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| Chubb Exposure Assessment Form Reinforced Concrete Superstructure |
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|  |  | Date of Assessment |       |
|  |  | Completed By |       |

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| Project |       |
| Contract Number |       |
| Contractor |       |
| Supervisor |       |
| Activity Start Date  |       |
| Expected Completion Date |       |
| No. of Workers  |       |

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| Operation | Item # | Exposure | Mitigation / Controls |
| 1. Erection of deck, columns, and core wall.
 | 1A | Fall exposure associated with the erection of form work for the deck, columns, and core. Detailed explanation required of RIC contractor explaining means and methods along with controls implemented to ensure 100% fall protection at all times for their workers.  |       |
|  | 1B | Overloading of the deck due to improper storage and handling of re-bar or other material on the deck. |       |
|  | 1C | Insufficient and/or cluttered walkways on the deck due to improper staging/storage of rebar and form work resulting in trip and fall exposure. |       |
|  | 1D | Improper set up and utilization of ladders during floor erection resulting in fall exposures.  |       |
|  | 1E | Fall/Trip exposure to MEP and other trades required to walk on top of rebar in the deck when installing sleeves and other related activities. |       |
|  | 1F | Fall exposures associated with surveying and layout work along the leading edge of unprotected deck. |       |
|  | 1G | Fall exposure associated with carpenters engaged in the initial installation of guardrails along the perimeter of the deck and leading edge of shafts.  |       |
|  | 1H | Workers leaning against perimeter guardrails.  |       |
|  | 1I | Storing and not securing material less than 10 feet from the perimeter of the deck. |       |
|  | 1J | Not monitoring weather reports to ensure form work and material on the deck is properly braced and secured against high winds.  |       |
|  | 1K | Not securing top and bottom of re-shores along perimeter of the floor slab and at leading edge of shaft openings. |       |
|  | 1L | Potential deck failure due to lack of compliance with approved engineering shoring and re-shore drawings ensuring deck can safely support the weight of the loads being applied.  |       |
|  | 1M | Exposures associated with stripping operations of deck, columns, and core such as struck by falling form work, slip/trips on stripping floor, overexertion moving material.  |       |
|  | 1N | Fall exposures with job made ladders. Workers not maintaining three points of contact due to carrying material or tools up and down ladders. Poorly constructed or maintained ladders. Slips on ladder rungs in winter due to ice/snow buildup.  |       |
|  | 1O | Crane related accidents due to improper hoisting and /or rigging of material. |       |
|  | 1P | Crane/rigging exposures associated with high winds including not following manufacturer requirements regarding wind speed operation. |       |
|  | 1Q | Exposures associated with moving form work through floor penetrations from one level to another. Exposures include fall from heights through floor openings, leaving floor penetration unprotected, material being lifted inadvertently falling onto a worker due to mishandling.  |       |
|  | 1R | Unsecured and maintained floor coverings along the deck where penetrations in the slab exist. |       |
|  | 1S | Guardrail installation and maintenance at elevator and mechanical shafts.  |       |
|  | 1T | Maintenance of perimeter safety cable and vertical netting.  |       |
|  | 1U | Failure to submit and/or comply with engineered drawings of work platform in elevator shaft used for ladder access and egress up to decking floor.  |       |
|  | 1V | Exposure to exposed tips of vertical and horizontal re-bars.  |       |
|  | 1W | Fall exposures to carpenters and lathers constructing the vertical columns. |       |
|  | 1X | Fall exposure associated with construction of the core/shear walls. |       |
|  | 1Y | Struck by falling objects during the erection of form work. |       |
|  | 1Z | Failure to have JHA completed, approved, and reviewed with crew performing the work. |       |
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| 1. Concrete placement of deck, columns, and core wall.
 | 2A | Fall exposure to laborers pouring concrete for columns and core wall. |       |
|  | 2B | Fall exposures along the perimeter of the deck and leading edges of shaft openings during concrete pour. |       |
|  | 2C | Blow out of form work for columns and vertical walls due to concrete pressure against form work. |       |
|  | 2D | Collapse of deck forms due to weight of concrete resulting from installation of form work not in compliance with approved engineered shoring drawings.  |       |
|  | 2E | Wear/damage to interior and exterior liner of concrete riser/ hoses utilized to pump concrete. Verification should be obtained that all concrete hoses are inspected to include proper wear thickness of hose interior and exterior wall. |       |
|  | 2F | Failure of concrete pump pipe elbows under excessive pressure due to inadequate blocking. |       |
|  | 2G | Damage/ wear of concrete hose collars for concrete pumping operation.  |       |
|  | 2H | Coordination of concrete pumper suppling project in the roadway/street to ensure motorist are not interfered with when driving down the street.  |       |
|  | 2I | Qualified flag personnel required if concrete pump truck will be positioned in the street.  |       |
|  | 2J | Un-protected floor opening where the vertical hose lines penetrate the floor slab to reach the overbuild section of the building.  |       |
|  | 2K | Air quality issues including buildup of gases/fumes and/or depletion of oxygen if temporary heat needs to be pumped into the area during winter months. |       |
|  | 2L | Failure to prepare and execute winter concrete safety plan/procedures. |       |
|  | 2M | Fall/Trip related exposures due to unorganized storage of material. |       |
|  | 2N | Exposed tips of re-bar at pile caps and columns.  |       |
|  | 2O | Trip/Fall exposures walking on top of exposed rebar for deck slab. |       |
|  | 2P | Failure to have qualified third-party inspection firm conduct control inspection of rebar installation prior to pouring of concrete. |       |
|  | 2Q | Failure to have qualified third-party inspection firm perform required concrete test. |       |
|  | 2R | Failure to have JHA completed, approved, and reviewed with crew performing the work. |       |
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| 1. Stripping & Re-shore of poured deck.
 | 3A | Removing form work prematurely before concrete has sufficiently cured. |       |
|  | 3B | Stripping/removing form work without thoughtful & planned safety procedures. |       |
|  | 3C | Struck by falling objects during dismantling operation. |       |
|  | 3D | Failure to install re-shores as per approved engineered shoring drawings. |       |
|  | 3E | Overexertion/strains due to improper lifting and handling of removed form work. |       |
|  | 3F | Failure to secure re-shores to prevent dislodgment or falling off the building or into shaft ways. |       |
|  | 3G | Improper storage of form work on floor resulting in clutter and fire hazards. |       |
|  | 3H | Fall exposures at floor openings or leading edges of slabs, associated with jumping form work from stripping floor to next erection floor.  |       |
|  | 3I | Removing safety cables, guardrails or floor covers without properly replacing same when finished or leaving the work area.  |       |
|  | 3J | Failure to comply with approved engineered drawings regarding premature removal of re-shores at stripped floors.  |       |
|  | 3K | Rigging failure of hoisted loads being removed from the floor due to unqualified rigger, improper selection and/or damaged rigging equipment. |       |
|  | 3L | Failure to have JHA completed, approved, and reviewed with crew performing the work. |       |
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| 1. Floor penetration covers at mechanical risers.
 | 4A | Floor covers not capable of supporting at least twice the heaviest load that may be applied. |       |
|  | 4B | Floor covers not properly installed/secured/marked. |       |
|  | 4C | Failure to regularly inspect floor covers to confirm covers designed to support at least twice the heaviest load and free from damage. |       |
|  | 4D | Failure to install and maintain guardrails along shaft openings and leading edge. |       |
|  | 4E | Failure to inspect regularly, floor openings and guardrail systems to ensure proper installation and maintenance is maintained. |       |
|  | 4F | Failure to have JHA completed, approved, and reviewed with crew performing the work. |       |
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| 1. Tower Crane erection & operation.
 | 5A | Failure to have tower crane pad/foundation designed/engineered drawings completed by qualified PE and submitted for approval to regulatory agency. |       |
|  | 5B | Failure to have anchor bolt installation for tower crane base verified to be as per approved engineered drawings. |       |
|  | 5C | Failure to have engineered drawings/ calculations for tower crane completed by qualified PE and submitted to regulatory agency for approval. |       |
|  | 5D | Failure to have engineered drawings/ calculations for assist crane completed by qualified PE and submitted to regulatory agency for approval. |       |
|  | 5E | Failure to have required permits secured for street closures and crane erection before any crane related work commences.  |       |
|  | 5F | Failure to have engineer of record and/or qualified third-party inspection firm on-site during erection of tower crane to ensure erection is per approved plans and specifications.  |       |
|  | 5G | Failure to ensure all tower crane components are compatible with required serial numbers and/or other approved markings and inspected to ensure compliance. |       |
|  | 5H | Failure to ensure tower crane mast sections secured to structure as per approved engineered drawings. |       |
|  | 5I | Failure to have qualified master rigger on-site during erection/jumping/dismantling of tower crane. |       |
|  | 5J | Failure to have engineer of record and/or qualified third-party inspection firm on-site for all tower crane jumps and dismantling operations.  |       |
|  | 5K | Failure to address if more than one tower crane erected, potential for cranes booms to collide with one another may exist. |       |
|  | 5L | Failure to have licensed or NCCO qualified tower crane operator assigned to specific crane. |       |
|  | 5M | Failure to have a qualified independent third-party crane inspection firm inspect and document all critical tower crane components including but not limited to; breaks, limit switches, electrical components, structural integrity of boom sections, all wire ropes, wind meter devices and counterweights. |       |
|  | 5N | Failure to ensure crane can weather wane freely.  |       |
|  | 5O | Failure to confirm ground conditions stability and underground vaults/utility locations will not be impacted due to assist crane set up on roadway. |       |
|  | 5P | Contact with overhead electrical cables. |       |
|  | 5Q | Failure to have JHA completed, approved, and reviewed with crew performing the work. |       |
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