

1.0 INTRODUCTION

1.1 CONSTRUCTION MANAGEMENT MANUAL OVERVIEW

The primary purpose of the District of Columbia Department of Transportation (DDOT) Construction Management (CM) manual is to establish standard operating procedures and provide guidelines to DDOT's engineers, construction managers (DDOT personnel and consultants), and personnel engaged in contract administration promoting uniformity and efficiency.

The CM staff must coordinate with others who provide services that include planning, budgeting, predesign services, design services, scheduling, bid and award services, and field oversight. The CM procedures written in this manual are primarily for DDOT projects. The CM standard operating procedures and guidelines provided in this manual are beneficial to the overall success of DDOT's construction projects. This manual can be accessed on the DDOT website at https://wiki.ddot.dc.gov/display/CMM. DDOT encourages the use of the online version of the full manual or individual sections for the latest version and electronic search capabilities.

The manual will be updated continuously, and updates will be published on the DDOT website. Questions about any section of the manual and/or proposed changes to the manual should be submitted to cm.manual@dc.gov.

1.2 EXPECTATIONS FROM THE CM TEAM

DDOT expects the CM team to deliver the construction project successfully on time within budget with all quality requirements met per the contract documents. DDOT also expects to access any information at any given time. DDOT will not accept and receive hard copies at the end of the project. Therefore, the CM team shall upload daily all generated documents (including hard copies scanned and uploaded) related to construction to the document management system and databases which are setup for the project. DDOT should always be able to access this information.

This manual only gives guidelines to the CM teams on how to manage construction projects as expected by DDOT. However, the CM team shall remember that the construction contract documents (which includes plans, specifications, permits, and other DC and federal regulation requirements) are binding between DDOT and the construction contractor. As representatives of DDOT, the CM teams shall understand the construction contract documents clearly to meet DDOT's expectations.



During construction management, the CM team representatives and construction contractor representatives often have disagreements. When an issue emerges, the following issue resolution matrix (also called resolution ladder) shall be implemented to resolve issues quickly.

Issue Resolution Matrix / Resolution Ladder

| DDOT Representatives | Construction Contractor Representative | Allowed Time |
|------------------------|---|--------------|
| Inspector | Foreman | 1 hour |
| Lead Inspector | Superintendent | 3 hours |
| Construction Manager | Project Manager | 1 day |
| Contract Administrator | Contract Manager/Project Manager | 2 days |
| DDOT Team Leader | Senior Representative from Contractor | 3 days |
| Contracting Officer | Senior Representative from Contractor | Final Step |

Note: When an issue cannot be resolved, it should be elevated to the next level until the issue is resolved.

1.3 ABBREVIATIONS

Section 101 of the DDOT Standard Specifications for Highways and Structures includes the intent and meaning of abbreviations and terms commonly used in connection with construction projects administered by the Department. DDOT and consultant CM personnel should be familiar with these terms and abbreviations and use them correctly.

The terms cited in the Standard Specifications for Highways and Structures, as well as other terms, which are defined or explained as follows, will be used frequently in this manual. Whenever the following abbreviations are used in this manual, the intent and meaning shall be interpreted as follows:

| AA | Administrative Administration |
|--------|--|
| AASHTO | American Association of State Highway Transportation Officials |
| ADA | Americans With Disabilities Act |
| ANC | Advisory Neighborhood Commission |
| BID | Business Improvement District |
| CA | Contract Administrator |
| CBE | Certified Business Enterprise |
| CI | Construction Inspector |
| CM | Construction Management |
| СО | Contracting Officer |



COR Contracting Officer's Representative

CPM Critical Path Method

DBA Davis Bacon Act

DBB Design Bid Build

DB Design Build

DBE Disadvantaged Business Enterprise

DDOT District Department of Transportation

Department District Department of Transportation

DOEE Department of Energy and Environment

EEO Equal Employment Opportunity

EOR Engineer of Record

FHWA Federal Highway Administration

HOA Homeowners Association

IDR Inspector Daily Report

IGE Independent Government Estimate

IPMD Infrastructure Project Management Division

MOT Maintenance of Traffic

MOA Memorandum of Agreement

MOU Memorandum of Understanding

NCR Non-Conformance Report

NTP Notice to Proceed

OA Operations Administration

OE Office Engineer

OCP Office of Contracting and Procurement

OJT On-the-Job Training

PDA Project Delivery Administration
PS&E Plans, Specifications & Estimate

PE Project Engineer

PID Public Information Division
PoDI Projects of Division Interest

PM Project Manager

PMA Performance Management Administration

SBE Small Business Enterprise



| TCP | Traffic Control Plan |
|-----|----------------------|
| QA | Quality Assurance |
| QC | Quality Control |

RFI Requests for Information

RE Resident Engineer (also called Field Engineer)

The Contractor refers to the construction contractor wherever it is mentioned in this manual.

1.4 DDOT ORGANIZATION AND OVERVIEW

DDOT's mission is to enhance the quality of life for District residents and visitors by ensuring that people, goods, and information move efficiently and safely with minimal adverse impact on residents and the environment.

DDOT manages and maintains transportation infrastructure by:

- Planning, designing, constructing, and maintaining the District's streets, highways, tunnels, bicycle tracks, alleys, sidewalks, bridges, traffic signals, streetlights, sign structures, streetcar infrastructure, and Circulator infrastructure.
- Managing and making improvements to the public right-of-way to facilitate multi-modal traffic flow through the District of Columbia.
- Managing, with the Department of Public Works as a partner, the snow and ice removal from the public right-of-way.
- Coordinating the District's mass transit services, including the reduced-fare program for students using MetroBus and MetroRail.

The Office of the Director is responsible for the oversight and management of the entire agency. The Chief Officers are responsible for the oversight and management of the following administrations:

- Project Delivery Administration (PDA)
- Operations Administration (OA)
- Administrative Administration (AA)
- Performance Management Administration (PMA)

The DDOT agency organization information and current organizational chart can be found on the DDOT website at https://ddot.dc.gov/publication/ddot-organizational-chart.



The capital construction projects are managed by the **Infrastructure Project Management Division** (IPMD) under PDA. IPMD is responsible for the design, engineering and construction of roadways, bridges, and large infrastructural projects in the District of Columbia. IPMD also manages special construction projects and all roadway assets. The asset maintenance construction projects are managed by the **Maintenance Division under OA**.

1.5 PROJECTS BY FUNDING CATEGORIES

DDOT projects are grouped in three categories by funding:

- Federal-aid projects
- Locally funded projects
- Third party/developer projects

The Federal-aid Highway Program provides financial assistance for the construction, maintenance, and operations of the highway network, including the Interstate Highway System, primary highways and secondary local roads. The Federal Highway Administration (FHWA) is charged with implementing the Federal-aid Highway Program in cooperation with the states and local government. For more information about federal-aid project requirements see Title 23, Part 635, Code of Federal Regulations (CFR). The Federal-aid Highway Program is administered in DC based on the Stewardship/Oversight Agreement between FHWA and DDOT per Section 106 of Title 23, United States Code. For federal-aid Projects of Division Interest (PoDI), all changes must be approved by FHWA with the Form FHWA-1365 (Record of Authorization to Proceed with Major Contract Revision) as attached to Appendix. The FHWA-1365 forms are approved by DDOT for the state assumed Federal-aid projects in accordance with the agreement between FHWA and DDOT.

Locally funded projects are fully funded by the District of Columbia. These projects are required to follow the District of Columbia Municipal Regulations (DCMR).

The third-party agreement on a project happens when an entity (design-builder) and DDOT have a mutual interest in the development and maintenance of transportation infrastructure in the District of Columbia. The funding for these projects comes from third parties.

The Transportation Infrastructure and Public Space Impact Mitigation Amendment Act of 2014, effective July 23, 2014 (D.C. Law 20-128; D.C. Official Code §50-9231.02(f)) gives DDOT the authority to enter into an agreement with a developer, property owner, utility company, the federal government or other governmental entity, or other person or entity to pay for the costs of DDOT's review and implementation



oversight of a proposed project that affects the transportation infrastructure or public space in the District.

1.6 DELEGATIONS OF AUTHORITY

DDOT's Chief Engineer oversees all phases of transportation infrastructure improvement projects in the District of Columbia. Chief Engineer may delegate this authority to Deputy Chief Engineers or Program Managers.

1.6.1 Contracting Officer

Contracts may be entered into and signed on behalf of the District Government only by contracting officers. The Contracting Officer (CO) is the only District official authorized to contractually bind the District.

Authorized Changes by the CO:

- The CO is the only person authorized to approve in writing any changes of construction contract requirements.
- The Contractor shall not comply with any order, directive or request that changes or modifies the construction contract requirements, unless they are issued in writing and signed by the CO.
- Any changes at the direction of any person, other than the CO, will be considered to have been made without authority and no adjustment will be made in the contract terms.

1.6.2 Contract Administrator

According to 27 <u>DCMR §1209</u>, the CO may appoint a Contract Administrator (CA) for each contract. The CA is synonymous with the term Engineer and/or Contracting Officer's Representative (COR).

The CA has the responsibility of ensuring that the work conforms to contract requirements and such other responsibilities and authorities as may be specified in the contract. The CA acts as the Contracting Officer's representative for technical matters, providing technical direction and participating in discussions, as necessary with respect to the specifications or statement of work, and monitoring the progress and quality of the contractor's performance. The CA keeps the CO fully informed of any technical or contractual difficulties encountered during the construction performance period and advises the CO of any risk and/or potential problem areas under the construction contract.

The CO may delegate the following functions to a CA:



- Prepare a clear and concise statement of work.
- Determine the allowability, suspension, or disapproval of costs.
- Approve or disapprove contractor invoices.
- Review and approve or disapprove a contractor's requests for payments under progress payments or performance-based payment structures.
- Take action to recover overpayments from the contractor.
- Perform production support, oversight, and status reporting, including timely reporting of potential and actual slippages in contract delivery schedules.
- Advise the contracting officer of any actual or potential labor disputes.
- Ensure contractor compliance with contractual quality assurance requirements.
- Ensure contractor compliance with contractual safety requirements.
- Perform surveillance to assess compliance with contractual terms for schedule, cost, and technical performance in the areas of design, development and production.
- Report to the contracting officer any inadequacies noted in the specifications.
- Ensure timely submission of required reports.
- Monitor contractor compliance with specifications or other contractual requirements.
- Prepare evaluations of contractor performance in accordance with chapter 22 of DCMR.
- Any other function relating to contract administration not expressly reserved by these rules to the contracting officer.

The CA must be a DDOT employee. In some cases, the DDOT Project Engineer might also be appointed as a CA.

1.6.3 DDOT Project Manager/Engineer

Pursuant to 23 C.F.R. §635.105(b), although the State Department of Transportation (State DOT) may employ a consultant to provide construction engineering services, such as inspection or survey work on a project, the State DOT shall provide a full-time employed state engineer to be in responsible charge of the project. Therefore, DDOT assigns a full-time Project Engineer for each construction project. When the consultant services are procured for the construction management, the consultant team is considered as an extension to the DDOT CA and Project Engineer.



1.7 ETHICS

All District government employees must maintain high standards of honesty, integrity, and impartiality. Employees must carry out this responsibility consistent with the laws and regulations that establish how to do so ethically. To ensure public confidence and trust in government, each employee shall follow the principles of ethical conduct set forth in Chapter 18 of the District Personnel Manual (DPM) and comply with the District's Code of Conduct. Failure to do so can result in penalties ranging from reprimand to termination from employment and, in some cases, even fines and criminal action. The Code of Conduct consists of various laws and regulations that limit many aspects of employee behavior.

This section contains a brief description of some of the District's ethics rules and is provided as an overview but not an exhaustive list and more detailed information may be found in the District's Ethics Manual, which is prepared by the District's <u>Board of Ethics and Government Accountability (BEGA)</u> and is available on BEGA's website at https://bega.dc.gov):

Some general principles of ethics and specific ethics standards include:

- Employees shall adhere to the principles of ethical conduct.
- Employees shall understand that government service is a public trust.
- Employees shall put forth honest effort.
- Employees shall report credible violations to appropriate authorities.
- Employees shall satisfy lawful obligations to government.
- Employees shall adhere to all federal, state, and local laws and regulations.
- Employees shall not hold financial interests that conflict with performance of duty.
- Employees shall not use nonpublic information improperly.
- Employees shall not make unauthorized commitments.
- Employees shall not use public office for private gain.
- Employees shall not act impartially or give preferential treatment.
- Employees shall not use government property for unauthorized activities. District equipment shall not be used for private purposes. Supervisors shall be especially vigilant to assure this rule is kept.
- Employees shall not take actions creating the appearance that they are violating the law/ethical standards.

- The political activity of District government employees is limited by the local Hatch Act (DC Law 20-4; DC Code §1-1171 and the Ethics Act (DC Law 19-124; DC Code §1-1161.01). In addition, the federal Hatch Act applies to some District employees whose salaries are paid in whole or in part with federal funds (i.e. a federal loan or grant to the District). No employee shall engage in any conduct contrary to these provisions.
- District employees and/or its consultants should neither solicit nor accept gifts or gratuities which
 are/or might be construed to be an influence on the decisions they make as representatives of
 the government.

Federal laws and code of ethical behavior may also apply including the following which provides that any person in government service should:

- Put loyalty to the highest moral principles and to country above loyalty to persons, party,
 or Government Department.
- Uphold the Constitution, laws, and legal regulations of the United States and of all governments therein and never are a party to their evasion.
- Give a full day's labor for a full day's pay; giving to the performance of your duties your earnest effort and best thought.
- Seek to find and employ more efficient and economical ways of getting tasks accomplished.
- Never discriminate unfairly by the dispensing of special favors or privileges to anyone, whether for remuneration or not; and never accept, for yourself or your family, favors or benefits under circumstances which might be construed by reasonable persons as influencing the performance of your governmental duties.
- Make no private promises of any kind binding upon the duties of office, since a
 Government employee has no private word that can be binding on public duty.
- Engage in no business with the Government, either directly or indirectly, which is inconsistent with the conscientious performance of one's governmental duties.
- Never use any information coming to you confidentially in the performance of governmental duties as a means for making private profit.
- Expose corruption whenever discovered.
- Uphold principles, ever conscious that public office is a public trust.