Purpose

Emergency Support Function (ESF)-3 Public Works and Engineering provides guidance and direction to designated agencies responsible for managing, assessing, and restoring public facilities and infrastructure during a significant event.

Scope

ESF-3 Public Works and Engineering coordinates resources necessary to manage, maintain, and restore public facilities and infrastructure during a significant event. Activities within the scope of ESF-3 functions include: monitors and reports conditions; conducts damage assessments; manages debris removal; identifies alternative facility and infrastructure solutions; and coordinates and establishes priorities regarding restoration and recovery activities.
For the purpose of this document, damage assessments include functional and structural evaluations on all public works systems except for those associated with ESF-1 Transportation, ESF-2 Communications, ESF-11 Agriculture and Natural Resources, and ESF-12 Energy.

**Relevant Laws, Statutes, Plans, and Policies**

- Loudoun County Emergency Operations Center (EOC) Policies and Procedures Guide
- Loudoun County Codified Ordinances
- Loudoun County Debris Management Plan
- Loudoun County Damage Assessment Plan
- Loudoun County Solid Waste Management Facility Emergency Contingency Plan
- Loudoun County Solid Waste Management Facility Operations Manual
- Loudoun County Solid Waste Management Facility Safety Plan

**ESF Planning Assumptions**

- Local public works systems will likely sustain damage. The damage, dependent upon the integrity of the public works facilities and systems, will determine the effectiveness and efficiency of response and recovery.
- Local Virginia Department of Transportation (VDOT) resources may become overwhelmed quickly or be relocated to other areas in the region during an emergency.
- Damage to public works systems may result in decreased capacity or diminished service.

**ORGANIZATION**

**ESF Responsibilities**

- Reports to and takes direction from the Infrastructure Branch Director.
- Provides informational updates to the Planning Section.
- Develops plans, policies, and procedures necessary to resolve public works and facilities issues during the significant event.
- Documents information and actions related to public works and engineering missions and assignments.
Utilizes current methods and procedures to process requests for assistance.

Submits a detailed record of costs and expenditures to the Finance and Administration Section.

Agency Roles and Responsibilities

**Department of General Services (DGS)**
Public Works Division
Waste Management Division

- The agency recognized with ESF Coordination. DGS maintains equipment, personnel and contracts necessary to provide emergency site security, clearance of debris, operation of the County’s solid waste management facility, emergency restoration of vital public works and facilities, and gathering of initial damage assessments. Emergency operational policies and procedures developed by DGS provide the framework for carrying out these activities.

**Department of Building and Development (DBD)**
Building Code Enforcement / Inspection Division

- Serves as the agency with primary responsibility for documenting, reporting, and conducting initial damage assessments. Coordinates with DGS to obtain structural engineering assistance as required.

**Loudoun County Health Department (LCHD)**
Environmental Health Services

- Serves as the agency with primary responsibility for documenting, reporting, and conducting inspections on damaged well and septic systems.

- Provides guidance on food sanitation and preventing the spread of disease during a significant event.

**Department of Parks, Recreation and Community Services (PRCS)**

- Provides personnel and equipment to assist with debris clearance from public facilities and infrastructure. Coordinates with DGS and VDOT to assist with clearing and opening primary transportation routes.

**Loudoun Water (LW)**

- Performs damage assessment of water and waste water systems and facilitates necessary repairs.

**Town Public Works Departments**

- Performs damage assessment of town operated water and waste water systems and facilitates necessary repairs and/or coordinates with appropriate service provider.
EMERGENCY SUPPORT FUNCTIONS ANNEX: ESF-3 PUBLIC WORKS AND ENGINEERING

- Provides personnel and equipment to assist in debris removal operations within corporate limits.

- Coordinates and facilitates restoration of essential town operated public facilities.

Virginia Department of Transportation (VDOT)

- Maintains primary responsibility for clearing the transportation network throughout Loudoun County. VDOT is responsible for clearing primary and secondary roadways and providing frequent status updates.

MISSIONS AND ASSIGNMENTS

Mission 1: Manages resources necessary to monitor, maintain, and restore public facilities and infrastructure.

Assignment 1-1: Identifies, prioritizes, procures, and allocates available resources to maintain and restore essential public works systems and facilities.

Assignment 1-2: Considers future (in the subsequent 12 to 24-hour period) resource requirements and conveys to EOC leadership.

Mission 2: Provides situational updates regarding public facilities and infrastructure conditions.

Assignment 2-1: Maintains and updates information related to the critical infrastructure damage, availability of alternative or redundant systems, debris clearance and removal, and restoration activities.

Assignment 2-2: Maintains and updates information related to public facility damage, closure, and restoration activities.

Mission 3: Conducts damage assessments and documents, analyzes, and reports results.

Assignment 3-1: Assesses the condition of County facilities, including those deemed “vital”. Coordinates and facilitates the closure of components determined to be unsafe.

Assignment 3-2: Conducts assessments on all damaged residential, commercial, and industrial buildings (public or private). Performs functional and structural evaluations on all public works systems, except as noted.

Mission 4: Manages debris removal process and documents, analyzes, and reports results.
Assignment 4-1: Coordinates, assesses, and identifies suitable debris disposal sites and provides guidance in areas affected by contamination.

Mission 5: Identifies public facilities and infrastructure alternatives that can be implemented when systems or infrastructure are damaged, unavailable, or overwhelmed.

Assignment 5-1: Maintains an inventory list of public facilities that may be available for alternative uses.

Mission 6: Coordinates initial public facilities and infrastructure restoration and recovery activities.

Assignment 6-1: Identifies and prioritizes restoration and recovery initiatives.