People

- Ensure employees are out of harm's way.
- Based on the project suspension circumstances, consider the feasibility of establishing skeleton crews to maintain critical systems or equipment
- Secure the site to prevent access from any unauthorized personnel. This includes maintenance of construction fencing and posting of permits.
- Inform local authorities having jurisdiction (Fire, Police, Building Department, etc.) regarding site access and security.
- Protect the public, i.e. ensure adjacent public sidewalks are maintained safely, free of hazards.

Property

- Maintain and secure all scaffolding, debris netting, sidewalk sheds, and temporary walkways.
- Maintain all adjoining property protection.
- Maintain all guardrails, edge protection systems such as netting and cocoon systems, and floor and shaft opening protection.

- Store and maintain cranes in accordance with manufacturer recommendations and approved crane notice application drawings.
- Ensure the proper shoring of excavated sites or backfill.
- Ensure construction equipment is safely stored and maintained in accordance with manufacturer recommendations.
- Ensure construction materials are safely stored. Any light-weight materials susceptible to becoming wind-borne must be removed from the site, tied-down, or ballasted.
- Verify location of, and properly secure, stored materials (offsite or onsite).
- Determine if any material deliveries are still in transit and make arrangements to either accept and store those materials, or have them returned to the supplier
- Maintain any fire suppression and detection systems.
- Secure/lock out all essential utilities (electrical power, gas service, water service, etc.) or otherwise disconnect to prevent accidents, leaks, etc.
- Remove any volatile gases and liquids.
- Gather up and remove construction debris and perform a general jobsite cleanup.
- Remove or dry up any standing water located inside buildings and structures. Determine if a pumping system needs to be maintained or established in locations susceptible to water accumulation.
- Consider regrading or backfilling areas to prevent ponding water.
- Evaluate elements of construction that may require installation of temporary protection measures (areas and equipment susceptible to water, weather exposure, temperature changes, etc.).
- Ensure all emergency, temporary and permanent egress is maintained and unobstructed; maintain hoists and elevators in emergency readiness.

Documentation

- Document what has been constructed up to the point of project suspension.
 - Preserve a record of conditions up to the point of work stoppage visually, including video and photographs of what the site looked like when construction stopped.
 - Preserve the baseline and updates to the CPM schedule and prepare current update to the CPM schedule to document the delay, status of impacted activities and as-built conditions; include applicable fragnet(s) with narrative to document work stoppage order.
 - Prepare as-built drawings.
 - Preserve contractual records (contract, contract amendments, change orders and all other documentation) leading up to the project suspension.

- Review the construction agreement closely for contractual responsibilities.
 - Find the Excusable Delays clause, also known as the force majeure clause and determine if your circumstance is expressly included in its definition; even if not precisely included. Common boilerplate language in such clauses is intended to address issues or occurrences that are unanticipated and beyond the reasonable expectation or control of the project stakeholders. The General Conditions - Delays and Extension of Time section in some standard construction contract forms such as AIA A201¹ or the Consensus Docs 200² might include terms such as: acts of God, terrorism, civil disturbance, unusual or adverse weather, and even epidemics or pandemics.
- Resolve payment issues including billings, retention and demobilization costs and other subcontract risks.
 - Verify the status of any construction / installation relative to the subcontract agreement for that scope, i.e. costs may be due for items that are sold / bought as part of an assembly but have not been delivered.
 - Verify what materials are required to complete the scope, and if procured confirm where they are, i.e. stored offsite or onsite.
 - Culminate subcontract agreements or open issues when possible; obtain letters of agreement or partial lien releases from subcontractors, vendors, professional teams for all completed work and monies paid, etc.; obtain lien releases and/or legal correspondence for subcontractors and vendors to document circumstances and contractual provisions around termination for cause and convenience.
- Confirm which party has responsibility for site security and safety costs, damages and inspections.
- Identify and separate costs related to shut down and maintenance during the suspension.
- Review insurance coverage/requirements/responsibility, for builder's risk, OCIP/CCIP, and workers' compensation. For example, confirm when the builder's risk coverage ends, and property coverage begins. Confirm if business interruption coverage is in place and its terms and conditions.
- Address surety considerations
 - Engage subcontractors in the suspension negotiations
 - Obtain subcontractor lien releases (where applicable)
 - Confirm any special considerations which must be addressed during the suspension phase
- Evaluate start-up costs/remobilization challenges.
 - Subcontract risks such as labor availability and wage increases
 - Commodity/material price increases at time of remobilization
 - Subs or suppliers that went out of business

- Weather damage, vandalism and theft
- Deterioration of work that has been installed, accepted or partially complete, as well as stored materials
- Building code or other governmental changes
- Obsolescence of original (mechanical/electrical/control) systems
- Review warranty support. When materials and equipment are not completed, commissioned and started, the issue of warranty support is often unclear (especially high exposures for electrical equipment, HVAC and boiler machinery).

Conclusion

Each project has its unique contractual obligations and circumstances, and the above guidance includes important points to consider. Careful consideration and planning are critical when project suspensions are a possibility. Careful planning when negotiating construction contracts and insurance coverage can help to mitigate the impacts of project suspension or termination. Additional steps should be taken, in terms of both addressing property and liability exposures as well as mitigating project execution risk. By addressing these issues, the negative consequences associated with project delay can be minimized and pave the way for smoother project re-start. In the event of a project suspension (or termination), Zurich suggests that you consult with your insurance professional, safety personnel and legal consultants.

References

¹ "A201- 2017 General Conditions of the Contract for Construction ." Aiacontracts.org, www.aiacontracts.org/contract-documents/25131-general-conditions-of-the-contract-for-construction.

² "General Contractor Agreement: Construction Contracts." ConsensusDocs, www.consensusdocs.org/contract_category/generalcontracting/.

Other related Zurich Risk Topics

Importance of a project schedule on construction projects

Contractor's equipment – theft and vandalism protection?

Jobsite security?

Fire exposure reduction in buildings under construction or renovation?

Tips for protecting the public on or adjacent to construction sites

Appendices

Appendix A – Suspended project checklist

Administration	Yes	No	Action	Security	Yes	No	Action
Is there a plan controlling the shutdown?			If no, put a plan in place. "Follow the Safeguards During Idle Periods" Procedures.	Is there a method of recording authorized visitors?			If no, investigate a system to record all visits by contractors, staff, visitors, etc.
Have the project's insurers been notified?			If no, ensure the insurers are aware of the project's status.	Are there vulnerable access points?			If yes, upgrade physical security.
Are routine inspections planned?			If no, prepare a regular inspection plan.	Are all perimeter barriers in good repair?			If no, repair fences, etc.
Has forwarding of mail been arranged?			If no, make arrangements.	Are existing doors and door hardware adequate?			If no, upgrade or board up.
Has the police department been informed?			If no, contact the local police department immediately.	Are letter flaps, drops, etc., sealed?			If no, seal or box to prevent junk mail and flammable liquid introduction.
Has the fire department been informed?			If no, contact the local fire department immediately.	Are existing windows in good repair?			If no, repair as a matter of urgency.
Have key holders or emergency contacts been assigned?			If no, nominate key holders and emergency contacts.	Are accessible windows adequately protected?			If no, fit them with protection.
Have the police been given key holder details?			If no, ensure the local police are informed.	Is there a perimeter burglar alarm?			If yes, maintain service and upgrade as necessary. If no, consider installation.
Has the local planning authority been consulted?			If no, contact the authority regarding their policy on idle properties.	Is there manned security?			If yes, consider retaining their services.
Are all keys accounted for?			If no, change locks urgently.	Is there remote monitoring capability?			If no, consider obtaining a system.
Are there elements of construction that may require installation of temporary protection?			If yes, protect areas and equipment susceptible to water, weather exposure, temperature changes, etc.	Are there water or moisture alarms in place?			If no, consider installing.

Housekeeping and Health and Safety	Yes	No	Action	Fire Safety	Yes	No	Action
Has the health and safety of visitors been addressed?			If no, make an assessment and implement recommendations.	Is there an automatic sprinkler system?			If yes, consider retaining with regular maintenance and adequate heat protection.
Has the health and safety of security staff been addressed?			If no, make an assessment and implement recommendations.	Is there an automatic fire detection system?			If yes, consider retaining with regular maintenance
Has all construction debris and standing water been removed from the inside of buildings?			If no, ensure construction debris and standing water is removed.	Are fire hoses provided?			If yes, consider retaining with regular maintenance and adequate heat protection.
Has all refuse been removed from the outside of buildings?			If no, ensure all refuse is removed and is stored away from the buildings.	Are portable fire extinguishers provided?			If yes, assess need. (Extinguishers are needed for guards, where applicable.)
Are unnecessary furnishings and furniture present?			If yes, remove all unnecessary items.	Is there a fire pump for the sprinkler system?			If yes, keep it in service with regular maintenance and adequate heat protection.
Are any portable or temporary facilities present, such as trade and storage trailers?			If yes, secure them from movement and unauthorized entry.	Is there a suction and/or gravity tank for the sprinkler system?			If yes, keep it in service with regular maintenance and adequate heat protection.
Were all nonessential services disconnected?			If no, ensure disconnections are made so they are not easily reconnected.	Will all water be shut off and heat not maintained?			If yes, be sure to drain all systems completely, including trapped drains.
Will any essential services (electrical power, gas service, water, hot water tanks) remain on?			If yes, secure/lock out. Ensure that frost protection (proper heating) is in place for water service. Drain unused hot water tanks and shut off their heat sources.	Is fall protection required and in place?			If yes, maintain all guardrails, edge protection systems such as netting and cocoon systems, floor and shaft opening protection, and secure all scaffolding.
Are any flammable liquids stored?			If yes, remove or dispose of safely.	Is public protection required?			If yes, maintain debris netting, sidewalk sheds, and temporary walkways.

Housekeeping and Health and Safety	Yes	No	Action	Fire Safety	Yes	No	Action
Are there any fuel tanks?			If yes, ensure tanks are empty and purged (seek advice where appropriate).	Is project documentation up to date?			If not, preserve a record of conditions up to the point of work stoppage visually, contractually and schedule related. Consider cloud-based or off-site document storage.
Is construction equipment to remain on site?			If yes, safely store and maintain in accordance with manufacturer recommendations.	Are hoists and/or elevators required for emergency response?			If yes, maintain in emergency readiness for local authorities.
Are cranes to remain on site?			If yes, store and maintain cranes in accordance with manufacturer recommendations and approved crane notice application drawings.	Is there interior and perimeter lighting in place?			If yes, consider retaining on a timed circuit.
Are there stored materials (on or offsite)?			If yes, verify location of, and properly secure, stored materials. Confirm ownership and insurance coverage.	Has roof been installed?			If yes, remove loose equipment and debris; make any necessary repairs; and verify drains are clear and operational.

NOTE: This is a listing of suggested items and does not warrant or imply that it is all encompassing or pertains to every aspect of your project. You are responsible for determining and mitigating the risks associated with your project.

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