



# ESF-3 Public Works and Engineering

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## JOHNSON COUNTY EMERGENCY OPERATIONS PLAN

<b>Coordinating Agency:</b>	Johnson County Public Works
<b>Support Agencies:</b>	Johnson County Department of Health and Environment Johnson County Facilities Johnson County Park and Recreation Johnson County Wastewater Jurisdictional Public Works Departments

## INTRODUCTION

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### Purpose

The purpose of the *ESF-3 Public Works and Engineering Annex* is to establish how Public Works and Engineering activities will be coordinated to meet the needs generated by disasters affecting Johnson County.

### Scope

This annex identifies the key policies, concepts of operations, roles and responsibilities, and capabilities associated with *ESF-3 Public Works and Engineering* in Johnson County.

Specifically, this annex addresses:

- Infrastructure protection, assessment, and emergency restoration
- Provision and coordination of public works resources
- Engineering and public works services
- Debris management operations

*ESF-3 Public Works and Engineering* applies to all individuals and organizations and the full range of Public Works and Engineering services that may be required to support disaster response and recovery operations in Johnson County.

*ESF-3 Public Works and Engineering* will be working closely with *ESF-1 Transportation, ESF-6 Mass Care, ESF-12 Energy and Utilities, and ESF-14 Assessment and Recovery*.

## **SITUATION & ASSUMPTIONS**

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In addition to the “Situation and Assumptions” section in the Basic Plan, the Concept of Operations for ESF-3 is based on the following:

### **Situation**

1. Johnson County is at risk from numerous hazards with the potential to cause damage to roads, bridges, and other publicly owned facilities that will need to be cleared, repaired, reinforced, or rebuilt to ensure safety and allow for emergency response activities. Disaster response may also require the use of specialized equipment owned and operated by public works departments in Johnson County.
2. The Johnson County Public Works Department is responsible for coordinating public works activities and resources in the unincorporated areas of the county. In the incorporated areas, the cities are responsible for this coordination, with the county providing support when needed. The following activities are performed by public works to mitigate against, prepare for, respond to, and recover from a disaster:
  - Mitigation and Preparedness: Clearing culverts and storm drains, treating road surfaces (sand & salt), flood monitoring, and maintaining road closures;
  - Response: Road clearance for emergency responders/repair crews, assistance with road closures & detour routing;
  - Recovery: Damage assessment to the infrastructure (public buildings, roads, bridges, etc.), debris removal & disposal, repair, and coordinate record keeping of damage assessment;
3. The jurisdictional public works departments have specialized equipment to support emergency operations. Johnson County Public Works maintains both equipment and personnel resource lists that may be accessed from the Emergency Operations Center (EOC).
4. Protective actions for properties within an identified 100-year floodplain will be decided by the affected local jurisdiction. These actions may include:
  - Identification of critical infrastructure located within the floodplain
  - Decisions regarding the placement, size and fuel procurement strategies for water transfer pumps
  - Locations of specifications of sandbagging operations

On-scene operational locations (such as sandbagging) will be decided on an incident by incident basis.

5. Johnson County maintains a Debris Management Plan which describes the activities and coordination required to remove, store, and dispose of debris deposited along or immediately adjacent to public rights-of-way in unincorporated areas of Johnson County.
6. Public Works personnel are trained only to the Awareness Level as prescribed by 29 CFR 1910.120. They can assist HAZMAT Response teams in a support capacity, but not to exceed the extent of their training.

## **Assumptions**

- The timely and coordinated deployment of public works and engineering resources will have a direct impact on the community's ability to respond to and recover from a disaster.
- Many disasters may require assistance from, and coordination of, public works departments throughout Johnson County.
- Disasters may damage, delay, and/or overwhelm public works resources and systems usually readily available to respond.
- While local public works resources meet the needs of most emergencies, some disasters will require the coordination of county-wide public works resources, implementation of mutual aid, utilization of private resources, and/or assistance from the state and/or federal government.
- The amount of debris resulting from a disaster could exceed an individual city's or the County's removal, processing, recycling, and disposal capabilities.
- The cities and/or the county may contract with private contractors to play a significant role in the debris clearance, removal, recycling, and disposal process.
- Depending on the situation, the state may authorize the use of state resources to assist in the removal and disposal of debris.
- Prioritization of public works and engineering support and resources will be assigned based on the specific requirements of each incident.

## **CONCEPT OF OPERATIONS**

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1. Jurisdictional Public Works departments will coordinate public works activities within their jurisdiction according to their own departmental policies and guidelines. Specific types of activities include but are not limited to:

- a. Public works infrastructure protection/maintenance such as:
    - i. treating road surfaces (sand & salt)
    - ii. snow and ice removal
    - iii. storm water management (clearing culvers & storm drains, sandbagging, building dikes, digging drainage ditches, etc.);
  - b. Assistance with road closures and detour routing;
  - c. Provision and coordination of public works resources to support emergency response;
  - d. Inspections of the public works infrastructure (roads, bridges, etc.) to expedite response and ensure safety;
  - e. Emergency restoration of damaged public works infrastructure;
  - f. Stabilizing or destroying unsafe structures; and
  - g. Debris clearance and management.
2. Jurisdictional Public Works departments will provide personnel, equipment, and technical expertise to support disaster response when needed and as available.
  3. In situations where the public works needs exceed a city's capabilities, the public works department will contact the Johnson County Public Works Department or the ESF-3 Public Works and Engineering Team in the EOC (when activated) to request assistance.
  4. Johnson County Public Works (or the ESF-3 Public Works and Engineering Team when activated) will manage requests for public works assistance and coordinate countywide public works activities as needed.
  5. Johnson County Public Works (or the ESF-3 Public Works and Engineering Team when activated), in coordination with Johnson County Department of Health and Environment, will work with local agencies and private sector representatives to conduct structural and environmental assessment activities as needed.
  6. Johnson County Public Works will also keep Johnson County Emergency Management and Communications – Emergency Management Division (JCEM) informed of situations where there is a potential need for the County EOC to be activated. Upon notification, JCEM will activate the EOC as needed.
  7. The mission of ESF-3 Public Works and Engineering is to ensure the provision and coordination of Public Works and Engineering activities required to meet the needs generated by disaster affecting Johnson County. When the ESF-3 Team is activated in the Johnson County Emergency Operations Center (EOC), the ESF-3 Team will orchestrate the countywide coordination required to fulfill the mission of ESF-3. These activities will include:
    - a. Establish and maintain operational awareness of public works and engineering through direct communications links with operational units in the field and/or their appropriate coordinating entities, to include jurisdictional public works departments;

- b. Conduct public works and engineering disaster impact and needs assessments, prioritize ESF-3 operational objectives in alignment with the EOC Incident Support Plan, and coordinate ESF-3 county-wide response activities;
  - c. Collect and analyze information relevant to ESF-3 and report in WebEOC and EOC documents including EOC Incident Support Plans and Situational Reports;
  - d. Receive, manage, & track resource requests for ESF-3;
  - e. Ensure full coordination of activities with other groups within the EOC to assist in the development and maintenance of a common operating picture.
8. Public Works Departments will assess damage to the public works infrastructure within their jurisdictions and provide information to Johnson County as needed. Johnson County Public Works (or ESF-3 Public Works and Engineering when activated) will collect county-wide public works damage assessment information, consolidate and report the information to Johnson County Emergency Management (or the ESF-14 Assessment and Recovery Team in the County EOC when activated).
  9. Damage assessment information and debris removal needs will be provided from many sources such as city/jurisdictional public works departments, other ESF teams, first responders and the ECC via citizen calls. The ESF-3 Public Works and Engineering Team will analyze this information to determine prioritization and action plans toward the ESF-3 mission.
  10. Johnson County Public Works Department is responsible for coordinating debris removal and disposal in the unincorporated areas of the county. These activities will be performed in accordance with Johnson County's Debris Management Plan. As described in the Debris Management Plan, many of the county departments such as Johnson County Department of Health and Environment, Johnson County Facilities, and Johnson County Park and Recreation will assist as needed through the provision of equipment, personnel, technical expertise, and in some cases, land for temporary debris storage. For the incorporated areas, the cities are responsible for this coordination, with the county providing secondary support if needed and available. In disaster situations where limited local resources may require centralized coordination and prioritization, the Johnson County Public Works Department and/or the ESF-3 Public Works and Engineering Team when activated will assume this responsibility.
  11. ESF-13 Public Safety and Security will coordinate with ESF-4 Firefighting, ESF-1 Transportation, and ESF-3 Public Works and Engineering (debris removal), and other ESFs as needed to designate primary and alternate transportation routes, and evaluate and ensure access requirements to meet response needs.
  12. All individuals/organizations involved in disaster response should collect and record information on the utilization of labor, materials, equipment, and disaster-related costs.

## ROLES AND RESPONSIBILITIES

### ESF-3 Public Works and Engineering Team

<b>The mission of the ESF-3 Public Works and Engineering Team is to ensure the provision of Public Works and Engineering support required to meet the needs generated by disaster affecting Johnson County.</b>	
Coordinating Agency	<b>Johnson County Public Works</b>
Support Agencies	Johnson County Department of Health and Environment Johnson County Facilities Johnson County Park and Recreation Johnson County Wastewater Jurisdictional Public Works Departments
Core Capabilities	<p><b><u>Infrastructure Systems</u></b>  <b>Mission Area: Response</b>  <b>Description:</b> Stabilize critical infrastructure functions, minimize health and safety threats, and efficiently restore and revitalize systems and services to support a viable, resilient community</p> <ul style="list-style-type: none"> <li>• Prepares for potential public works and engineering requirements. Activities include providing public information, contributing to situational awareness, establishing response teams, leveraging technological tools, training and exercising with partners, establishing private sector contracts and agreements, and coordinating with volunteer organizations and other nongovernmental partners.</li> <li>• Conducts pre-incident and post-incident assessments of public works and infrastructure.</li> <li>• Provides emergency repair of damaged public infrastructure and critical facilities.</li> <li>• Supports restoration of critical navigation, flood control, and other water infrastructure systems, including drinking water and wastewater utilities.</li> <li>• Provides assessment and emergency response support for water, wastewater treatment facilities, levees, dams, buildings, bridges and other infrastructure.</li> <li>• Constructs temporary critical public facilities to temporarily replace destroyed or damaged following a disaster (e.g., schools, local government offices, fire stations, police stations, and medical facilities) in coordination with ESF #6.</li> <li>• Provides assistance in the monitoring and stabilization of damaged structures and the demolition of structures designated as immediate hazards to public health and safety.</li> </ul>

- Provides structural specialist expertise to support inspection of mass care facilities and urban search and rescue operations in coordination with ESF #9.
- Manages, monitors, and/or provides technical advice in the clearance, removal, and disposal of debris from public property and the reestablishment of ground and water routes into impacted areas. For the purposes of ESF #3, the term “debris” includes general construction debris that may contain inherent building material contaminants, such as asbestos or paint. Debris may also include livestock or poultry carcasses and/or plant materials.
- Provides technical assistance to include engineering expertise, construction management, contracting, real estate services, and inspection of private/commercial structures.
- Provides engineering and construction expertise, responders, supplies, and equipment to address flooding to include providing advance measures in anticipation of imminent severe flooding.

**Critical Transportation**

**Mission Area: Response**

**Description:** Provide transportation (including infrastructure access and accessible transportation services) for response priority objectives, including the evacuation of people and animals, and the delivery of vital response personnel, equipment, and services into the affected areas

- Provides coordination, response, and technical assistance to effect the rapid stabilization and reestablishment of critical waterways, channels, and ports to include vessel removal, significant marine debris removal, emergency dredging, and hydrographic surveys.
- Clears debris from roads to facilitate response operations.
- For incidents involving a blast or explosion associated with a chemical, biological, radiological, nuclear, or explosive (CBRNE) threat agent resulting in a contaminated debris field, leads Federal actions to clear critical transportation routes of CBRNE-contaminated debris, during the emergency phase, in consultation with ESF #10. ESF #10 assumes leadership for management of CBRNE-contaminated debris after the emergency phase is over.

**Environmental Response/Health and Safety**

**Mission Area: Response**

**Description:** Ensure the availability of guidance and resources to address all hazards including hazardous materials, acts of terrorism, and natural disasters in support of the responder operations and the affected communities.

- Collects, segregates, and transports to an appropriate staging or disposal site(s) hazardous materials that are incidental to building demolition debris, such as household hazardous waste and oil and gas

from small motorized equipment; removes and disposes of Freon from appliances; and removes, recycles, and disposes of electronic goods.

- Assists in incidents involving a blast or explosion associated with a CBRN threat agent resulting in a contaminated debris field. ESF #3 works in consultation with ESF #10.

### **Public and Private Services and Resources**

#### **Mission Area: Response**

**Description:** Provide essential public and private services and resources to the affected population and surrounding communities, to include emergency power to critical facilities, fuel support for emergency responders, and access to community staples (e.g., grocery stores, pharmacies, and banks) and fire and other first response services.

- Assists in emergency contracting support for infrastructure related to life- saving and life-sustaining services to include providing potable water, emergency power, and other emergency commodities and services.

### **Fatality Management**

#### **Mission Area: Response**

**Description:** Provide fatality management services, including body recovery and victim identification, working with state and local authorities to provide temporary mortuary solutions, sharing information with mass care services for the purpose of reunifying family members and caregivers with missing persons/remains, and providing counseling to the bereaved.

- Manages debris to facilitate fatality recovery efforts to include establishing a system for sorting debris and recovering human remains.
- Provides construction and engineering support for temporary morgues.

### **Mass Care Services**

#### **Mission Area: Response**

**Description:** Provide life-sustaining services to the affected population with a focus on hydration, feeding, and sheltering to those who have the most need, as well as support for reunifying families.

- Provides construction, engineering, and project management expertise and support for temporary housing and sheltering, ensuring accessibility for those with disabilities and others with access and functional needs to include management of temporary roofing support following hurricane disasters.

	<p><b><u>Search and Rescue</u></b>  <b>Mission Area: Response</b>  <b>Description:</b> Deliver traditional and atypical search and rescue capabilities, including personnel, services, animals, and assets to survivors in need, with the goal of saving the greatest number of endangered lives in the shortest time possible.</p> <ul style="list-style-type: none"> <li>• As required, provides debris removal equipment and expertise to support search and rescue operations</li> </ul>
Preparedness	<ul style="list-style-type: none"> <li>• Review the ESF-3 Annex annually and update as needed</li> <li>• Continually evaluate the capabilities required to accomplish the ESF-3 mission, identify any gaps, and leverage resources to address them</li> <li>• Manage the resolution of ESF-3 after-action issues</li> <li>• Develop and/or participate in relevant ESF related planning, training, and exercise activities at the local, regional, state, and/or federal level</li> <li>• Ensure necessary supplements to the ESF annex are developed and maintained (including emergency contact lists, resource lists, departmental/functional plans, procedures, protocols, &amp; EOC job aids)</li> <li>• Ensure representatives from the Coordinating Agency and Support Agencies are fully trained and prepared to respond to the County EOC as ESF-3 Team Members</li> </ul>
Response	<ul style="list-style-type: none"> <li>• Establish and maintain operational awareness of public works and engineering through direct communications links with operational units in the field and/or their appropriate coordinating entities, to include jurisdictional public works departments;</li> <li>• Conduct public works and engineering disaster impact and needs assessments, prioritize ESF-3 operational objectives in alignment with the EOC Action Plan, and coordinate ESF-3 county-wide response activities;</li> <li>• Collect and analyze information relevant to ESF-3 and report in WebEOC and EOC documents including EOC Action Plans and Situational Reports;</li> <li>• Receive, manage, &amp; track resource requests for ESF-3;</li> <li>• Ensure full coordination of activities with other groups within the EOC to assist in the development and maintenance of a common operating picture.</li> </ul>
Recovery	<ul style="list-style-type: none"> <li>• Coordinate the ESF-3 support of recovery activities</li> <li>• Coordinate the restoration of ESF-3 resources and/or capabilities as needed</li> <li>• Ensure ESF-3 Team Members and/or their agencies provide appropriate records of costs incurred</li> <li>• Conduct an ESF-3 after action review</li> </ul>
Mitigation	<ul style="list-style-type: none"> <li>• Identify and implement mitigation activities to prevent or lessen the impact of future incidents</li> </ul>

## ESF-3 Public Works and Engineering Coordinating Agency Responsibilities

<b>Johnson County Public Works</b>	
Preparedness	<ul style="list-style-type: none"> <li>• Ensure each of the preparedness responsibilities identified for the County ESF-3 Team (listed above) are accomplished</li> <li>• Maintain an inventory of agency resources</li> <li>• Provide current emergency contact information to Johnson County Emergency Management</li> </ul>
Response	<ul style="list-style-type: none"> <li>• Provide Public Works and Engineering support in emergency/disasters, in accordance with departmental operations guides &amp; protocols, existing MOUs &amp; agreements, and the <i>ESF-3 Public Works and Engineering Annex</i></li> <li>• Ensure each of the response responsibilities identified for the County ESF-3 Team (listed above) are accomplished regardless of the activation/staffing level of the County EOC</li> <li>• Arrange for appropriate staffing of the County ESF-3 Team in the EOC throughout activations</li> <li>• Coordinate the activities of ESF-3 Team Members in the County EOC</li> </ul>
Recovery	<ul style="list-style-type: none"> <li>• Coordinate the ESF-3 support of recovery activities</li> <li>• Coordinate the restoration of ESF-3 resources and/or capabilities as needed</li> <li>• Ensure ESF-3 Team Members and/or their agencies provide appropriate records of costs incurred</li> <li>• Conduct an ESF-3 after action review</li> </ul>
Mitigation	<ul style="list-style-type: none"> <li>• Identify and implement mitigation activities to prevent or lessen the impact of future incidents</li> </ul>

## ESF Support Agency Responsibilities

<b>Johnson County Department of Health and Environment</b>	
Preparedness	<ul style="list-style-type: none"> <li>• Assist with the ESF-3 Team preparedness activities (listed above)</li> <li>• Maintain an inventory of agency resources</li> <li>• Provide current emergency contact information to Johnson County Emergency Management</li> </ul>
Response	<ul style="list-style-type: none"> <li>• Coordinate response activities with the ESF-3 Team in support of the ESF-3 mission</li> <li>• Send agency representatives to the County EOC as part of the ESF-3 Team when activated</li> </ul>
Recovery	<ul style="list-style-type: none"> <li>• Coordinate the restoration of agency resources and/or capabilities as needed</li> <li>• Participate in countywide recovery planning and activities</li> <li>• Prepare the documentation required to become eligible for reimbursement</li> <li>• Participate in after action reviews</li> </ul>
Mitigation	<ul style="list-style-type: none"> <li>• Identify and implement mitigation activities to prevent or lessen the impact of future incidents</li> </ul>
<b>Johnson County Facilities</b>	
Preparedness	<ul style="list-style-type: none"> <li>• Assist with the ESF-3 Team preparedness activities (listed above)</li> <li>• Maintain an inventory of agency resources</li> </ul>

	<ul style="list-style-type: none"> <li>• Provide current emergency contact information to Johnson County Emergency Management</li> </ul>
Response	<ul style="list-style-type: none"> <li>• Coordinate response activities with the ESF-3 Team in support of the ESF-3 mission</li> <li>• Send agency representatives to the County EOC as part of the ESF-3 Team when activated</li> </ul>
Recovery	<ul style="list-style-type: none"> <li>• Coordinate the restoration of agency resources and/or capabilities as needed</li> <li>• Participate in countywide recovery planning and activities</li> <li>• Prepare the documentation required to become eligible for reimbursement</li> <li>• Participate in after action reviews</li> </ul>
Mitigation	<ul style="list-style-type: none"> <li>• Identify and implement mitigation activities to prevent or lessen the impact of future incidents</li> </ul>
<b>Johnson County Parks and Recreation</b>	
Preparedness	<ul style="list-style-type: none"> <li>• Assist with the ESF-3 Team preparedness activities (listed above)</li> <li>• Maintain an inventory of agency resources</li> <li>• Provide current emergency contact information to Johnson County Emergency Management</li> </ul>
Response	<ul style="list-style-type: none"> <li>• Coordinate response activities with the ESF-3 Team in support of the ESF-3 mission</li> <li>• Send agency representatives to the County EOC as part of the ESF-3 Team when activated</li> </ul>
Recovery	<ul style="list-style-type: none"> <li>• Coordinate the restoration of agency resources and/or capabilities as needed</li> <li>• Participate in countywide recovery planning and activities</li> <li>• Prepare the documentation required to become eligible for reimbursement</li> <li>• Participate in after action reviews</li> </ul>
Mitigation	<ul style="list-style-type: none"> <li>• Identify and implement mitigation activities to prevent or lessen the impact of future incidents</li> </ul>
<b>Johnson County Wastewater</b>	
Preparedness	<ul style="list-style-type: none"> <li>• Assist with the ESF-3 Team preparedness activities (listed above)</li> <li>• Maintain an inventory of agency resources</li> <li>• Provide current emergency contact information to Johnson County Emergency Management</li> </ul>
Response	<ul style="list-style-type: none"> <li>• Coordinate response activities with the ESF-3 Team in support of the ESF-3 mission</li> <li>• Send agency representatives to the County EOC as part of the ESF-3 Team when activated</li> </ul>
Recovery	<ul style="list-style-type: none"> <li>• Coordinate the restoration of agency resources and/or capabilities as needed</li> <li>• Participate in countywide recovery planning and activities</li> <li>• Prepare the documentation required to become eligible for reimbursement</li> <li>• Participate in after action reviews</li> </ul>
Mitigation	<ul style="list-style-type: none"> <li>• Identify and implement mitigation activities to prevent or lessen the impact of future incidents</li> </ul>
<b>Jurisdictional Public Works</b>	
Preparedness	<ul style="list-style-type: none"> <li>• Assist with the ESF-3 Team preparedness activities (listed above)</li> </ul>

	<ul style="list-style-type: none"> <li>• Maintain an inventory of agency resources</li> <li>• Provide current emergency contact information to Johnson County Emergency Management</li> </ul>
Response	<ul style="list-style-type: none"> <li>• Coordinate response activities with the ESF-3 Team in support of the ESF-3 mission <ul style="list-style-type: none"> <li>• Coordinate public works activities within their jurisdiction according to their own departmental policies and guidelines.</li> <li>• Provide personnel, equipment, and technical expertise to support emergency/disaster response</li> </ul> </li> <li>• Send agency representatives to the County EOC as part of the ESF-3 Team when activated</li> </ul>
Recovery	<ul style="list-style-type: none"> <li>• Coordinate the restoration of agency resources and/or capabilities as needed</li> <li>• Participate in countywide recovery planning and activities</li> <li>• Prepare the documentation required to become eligible for reimbursement</li> <li>• Participate in after action reviews</li> </ul>
Mitigation	<ul style="list-style-type: none"> <li>• Identify and implement mitigation activities to prevent or lessen the impact of future incidents</li> </ul>

## **POLICIES, AUTHORITIES, AND REFERENCES**

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*Please refer to the Basic Plan for additional Policies, Authorities, and References.*

### **Johnson County**

- Johnson County Debris Management Plan

### **Department of Health and Environment**

- K.S.A. 65-101
- K.S.A. 65-3401(b)
- K.S.A. 65-3406K.S.A. 65-3407c K.S.A. 65-171(m)

### **Water Management**

- K.S.A. 82a-303c

### **Occupational Safety**

- 29 C.F.R. 1910-1926

### **Mutual Aid**

- K.S.A 12-16,117

### **Transportation**

- K.S.A. 68-406
- K.S.A. 68-406a
- K.S.A. 68-416a