

Massachusetts Bay Transportation Authority

CAPITAL PROGRAMS MANUALS















CONSTRUCTION CLOSEOUT

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Introduction

Construction Closeout Manual: Chapter 1

Purpose

The Construction Closeout Manual is intended to provide a "high level" overview of the necessary steps included in the Construction Contract Closeout Process. Contract closeout is an essential process in the lifecycle of a contract. Contract closeout releases the MBTA from contractual obligations and liabilities and it unencumbers capital funding that can be repurposed to support other activities within a Project or can be used to supplement other work within the Capital Program.

Included in this manual is general guidance on the various forms and documents that are required to ensure all specified work has been completed in accordance with the contract, all record documents have been received, and all financial aspects of the contract are settled. Additional details are available in contract specification sections, specifically Section 01700 relative to contract closeout, as well as in the Field Staff and Change Order Manuals.

Responsibilities

The Project Manager is responsible for the timely and effective closeout of a construction contract. The PM needs to rely on actions by all participants in the MBTA Construction Management Process, including the Contractor, the Design Engineer of record, MBTA Field Staff, Finance, Change Order Management and QA/QC Managers. Ultimately, it is the Project Manager's responsibility to oversee, and follow-up on, all activities in the Construction Contract Closeout Process.



The Closeout Process

Construction Closeout Manual: Chapter 2

The Construction Contract Closeout Process officially begins with the Contractor's declaration of substantial completion and is complete when the final contract payment is processed. The Construction Contract Closeout Process should begin at least three (3) months prior to the contract's 'scheduled' substantial completion inspection, when the core project team (i.e., PM, Field Staff, Designer and Contractor) shall hold a 'work-off' meeting. At this meeting, the team shall develop a work list that includes all outstanding work items and administrative documents, as well as their forecasted completion dates. The work list should be distributed bi-weekly until substantial completion is achieved. Each update shall show items completed and the forecast completion dates of any outstanding items.

During the closeout process, the project team must take steps to verify that all contract work is complete, verified, and accepted by the MBTA; must oversee the processing of required contract closeout forms; confirm that contract deliverables have been provided; and ensure that contract values are reconciled.

In addition to this Manual, Project Managers should refer to MBTA Standard Specification **Section 01700** entitled "Contract Closeout", which appears in all MBTA construction contracts and serves as a guideline for both Contractors and Project Management staff when closing a construction contract.



Completion of Work

Construction Closeout Manual: Chapter 3

One of the most important aspects of the closeout process involves documenting the Contractor's completion of all contract work and assembling the required closeout forms attesting that the work has been performed in accordance with contract specifications and is acceptable to the MBTA.

The four primary forms used to document that all work has been completed in accordance with the contract, all record documents have been received, and all financial aspects of the contract are settled include:

- Certification of Substantial Completion (Form 6)
- Notification Opening Portions of Contract for Operations (Form 7)
- Certification of Completion and Release by Contractor (Form 8)
- Certificate of Inspection and Acceptance (Form 9)

It is the responsibility of the Project Manager to initiate these required closeout forms. With the exception of the Certification of Completion and Release (Form 8), which must be generated in CMS, all forms should be initiated through the respective e-Builder process.



Certification of Substantial Completion

Construction Closeout Manual: Chapter 4

The Certificate of Substantial Completion represents the legal recognition by the Authority that the contract is "substantially complete" except for certain minor punch list items which do not hamper the acceptance and use of the facility by the MBTA. The form outlines specific portions of the project which are substantially complete and requires signatures from the Designer, Project Manager, Director, Director of QA/QC, Chief Engineer and the respective Delivery or Transformation Chief overseeing the construction work.

Substantial completion is defined in the General Conditions as the scope of work that is required by the contract and has been completed, except for work having a contract price of less than 1 percent of the adjusted total contract price, or substantially all the work has been completed and opened to public use except for minor incomplete or unsatisfactory work items that do not materially impair the usefulness of the work required by the contract.

The Contractor shall provide written certification to the MBTA when it believes the work is substantially complete and ready for semi-final inspection. Along with said written certification, the Contractor shall provide the MBTA with the Contractor's written list of incomplete and non-conforming items/work and a schedule for the completion or correction of such items/work.

Before requesting inspection for Certification of Substantial Completion, the Contractor must submit the following items to the MBTA:

- Closeout Plan
- Work-list and Punch-list
- Closeout of Submittals, RFIs and NCRs
- Workmanship Bonds
- Maintenance Agreements
- Final Certifications and similar documents
- O&M Manuals
- Training Sessions or Training Materials
- Warranties and Guarantees

- Warranty Bonds (if required) for building and special systems
- Spare Parts and Tools
- As-builts or Red Line Drawings, as practicable
- Testing and Commissioning Reports
- QA/QC Records
- ADA and System Safety Certifications
- Contractor's Certification of Work
- Designer's Construction Control Documents
- Signed Construction Permits
- Certificate of Occupancy
- Occupancy Permits

Upon receipt of the items listed above, the Contractor shall prepare a closeout package that shall be compiled and presented to the PM, the Designer, and the State Building Official for permitted projects.

Within 21 days of receipt of the Contractor's written certification and written list of incomplete and non-conforming work and completion/correction schedule, the MBTA shall inspect the work, and provide the Contractor either a written declaration that the work has been substantially completed or an itemized list of incomplete and unsatisfactory work items required by the contract sufficient to demonstrate that the work has not been substantially completed. The MBTA will either proceed with inspection or advise the Contractor of incomplete work requirements. If the Project Manager fails to respond within the 21-day period, the contractor's certification shall take effect and the contract will be declared substantially complete.

The MBTA shall not issue a Certificate of Substantial Completion until the above listed documents, where applicable, have been submitted and accepted by the MBTA, and a Certificate of Occupancy (or temporary COO) has been issued by the State Building Official.

If the Project Manager does not believe the Contractor will achieve the substantial completion date, they shall notify Contract Services (CNprocurement@MBTA.com) of the new proposed substantial completion date so that administrative steps can be taken in FMIS to extend the contract dates. Failure to notify CNprocurement@mbta.com of a new proposed substantial completion date may delay contractor invoices.

Upon determination of substantial completion, the Project Manager shall initiate the "Form 6 Substantial Completion Approval" in e-Builder and attach a punch list of items which shall be completed by the Contractor prior to Final Acceptance.

Punch List

The Punch List is an inventory of outstanding construction activities or items requiring correction that must be completed before a contract is closed. A Punch List is required to obtain the Certificate of Substantial Completion (Form 6). Punch List items are identified at the time of substantial completion (or before) and should be relatively minor, so they do not hamper the use of the facility by the MBTA. The Punch List is typically developed by the Contractor with input from the Consultant and Project Office.

As-Built Drawings & In-Process Drawings

The Contractor is responsible for submitting a complete set of 'as-built' drawings to the MBTA prior to receiving a Certification of Substantial Completion. The Contractor's as-built drawings shall note any variation in work and reflect all approved changes or clarifications that occurred since the issuance of the conformed set of contract documents. Variations and changes may have been the result of a Request for Information (RFIs), Design Change Requests (DCRs), Shop Drawings, Change Orders (CO), Non-Conformance Reports (NCR), or by the Contractor's actual construction.

The accuracy of the as-built drawings shall be verified by the Designer and the MBTA during substantial completion and final acceptance inspections. If inaccuracies are found, then the Contractor shall revise the as-built drawings until they are acceptable. The Contractor will not be issued 'substantial completion' until their as-built drawings have been submitted and deemed acceptable for use during substantial completion inspections. For this requirement to be manageable, reviews of the as-built drawings shall be performed periodically throughout the project duration.

Upon acceptance of the as-built drawings, the Contractor shall provide the MBTA with a set of computer-generated (i.e., pdf and AutoCAD format) as-built drawings. The Contractor shall not be issued 'final acceptance' until the computer-generated drawings have been accepted by the MBTA and the Designer.

Refer to Specification Section 01700 'Contract Closeout', 1.4 'As-built Drawings' for additional information pertaining to this provision.

A copy of the Contractor's accepted as-built drawings shall be retained in the project's e-Builder Document File Folder No. 11.06.03 'Construction Closeout, As-built Drawings'. In addition, a copy of the Designer's Record Drawings shall be retained in File Folder No. 11.06.02 'Construction Closeout, Design Record Construction Documents'. Copies of each set of drawings shall also be transferred to the MBTA Document Control Manager (DocumentControl@mbta.com) for archiving.

System Safety Certification

The purpose of the Safety Certification Program is to ensure that major capital projects which rehabilitate, replace, extend, or modify infrastructure, systems, vehicles, and equipment are safe, and that safety concerns or hazards are adequately addressed prior to use. The Safety Certification process begins during the design phase of the project when safety critical items are identified through hazard analyses and reviews of lessons learned from similar projects and incorporated into construction contracts. The Safety Certification process continues throughout the construction phase and is complete when all identified safety critical items are addressed.

Safety System Certification is required to obtain a Certificate of Substantial Completion (Form 6).

Operations Manuals and Warranties

To achieve substantial completion, the Contractor is required to submit all operation and maintenance (O&M) manuals and provide MBTA end-users any specified training as required by the project's technical specifications.

O&M manuals are generally required for major pieces of equipment or systems (i.e., mechanical, electrical, plumbing, fire protection, etc.) that were installed as part of the project. The O&M manuals typically include product data, shop drawings, maintenance instructions, spare parts list, the supplier's and installer's contact information, and a copy of the 'executed' warranty or service contract.

The Contractor will not be issued a 'final acceptance' certificate until all manuals include 'executed' warranties.

Copies of the manuals shall be retained in the project's e-Builder Document File Folders Nos. 10.07 'Submittals' and 11.06.05 'Closeout, Manuals'. Electronic copies of the manuals shall be forwarded to the Office of the Chief Engineer for end-user distribution. Also, hard copies of the manuals (if required) shall be kept with the applicable equipment or system.

For additional information and details regarding the requirements for substantial completion, please refer to Specification Section 01700 'Contract Closeout', 1.2 'Substantial Completion'.



Notification – Opening Portions of Contract for Operations (Form 7)

Construction Closeout Manual: Chapter 5

The form for Opening Portions of Contract for Operations (Form 7) represents the recognition by the Authority and the Division of Occupational Licensure that the entire project or portions of the project are ready for use and occupancy. The form outlines specific portions of the project that are open for occupancy and requires the Project Office to obtain signatures from the Designer, Project Manager, Director, Director of Construction QA/QC, Senior Director of Environmental Affairs, Chief Engineer and the Delivery or Transformation Chief overseeing the contract.

In order to obtain a signature on the Form 7 from the Director of Construction QA/QC, all required building permits must be closed, and the Certificate of Occupancy must be provided. Approval of the Senior Director of Environmental Affairs will only be granted after the Environmental Department reviews the Environment Checklist to ensure that all environmental conditions and requirements have been met and are properly closed. In addition, a copy of the System Safety Certification must be provided.

When the Project Manager has all required documentation, they shall initiate the "Form 7 Occupancy Approval" process in e-Builder.

If any of the required documentation is missing, the Project Manager must coordinate with the Director of Construction QA/QC to obtain a Temporary Certificate of Occupancy.

Building Permits

During the design phase of a construction contract, Project Managers meet with State Building Inspectors (DOL) to identify all required permits for a construction contract. The Project Office shall create a memo outlining the results of the meeting and identify the permits that will be required. This memo shall be included with the prebid control package.

The contractor shall apply for all required permits and successfully close them out upon completion of the work.

Should it be determined that a contract does not require any permits, the memo shall document that no permits are required, and the memo shall be submitted with the prebid control package for future reference during the closeout process.

Environmental Checklist for Construction Closeout

Prior to the advertisement of a construction contract, the Project Manager must complete an Environmental Review and Permitting Checklist to ensure that all Environmental Permits and approvals have been obtained and are properly integrated into the project bid documents. When the time for construction closeout arrives, the Environmental Department will review the checklist to ensure that all environmental conditions and requirements have been met and are properly closed. The Environmental Department will not sign the Notification of Opening Portions of Contract for Operation (Form 7) or Certificate of Final Completion (Form 9) until all identified items are completed.

It is recommended that the PM work with their Consultant and the MBTA Environmental Department to complete this form.



Certificate of Completion and Release (Form 8)

Construction Closeout Manual: Chapter 6

The Certificate of Completion and Release (Form 8) absolves the MBTA from compensating the Contractor for any additional monies or time related to the contract. As such, the execution of this form is critical to the Construction Contract Closeout Process. The form outlines various contract values including, award amount, cumulative totals of executed contract changes, work to date, paid to date, and the balance due to the Contractor. This form is generated in CMS and cannot be produced until **AFTER** the execution of all remaining change orders and CQVs. It is recommended that the Project Office coordinate with their Budget Analyst when producing this form to ensure the timing is appropriate and the contract values are accurate. The Form 8 should be produced ahead of the final contract payment and be sent to the Contractor for signature. In addition, the Contractor must have the form notarized. Once the Form 8 is signed and notarized, it shall be uploaded to e-Builder with the final contract invoice.

The Certificate of Completion and Release can be found in CMS by navigating to PYMTS > Reports > PY-016.

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Certificate of Inspection and Acceptance (Form 9)

Construction Closeout Manual: Chapter 7

The Certificate of Inspection and Acceptance (Form 9) is the final contract closeout form used to document that all contract work has been completed in accordance with the contract plans and specifications and has been accepted by the MBTA.

The date of the official final inspection of contract work along with the date of final acceptance, the day the Authority concurs that all contract work is physically complete and accepted, is inserted into the Form 9. The date of acceptance is used to establish warranty periods, unless otherwise provided for in the contract documents. The Form 9 is then routed to the Designer as well as several internal MBTA reviewers, including the Project Manager, Area Director, Director of Construction QA/QC, Senior Director of Environmental Affairs, Director of Document Control, AGM of Systemwide Accessibility, Chief Engineer and the Delivery or Transformation Chief.

Prior to final acceptance the Contractor shall: complete all contract work, including all items on all punch lists, to the satisfaction of the MBTA; submit and obtain the MBTA's approval on all "Record Documents", warranty documents and all other required submittals; and address all non-conformance reports to the Owner's satisfaction.

When the Project Manager has all required documentation, they shall initiate the "Form 9 Final Acceptance" process in e-Builder for routing and approval.

Refer to Specification Section 01700 'Contract Closeout', 1.3 'Final Acceptance' for additional information pertaining to this provision.



Final Contract Reconciliation and Closeout

Construction Closeout Manual: Chapter 8

As part of the Construction Contract Closeout Process, the final value of a construction contract must be reconciled to match the contract work to date. The process to reconcile a construction contract is generally achieved by executing one or more contract actions, including a Construction Quantity Variance (CQV) to balance contract line items, change orders to modify contract dates or add/remove scope, and by processing invoices to charge remaining contract items.

This chapter discusses the various methods used to reconcile the contract value before closeout. It should be noted that not all contracts follow the same reconciliation process. As a result, close coordination with your Field Staff, members of the Audit & Closeout team, Change Management Group and Capital Program Oversight is strongly recommended during this stage of the process to ensure proper sequencing of contract actions, release of retainage and final payment. Project Managers are encouraged to begin this phase of the closeout process as soon as practicable to prevent delays.

Construction Quantity Variance (CQV)

As part of the contract reconciliation process, all contract line-item quantities must be fully expended or reduced to their actual work to date. A CQV is the administrative balancing process to identify and remove any outstanding or unused contract line-item quantities (i.e., unit-price, allowances and sum not-to-exceed change orders) and their related values from the contract.

At the Project Office's request, the CQV is generated in CMS by Capital Program Oversight. Prior to a PM initiating the CQV process, the Project Manager must confirm that the Contractor does not have any additional charges being submitted against the contract items that are being reconciled through the CQV process. A Project Manager can confirm the remaining contract line-item balances, by reviewing the Contract Skeleton found in CMS (PYMTS > Reports > CMS - PY - 4).

The CQV process does not include the balances of executed risk reallocations. As a result, the Project Manager must also know whether or not any contract risk reallocations with remaining balances will be fully invoiced before the final CQV is processed. Any risk reallocation that contains a balance that will not be fully invoiced, must be closed. To close

a risk reallocation, email the Change Order Coordinator and request that a risk reallocation be closed prior to the initiation of a COV.

Following the closure of any risk reallocations that will not be fully invoiced and confirmation about upcoming charges against remaining contract unit-prices, the Project Manager shall initiate the CQV process via e-Builder. The PM needs to inform Capital Program Oversight (CPO) which contract line-item balances should be removed through the CQV process by attaching a marked-up copy of the Contract Skeleton to the e-Builder process or by communicating directly with the Budget Analyst. Capital Program Oversight (CPO) will generate the CQV Report in CMS (CMS Form CMS-CO-7) and upload it to e-Builder. In addition, CPO will enter the CQV in CMS identifying which contract work order(s) shall be reduced.

Once uploaded to e-Builder, the CQV Report will be transmitted to the Change Order Coordinator (COC) who will produce the additional required CMS reports and will upload the documents to e-Builder.

Upon receipt of the CQV Form, the PM, with the assistance from the Designer and RE, must provide a justification letter explaining the quantity variances from the as-bid quantities for each line-item listed in the CQV. The justification letter is submitted with the CQV Forms and routed through e-Builder for signature. Signatories include the RE, PM, Budget Analyst, Program Controller, Director of Administration & Finance, Project Director, Deputy Chief and Delivery or Transformation Chief in accordance with construction contract delegated authority.

Note that MBTA Legal does not review credit based CQV's or credit change orders of any value unless special added contract or legal provisions need review.

Once all signatures are gathered and approval received, the CQV will be executed by Contract Services.

Change Orders

Prior to contract closeout, the Project Office must process any required change orders. A change order (CO) is usually a bilateral contract amendment executed by the Authority and Contractor that modifies the contract. A CO can also be issued unilaterally by the MBTA for administrative changes or in the event of a scope dispute. CO's can result in changes to the contract terms and conditions, add or modify special provisions, specifications, drawings and/or an increase or decrease in the contract price and/or the contract milestones and schedule time(s).

Typical change orders during the contract closeout phase may include time extensions, claims settlements, credit change orders and change orders for added work/scope.

For more detailed information on each process please refer to the Contractor Change Order Manual and the SOPs for CO/RR's, Work Directives, and the Small Dollar Changes Program.

For more information, please visit the following links:

- Change Order Manual & Various Change Order Documents
- Change Order & Risk Reallocation SOP
- ❖ Work Directive SOP
- Small Dollar Change Orders SOP

CHANGE ORDER – TIME EXTENSIONS

When a contract's actual substantial completion date is beyond the contractual substantial completion date, a time extension may be required. Should a time extension be required, and in the absence of a waiver from Project Controls, the Contractor shall submit a Time Impact Analysis (TIA). The TIA must clearly demonstrate the impact that the change has caused or will cause to the critical path. The TIA must also demonstrate that the delay is the result of issues that are not the contractual responsibility or fault of the Contractor, that the Contractor's schedule has been followed and that every reasonable effort has been made to mitigate the delays. The TIA must comply with the delay provisions specified in the contract and the Project Controls Manual. Please see the Contractor Change Order Manual for more detailed information.

CHANGE ORDER – CLAIMS & SETTLEMENTS

A claim or settlement is a change order negotiated prior to contract closeout that settles a Contractor claim. These actions are administered in the same manner as other closeout change orders. One difference in the documentation package might be a Settlement Agreement & Release prepared by the Change Order Group or MBTA Legal memorializing the negotiations, money and time agreements and establishing mutual legal waivers.



Final Payment Submission

Construction Closeout Manual: Chapter 9

The final contract payment is used to compensate the Contractor for any remaining unpaid work and/or release any remaining retainage to the Contractor.

Prior to the final contract payment submission, all contract work shall be complete and accepted; all CQVs and change orders must be executed; and all required contract closeout forms (Forms 6, 7, 8 & 9) and documents shall be submitted and approved by the MBTA.

If all of these items are complete, the PM shall request the Contractor to submit the final contract payment in e-Builder, consistent with the Construction Invoice SOP, including a request from the Contractor to release all remaining contract retainage.

Along with the final contract payment, the Project Office must provide the final contract CPER, a Construction Contract Closeout Summary and a Contract Closeout Memo concurring with the final release of retainage and recommending contract closeout. The final payment submission is routed from the Project Manager to the respective Delivery or Transformation Chief through e-Builder for review and approval before going to Capital Program Oversight to generate the payment in CMS.

Release of Retainage

Retainage is an amount of money withheld from payment to a Contractor to assure that the Contractor will satisfy its obligations and complete a construction project. The MBTA withholds retainage equal to five (5%) percent of the gross payment value on each progress payment until the contract reaches fifty (50%) percent completion. After fifty (50%) percent completion, a Project Manager may petition their Delivery or Transformation Chief to release a portion of contract retainage. At least one (1%) percent of the adjusted construction contract value must be held in retainage for the final contract payment. Project Managers should carefully consider the amount of retainage withheld based on their knowledge of the job and expectations concerning Contractor submittal of all contract closeout documentation.

Prior to any release of retainage, the Contractor must submit a release of retainage request to the Project Manager for consideration. If approved, the Project Manager must prepare a Concurrence Memo that outlines the justification for the release of retainage, which shall be forwarded to the appropriate Delivery or Transformation Chief for review and approval. If the Contractor's request to release retainage is part of the final contract payment, the Contractor must submit a request to release retainage, but the Project Manager may provide their concurrence through a Construction Contract Closeout Memo. Contractors should be encouraged to submit their release of retainage requests in advance of their invoice submission to allow the Project Manager, and the respective Delivery or Transformation Chief time to review and approve the request. Failure to submit the request to release retainage ahead of the invoice submission could result in invoices being delayed while the request is being considered for approval.

For more information, see the General Conditions of Contract Section 00700 and the Measurement & Payment Specification 01.

Construction Contract Closeout Memo

The PM must submit a Construction Contract Closeout Memo to the respective Delivery or Transformation Chief with the final payment request. The memo should contain the Project Managers declaration that all contract work has been completed and contract deliverables have been received. The memo should also contain the PM's recommendation to release any remaining retainage and close the contract. The Construction Contract Closeout Memo and PM concurrence of the release of contract retainage can both be included in a single memo. This memo does not require a signature from the Delivery or Transformation Chief. Instead, their approval of the final contract payment serves as concurrence to the final release of retainage and contract closeout.

Construction Contract Closeout Summary

This CMS generated form is required with the final contract payment and outlines various contract values including, award amount, cumulative totals of executed contract actions, and DBE participation. This form must be processed AFTER the execution of all remaining CQVs and change orders to contain the proper contract values. The Project Manager must review the values for accuracy, sign the form and include it with the final payment submittal.

(In CMS navigate to PYMNTS > Voucher Backup Documents PY-18)



Miscellaneous Closeout Documentation

Construction Closeout Manual: Chapter 10

This chapter explores some of the miscellaneous documentation that may be required for closeout but cannot be expressly linked to a closeout process or form.

Lessons Learned

The Project Manager is required to record and complete a Lessons Learned form for construction contracts prior to contract closeout. This form is completed through the "Lessons Learned" process in e-Builder and is used to capture and share knowledge about what has worked well and what could have been done differently during the planning, management, and delivery of a capital project. PMs are required to complete this form and archive the Lessons Learned document with the official project records.

Project Managers are encouraged to submit Lessons Learned at any stage of the construction contract, as issues are identified.

A copy of the Lessons Learned document shall be retained in the project's e-Builder Document File Folder No. 11.08 'Lessons Learned''.

Please see the Project Controls Manual for more information on Lessons Learned.

Utilities

On a typical construction contract, the Contractor pays for any utilities up until the MBTA "accepts" the facility, at which point the accounts are turned over to the MBTA to pay as part of our overall utility budget.

It is critical that Project Managers fill out a Capital Programs Utility Account Notification form and submit it to the Manager of Energy Programs in the Environmental Department *no fewer than 30 days before the MBTA takes responsibility for a utility bill* to allow the Environmental Department time to do the following:

Transfer accounts from the Contractor's name to the MBTA's name, which includes ensuring that the Contractor has paid all prior invoices and that the balance is clear.

- ❖ Work with the utility to have the accounts placed on the MBTA's wholesale account list.
- ❖ Adjust the Environmental Department's utility budget to start paying these costs.

This includes all utilities – electricity, natural gas, steam, and water.

This process can be completed through the MBTA - Construction Contract Closeout Checklist (MCCCC) in e-Builder.

Contractor Performance Evaluation Report (CPER)

After construction is complete and before the final contract payment if processed, the RE shall prepare a 'final' CPER which shall evaluate the performance of the Contractor's work for the entire project including closeout activities. The CPER must be completed prior to the processing of the final payment request. The CPER process is completed through the "Contractor Performance Record" process in e-Builder, in accordance with the Contractor Performance Evaluation Report (CPER) SOP.

Disadvantaged Business Enterprise (DBE) Good Faith Effort (GFE)

The Project Manager should be monitoring the DBE goal throughout the contract to ensure the Contractor is meeting or will meet the DBE goal. The Contractor shall document all activities pertaining to DBE participation as it relates to the Contractor's commitment to the MBTA. The Project Manager shall notify the MBTA Office of Diversity and Civil Rights ("ODCR") promptly upon notice that the DBE goal attainment is in jeopardy and partner with ODCR to examine the Contractor's ongoing efforts to meet the DBE goal and determine options for corrective actions when necessary. If upon contract completion the Contractor has not met the DBE goal, then the Contractor must submit GFE documentation in accordance with the Regulations cited below.

Upon receipt of the Contractor's GFE submission, the Project Manager should coordinate their review with ODCR to determine if the Contractor's efforts are compliant with the federal guidelines.

The Consultant shall upload their GFE Documentation to e-Builder folder 21.08 "Good Faith Efforts Documentation".

For guidance on how to document Good Faith Effort, please see the Code of Federal Regulations, <u>Appendix A to Part</u> 26 - Guidance Concerning Good Faith Efforts and the MBTA DBE Program Plan.

Commercially Useful Function (CUF Analysis)

A Commercially Useful Function (CUF) is a process to evaluate whether a firm that is certified as a Disadvantaged Business Enterprise (DBE) controls all components of a business and is directly responsible for the execution of the work they are contracted to perform.

The CUF Analysis is a fraud preventative measure that ensures DBEs are performing a Commercially Useful Function and must be performed on all federally funded contracts prior to closeout. Unlike other aspects of contract closeout, the CUF Analysis is performed by the MBTA Office of Diversity and Civil Rights ("ODCR"). The Project Manager's responsibility is solely to ensure that a CUF Analysis has been performed by ODCR for each DBE Subcontractor on a contract.

To confirm that a CUF Analysis has been performed, a Project Manager must email the ODCR Compliance Officer or check the e-Builder Document File Folder No. 21.15 'Commercially Useful Function'.

Ideally, the Project Manager confirms that the ODCR Compliance Office has performed a CUF Analysis prior to substantial completion.

Waiver Process for Missing Closeout Documentation

If for some reason a Project Office is unable to obtain any of the required closeout forms or documentation, the Project Manager shall submit a memo to their Delivery or Transformation Chief requesting a waiver. The memo must identify what documentation is missing and provide reasons why the required documentation cannot be obtained, what steps will be taken to substitute documentation, if any, identify if setoffs will be made to retainage and obtain concurrence for these explanations and actions from the Director of Construction Procurement. A copy of the approved waiver shall be submitted with the final contract invoice in e-Builder.

Project Managers are encouraged to speak with the Director of Construction Procurement prior to drafting the Waiver Memo to ensure all necessary elements are addressed in the documentation.

Administrative Closeout

When a construction contract is unable to follow the complete Construction Contract Closeout Process due to certain circumstances such as the Contractor not cooperating or the proper administrative steps not being performed, an Administrative Closeout may be requested. The Project Office must reach out to Contract Services (cnprocurement@mbta.com) to determine if an Administrative Closeout is appropriate. If Contract Services determines that an Administrative Closeout should be completed, the Project Office must submit a memo that outlines why the contract cannot comply with the normal closeout process to the appropriate Delivery or Transformation Chief for approval. Once the memo is approved by the Chief, it shall be sent to cnprocurement@mbta.com. A copy of the approved memo shall also be submitted with the final contract invoice in e-Builder.

The Administrative Closeout process is separate from the Waiver Process.



On-Call Contracts

Construction Closeout Manual: Chapter 11

MBTA On-Call construction contracts are administered through contract "Work Assignments".

Each work assignment is treated as a mini-project that has a detailed scope of work and an associated dollar value. Work assignments can be funded by several contract unit price items and/or may appear in the contract as a change order or risk reallocation. In some instances, a work assignment may contain a combination of unit price items and a change order/risk reallocation depending on the available funding and scope of work.

Regardless of the contract mechanism, upon completion of a work assignment, the Project Manager must close out each individual work assignment and gather all necessary closeout documentation, which will vary depending on the scope of the work assignment. Closeout documents may include as-builts, manuals, warranties, or occupancy permits. Project Managers should refer to the requirements outlined for substantial completion (Form 6), occupancy (Form 7) and final completion (Form 9) outlined in Chapters 3, 4 and 6 of this Manual as a guideline for what documentation may be required.

Work Assignment Closeout

Following the completion of each individual work assignment, the Project Manager must take the necessary steps to verify that all work has been completed including:

- Confirm that any deliverables related to the work assignment have been provided and accepted. If required, process a Certificate of Substantial Completion (Form 6) through e-Builder.
- Confirm that any permits required to complete the work assignments have been closed; If required, process a Notification - Opening Portions of Contract for Operation (Form 7) through e-Builder.
- Ensure the work assignment will be fully invoiced or that the remaining work assignment balances are removed from the contract by executing the required contract action (closing the risk reallocation; processing a CQV; processing a credit change order) in accordance with the Change Order Manual.

- Confirm that the work assignment has been completed in accordance with the contract plans and specifications and has been accepted by the MBTA. If required, process a Certificate of Inspection and Acceptance (Form 9) through e-Builder.
- Process a Work Assignment Closeout Form.

All work assignments require a Work Assignment Closeout Form to be routed for approval prior to closeout. Additional closeout documentation may be required depending on the complexity of the work assignment. Project Managers should refer to the requirements outlined in the Contract Specifications for substantial completion (Form 6), occupancy (Form 7) and final completion (Form 9) to determine which work assignments require additional closeout documentation.

Work Assignment Closeout Form

A Work Assignment Closeout Form discharges the MBTA from compensating the Contractor for any additional monies related to the subject work assignment. A fully signed Work Assignment Closeout Form must be submitted when releasing retainage on a particular work assignment. This form identifies the executed value of the work assignment, the total paid to the Contractor and the amount of retainage to be released. The form requires the Contractor to sign the form and have it notarized. All Work Assignment Closeout Forms must be signed by the Project Manager, Area Director, Director of QA/QC and respective Delivery or Transformation Chief.

Final Contract Reconciliation and Payment (On-Call Contract)

The Project Manager shall adhere to the normal contract closeout procedures outlined in this Manual upon completion of an on-call construction contract. This includes reconciling any remaining contract line items or work assignments and many involve processing change orders and/or executing CQVs.

In addition, the Project Manager must also obtain a Certificate of Substantial Completion (Form 6), Certificate of Occupancy (Form 7), Certificate of Inspection and Acceptance (Form 9), and Certification of Completion and Release (Form 8) for the contract. This is accomplished by compiling the Work Assignment Closeout Forms for each work assignment on the contract and submitting them for routing with the respective process in e-Builder to show that all work has been completed and accepted to the satisfaction of the MBTA.

The Contractor must submit their final contract payment consistent with the Construction Invoice SOP, including a fully signed Work Assignment Closeout Form for the release of any remaining retainage on open work assignments.



Project Closeout

Construction Closeout Manual: Chapter 12

Project Closeout process involves the final reconciliation and closeout of all project work orders.

Following the completion of all contracts and their related activities within a CIP Project, Project Managers must oversee the final reconciliation and closeout of all project work orders. This process involves close coordination with the assigned Capital Program Oversight Budget Analyst and requires Project Managers to confirm that all outstanding invoices and internal labor charges have been paid for each individual work order. Once it is confirmed that all activity is complete, the Project Manager must request that the Budget Analyst close the respective work order(s) in CMS.

The Project Closeout process typically includes non-contract related work orders within the Force Account, Field Inspection, and Project Administration MAC Codes, but it may also involve work orders within the Construction and Professional Services MAC Codes. Project Managers must take the following actions to close work orders within each respective Responsibility Area of every Grant-Project within a CIP Code.

CONSTRUCTION - Project Manager shall confirm that all non-contract related work is complete, all expenses have been posted and requests that the Budget Analyst close each work order.

FORCE ACCOUNT - Project Manager shall confirm with each supporting MBTA Department that all work is complete, final charges have been posted and requests that the Budget Analyst close each work order.

EXTERNAL FORCE ACCOUNT - Project Manager shall confirm with each supporting non-MBTA entity (Keolis, Amtrak, Private Bus Carriers, etc.) that all work is complete, all final charges have been posted and requests that the Budget Analyst close each work order.

Prior to closing work orders for Keolis or Amtrak, a 30-day notification must be provided to each entity to allow them time to review and submit final invoices. The Project Office shall inform MBTA Railroad Operations of their desire to close a PI Agreement(s) with Keolis or Amtrak and Railroad Operations shall submit the notification on behalf of the Project Office.

Prior to closing work orders for private bus diversions (Yankee Bus Lines, Peter Pan, Academy Bus) the MBTA Project Office must coordinate with the MBTA Director of Service Expansion to confirm that all outstanding invoices have been paid.

FIELD INSPECTION - Project Manager shall confirm that all work is complete, all final charges have been posted and requests that the Budget Analyst close each work order.

PROJECT ADMINISTRATION - Project Manager shall confirm with each supporting Capital Programs Area that all work is complete, all final charges have been posted, and requests that the Budget Analyst close each work order.

PROFESSIONAL SERVICES - Project Manager shall confirm that all non-contract related work is complete, all final invoices have been paid and requests that the Budget Analyst close each work order.

MATERIALS or **REAL ESTATE** - Project Manager shall confirm with each vendor or supporting MBTA Department that all work is complete, all final charges have been posted, and requests that the Budget Analyst close each work order.

Work Orders involving labor charges should remain open for approximately two to three weeks after final expenditures have been posted to the respective work order.

Indirect work orders must remain open until all indirect charges have been reallocated through the monthly financial closing process. This typically occurs around the 15th of each ensuing month. For example, indirect charges stemming from services in May will hit a work order around June 15th. Once the charges against an indirect work order are processed, the indirect work order may be closed.

If there is insufficient funding within a MAC Code to reconcile work orders, Project Managers must request that their Budget Analyst process a Budget Revision to move the required funding into place.

Once all work orders within a CMS Grant-Project and/or CIP Code have been balanced and closed, Capital Program Oversight will facilitate the closure of the Project or CIP Code. Any unused funding will be placed into a Contingency MAC Code or Contingency Project until a decision can be about where to reallocate the funding. The decision to reallocate funding will be made following discussions with leadership in Capital Program Oversight, Capital Planning and Capital Programs.



Closing Arguments

Construction Closeout Manual: Chapter 13

e-Builder

Contract closeout documents must be processed through their respective e-Builder processes, when available, to allow the documents to be linked to the Construction Contract Closeout Standard Report in e-Builder. This will allow visibility into the Construction Contract Closeout Process for proactive monitoring and follow-up by multiple parties.

Exceptions

Every contract closeout is different, and some may require special considerations. Please contact the Director of Audit and Closeout to discuss options, should exceptions arise

Appendices

TEMPLATES

- CPER Template
- Project Closeout Checklist
- Work Assignment Closeout Form
- Final Release of Retainage and Contract Closeout Memo
- Capital Programs Utility Account Transition Form
- Safety Certification Certifiable Items List (CIL)
- Environmental Checklist (requires TSTOP access)

REFERENCE DOCUMENTS

Additional Information

- Construction Field Staff Manual | Capital Programs | MBTA
- Construction Change Order Manual | Capital Programs | MBTA
- Project Controls Manual | Capital Programs | MBTA
- Contractor Performance Evaluation Report (CPER SOP)

- ❖ DBE Good Faith Effort Guidelines
- **❖** <u>Safety Certification Program</u>
- ❖ Spec Section 01700

Completed Template Samples

- Safety Certification Checklist (Example)
- CQV Form and Justification Letter (Example)
- CMS Construction Contract Closeout Summary (Example)
- Punch List (Example)
- Lessons Learned (Example)
- Environmental Checklist (Example)