*General Notes on Sample Project Closeout Checklist*

This template, prepared by the Construction Contract Administration Committee, is intended to serve as a generic checklist format to be tailored for individual practices and the specific needs of the particular project.

There are generally three categories of close out documentation:

* documentation required by the authorities having jurisdiction (AHJs),
* that required under the contract or specifications (Contractual), and
* those documents required for the Owner’s Operation and Maintenance of the building.

The checklist is divided into these three sections.

|  |  |
| --- | --- |
| Project: |  |
| Project No.: |  |
| Client: |  |
| Address: |  |
| Legal Description: |  |
| Use: |  |
| Date: |  |

Municipal Requirements (Authorities having Jurisdiction)

This category of closeout documentation includes final letters from the consultants based on the general review of the project, verification letters relating to life safety system (e.g. fire alarm, sprinkler, mag-lock), acceptance/clearance letters from the Technical Standards and Safety Authority (TSSA) relating to elevating devices, boilers, and pressure vessels, as well as final documents arising from development or site plan agreements (e.g. grading and planting certificates, storm water management calculations). Depending on the location of the site, there may also be requirements (e.g. from conservation authorities, the Ministry of the Environment, or Transport Canada). If the project includes condominiums, there will be Tarion requirements that must be met (including Schedule G).

1. Occupancy Certificate

This is a record copy of the certificate issued by the local municipality to permit partial or complete occupancy of a building. Issuance is usually dependent upon final review letters from the consultants, life safety system verification, and final inspection by the municipality.

1. Certification from the various consultants

Development Agreement Requirements

Dependent on the specifics of any development agreement signed before the start of the project.

Ministry of Housing

Consultants:

Architect

General Review clearance letter

Based on the most recent site review stating that the building is in general conformity to the permit drawings (see [EABO Final General Review Report](http://www.oaa.on.ca/images/docs/1288762517_EABO_Final_General_Review_Report.pdf) It does not deal with non-code related items such as gypsum board finish level, painting or cleaning.

Site Services

Grading Certificate

Storm water management

Landscape

Planting Certificate

Usually prepared by a landscape architect stating that the size and species of trees and shrubs corresponds with site plan agreement requirements.

Structural

General Review clearance letter

Based on the most recent site review stating that the building is in general conformity to the permit drawings (see EABO Final General Review Report. It would not deal with non-code related items such as cosmetic concrete honeycombing or colour variation between batches.

Plumbing

General Review clearance letter

Based on the most recent site review stating that the building is in general conformity to the permit drawings (see EABO Final General Review Report It does not deal with non-code related items such as colour of fixtures or finishes.

Septic Certification (if applicable)

Sprinkler

Certificate to NFPA 13

Usually prepared and issued by the engineer who signed and sealed the sprinkler design drawings.

Mechanical HVAC

General Review clearance letter

Based on the most recent site review stating that the building is in general conformity to the permit drawings (see EABO Final General Review Report).It does not deal with non-code related items such as final cleaning of ducts or replacement of filters.

Electrical

General Review clearance letter

Based on the most recent site review stating that the building is in general conformity to the permit drawings (see EABO Final General Review Report). It does not deal with non-code related items such as colour temperature of lighting.

ESA Certification

Fire Alarm

Certificate of Verification

Mag Lock Certificate (if applicable)

Where magnetic locks are required to be connected to a fire alarm system, the system must be verified after the installation of the mag lock to ensure its function is not impaired.

Fire Prevention

Certificate of Verification

Elevating Devices (if applicable)

TSSA License.

Upon review, the TSSA issues licenses for elevating devices. Elevating devices must be licensed before they are put into general service. Elevating devices include elevators, escalators, moving walks, inclined lifts, dumbwaiters, man lifts, accessibility lifts, aerial tramways and chair lifts.

Boilers and Pressure Vessels

TSSA Inspection certificate/Operating License

Upon review, the TSSA issues inspections certificates or licenses for certain types and sizes of equipment that operates under pressure such as boilers and piping systems.

Security

CONTRACTUAL REQUIREMENTS:

This category of close out includes all final documentation of contract fulfilment as specified in the Contract Documents.

1. Outstanding Change Orders (if applicable)

Work on issued changes should not proceed until a signed Change Order is signed by all parties involved. It is preferable that outstanding changes be priced and processed within a reasonable timeframe so that the owner is aware of the real cost of construction and the general and sub contractors know they will be compensated for their work.

Items

Allowances

Others

1. Deficiencies Review Procedures

As part of the close out process and to aid in establishing the cost of outstanding and defective work a process for deficiency review has to take place. This process starts with the subcontractors developing a punch list and thus correcting the work on their list until either all items are corrected or noted items that can’t be complete by a specific date; and then noting when it will be complete. This list is reviewed in association with the general contractor as it would be responsible for co-ordination on site. Upon completion the general contractor will request a site review with consultant s, owner, contractor and subcontractor to review the list and modify as required.

1. Last Minute Changes:

Last minute changes can be disruptive to efforts to complete the project on time. Ask whether the change could done by others at a later date or whether a delay in completing the contract will delay the completion date? Determine with the team whether this last minute change should proceed as a change directive if there is insufficient time to issue, price and document by Change Order.

Construction

Landscaping

Playground

Work until spring

Other

1. Final Contract Price

Finalizing Contract Price: The process to finalize contract price involves all parties noting that no extras exist and that all changes have been processed as change orders, including cash allowances.

1. Finalize Contract Time

Contract time is set out in the contract the owner and contractor and can typically only be modified by change order in the event of delays beyond the contractor’s control or when extra scope causes the general contractor to extend the contract duration.

Date of Contract Completion

1. Final Payment

Requirements for final payment are noted in standard forms of contract, the Construction Lien Act, OAA/OGCA Document 100 and “A Guide to Project Closeout Procedures”.

Procedure

Statutory Declaration

Workman's Compensation Clearance

Contractor’s reconciliation of final accounts

Construction Liens

Date of last supply

Substantial performance

Deemed completion (if applicable)

1. Date of Occupancy

Effective date of handover of systems

Effective date for handover of security

Builders risk off

Effective date for handover of insurance

1. Utilities Transfer - reading

Gas

Electrical

Water & sewage

1. Final Cleaning and Commissioning Requirements

Window stickers removed/windows cleaned

Furnace filters replaced, lubrication, indicator bulbs

Brick cleaning

Site cleaning

Spare parts

Elevator wiring diagrams and test results (where required)

Mechanical and plumbing letter re: tests, adjustments

Fire Department Certificate for fire protection systems

Certificate of electrical inspections

Test of fire alarm (where installed)

Elevator tests and Certificate (where installed)

Fire safety plan and signs

Owner or Tenant Operational & Maintenance Requirements

Included are items such as as-built drawings, operations and maintenance manuals, and warranties to assist the Owner, Tenant or Facility Manager to in the operation of the building post-Occupancy.

1. Bonds and Insurance

Review of insurance claims

Review of expiry dates

Confirmation that surety informed

1. Owner Provided Equipment

Systems

Furniture

Other

1. Appliances - delivered/installed

Correct handedness

Clothes washing - coin operated / other

Damage

1. Maintenance Contracts

Checklist varies significantly by building type and scale

1. Landscape

Winter clearing Note: snow removal and perimeter maintenance

Lawn Sprinkler

Sprinkler supervision

Mechanical equipment

Fire Alarm

Software maintenance Note: CCTV, security, operations, etc. software maintenance and upgrading

Window washing

Interior cleaning (floors, entrance mats, dusting, kitchen housekeeping, etc.)

Water Main

Owner may have a separate fire water line, required to be flushed/tested annually

1. Hardware/Keying

Personnel involved

Master keys

Replacement hardware and servicing procedure

Special keying arrangements (holding cells and other secured facilities)

Owners, particularly those with high security requirements often have established relationships with a locksmith or contract hardware specialist. In these instances, construction locks will be installed for re-keying by Owner forces on turnover.

1. Maintenance Contracts – advise Owner to secure the following maintenance contracts as applicable

Landscape & Irrigation

Snow removal

Sprinkler supervision

Mechanical equipment

Fire Alarm

Software maintenance: CCTV, access control,

Window washing

Interior cleaning (floors, entrance mats, dusting, kitchen housekeeping, etc.)

Water main

Owners sometimes have a separate fire water line, required to be flushed and tested annually – if required, add to Maintenance list

Window Cleaning

Roof anchor inspection

Special Maintenance (consult specification)

1. Operating Manuals

O&M manuals to Owner’s building operators

MSDS sheets

1. Record Drawings

Refer to client / architect agreement for quantity and paper size of hardcopies (Whiteprints, Vellums, Mylars), for format of digital files (PDF, PDF/a, BIM, CAD), and for media to be used (CD, DVD, USB drive, electronic file transfer).

Architectural

Mechanical

Electrical

Fire alarm

Data/ Communications (if applicable)

Civil (if applicable)

1. Warranty list and contacts

Warranty Requirements (12 months from date of Substantial Performance

Review Contract and Project Manual to confirm Basic (minimum, usually 1 year) and Extended or Additional Warranty Requirements for all products, materials and assemblies.

Including, for example base contract (e.g. CCDC2) and specifications:

00 73 00 Supplementary Conditions:

01 70 00 Execution and Closeout Requirements,

01 78 00 Closeout Submittals

01 78 36 Warranties

01 80 00 Performance Requirements,

01 83 00 General Requirements for Building Envelope

[Other]

Review specific sections in project manual for applicable products, materials and assemblies, confirm:

* Basic or extended warranty required,
* Warranty Requirements / Parameters, for example:
* Materials, Labour and Workmanship (longer, shorter?)
* Responsibility for related impact (e.g. removal/replacement of other materials where required to perform work)
* Total System Warranties (where a system shall meet both specified system and other design and performance requirements)
* Correlated of requirements with other sections such as under 01 80 00.

Review Warranties as required to determine the following:

* Dated from date of Substantial Performance of Contract (usually 12 months),
* Extended warranties signed over to Owner from specification
* Section # / Product/Material/Assembly
* Length of Warranty
* Correlates to other Sections as applicable

Typical extended warranties signed over to Owner from specification:

Planting (2 year)

Green roof system

On green roof systems that are co-dependent on the integrity of the roof membrane, electronic field vector mapping, planting etc. obtaining a system warranty can be beneficial to the Owner

Roofing (25 year)

Asphalt paving (2 year)

Siding (varies to 10 years for fibre, consult specification)

Glazing (2 year)

Sealed glazing units (varies, consult specification)

Curtain wall / window wall systems (varies with system, consult specification)

Membranes

Sheet metal (varies to 10 years, consult specification)

Plastic (1 year) (trunk wrapping)

Sealants (2 year)

Masonry protection

Doors (5 year)

Windows (sealed units 5/10 year; mirrors 5 years)

Hardware

Flooring (2 year) Carpet (10 years)

Tub enclosures

Millwork / cabinets

Special Equipment

Elevators / Conveyances

Plumbing

Plumbing Fixtures

HVAC Units (varies – consult specification)

Electrical devices (varies – consult specification)

1. Instruction and Training

Small / Medium Scale

Training varies considerably with scale, building type and Ownership structure. Owner should be able to operate building in conformance with consultants’ design intent

* Presentation of Commissioning Documents
* Presentation of Operation and Maintenance (O&M) Manuals
* Presentation of Shop Drawings
* Coordinate Instruction / Training meetings - Contractor / Trades / Owner for system operation
* Coordinate Submission of special equipment and spare parts (consult specifications)

Complex / Large Scale

Coordinate and Track Training Program of Owner’s Building Operations Team

* Presentation of system narrative, design intent and system description
* Presentation of commissioning reports (system by system)
* Presentation of record drawings with Owner’s Building Operations team (as applicable)
* System Training and phase in of joint operation by Owner’s Operation and Construction teams approaching Occupancy Date (when applicable)

\*FAS and life safety

\*HVAC equipment

Geothermal heat rejection

Building automation and controls

Vertical Conveyances

Waste handling systems

Integrated testing

Kitchen Systems

Parking control systems

\*almost always applicable

1. Close-out Submissions

As-Built Drawings

Maintenance & Operations Manuals

Engineered Shop Drawings – Trade

Engineered Shop Drawings – Systems (if applicable)

1. Maintenance Materials

Hardware / wrenches / specialty tools

Window cranks / window hardware

Spare Stock

Flooring

Tile (rubber)

Sheet flooring - (consult specifications)

Carpet – (consult specifications)

Paint - (consult specifications)

Ceiling Tile - (consult specifications)

Parts – system maintenance parts (consult specifications)

1. Fire Safety Plan

Text align with Municipality standard

Drawings letter format

Combine with “You Are Here” placards for entrances

1. Record Drawings (consultant team)

Record drawings incorporate the contractor’s as-built drawing information. Confirm during the project that as-built information is being maintained. Ensure the other consultants have up-to-date architectural background drawings to use as the basis for the record drawings.

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