The Contractor shall submit this Earthwork Construction Plan (ECP), describing the methods and manners in which earthwork and soils will be managed during construction activities. The A-51 ECP is applicable for all field personnel working in areas regulated under the special provision(s). The Regulated Substances Health and Safety Plan (RSHASP), an attachment to the A-51 ECP, shall pertain to the Contractor, Illinois Tollway representatives and any visitors at the site. After approval, the A-51 ECP shall be revised, as necessary, to reflect changed conditions in the field.

### Section 1.

1. **Project Information**

Contract Number Route Mile Posts County

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Municipality(ies)

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### Endorsement

This plan must be approved by the Contractor’s Quality Manager or Project Manager to comply with the plans, specifications and special provisions for management of regulated substances during construction activities.

Print Name Title Company/Firm

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By checking this box and typing my name below, I certify this plan has been approved by the Contractor’s Quality Manager or Project Manager.

Signature Date

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### Section 2. Earthwork Management Plan

Do you plan to stockpile more than 10,000 cubic yards of excavated material within the contract limits for a time greater than 7 days?  Yes  No

If yes, provide a plan sheet as Attachment 1 showing locations and volume of earthwork stockpile, windrow, filling in low areas or other. Contractor will provide the duration of the stockpile at each location by stage.

When the Contractor proposes to stockpile excavated material outside the contract limits or off Tollway right-of-way, the Contractor shall obtain and file with the Engineer permission in writing, from the property owner, for the use of the property for this purpose in accordance with 107.22 of the Supplemental Specifications. The Contractor shall provide a plan sheet as Attachment 1 showing locations and volume of earthwork stockpile, windrow, filling in low areas or other. Contractor will provide the duration of the stockpile at each location by stage.

## Describe earthwork stockpile management by contract stage. Include how different waste streams, reuse types, suitable vs. unsuitable soil will be kept separate.

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## Mark all of the following earthwork items which differed from the contract quantities. (update throughout contract)

Earth Excavation

Rock Excavation

Furnished Excavation

Removal and Disposal of Unsuitable Material

Structure Excavation

Topsoil Excavation and Placement

Topsoil Excavation and Disposal

Topsoil Furnish and Place, 4”

Non-Special Waste Disposal, Type 1

Hazardous Waste Disposal

Incidental Earth Excavation

Performance based items

For all marked items, describe preferred method of management (add attachments as necessary, such as maps, survey points and any additional information requested by the Engineer)

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Do you plan to temporarily place material outside the contract excavation limits or permanently waste excess material outside the contract grade lines?  Yes  No

If yes, the Contractor is required to submit the A-50 process for review and approval by the Tollway.

### Section 3. Experience and Qualifications (Disposal of Regulated Substances and Uncontaminated Soil special provision)

Does the contract include the Disposal of Regulated Substances and Uncontaminated Soil special provision AND more than 300 cubic yards of earthwork excavation?  Yes  No

**If yes, complete Section 3. If no, Section 3 is not required.**

1. **Experience**

The Contractor, or firm, herein referred to collectively as Contractor, performing the regulated substances monitoring, field screening and/or additional sampling shall be pre-qualified in Hazardous Waste (Simple or Advanced) by IDOT, or demonstrate acceptable project experience. Acceptable project experience includes, but is not limited to, having completed at least five (5) documented Leaking Underground Storage Tank (LUST); and/or five (5) Site Remediation Program (SRP) cleanups following 35 Ill. Adm. Code 734, 740 or 742 within the last ten (10) years. Acceptable qualifications shall also be demonstrated with project experience in remediation and regulated substances operations in accordance with applicable federal, State or local regulatory requirements. Documentation of qualifications shall be provided to the Engineer for evaluation and acceptance. Acceptable project documentation shall include, at a minimum, the regulatory identification numbers, project completion dates and description of the Contractor's role in the projects.

The qualified soils monitoring personnel performing work shall have a minimum of one-year of experience in roadway construction, OSHA 40-Hour HAZWOPER Training and current certification of completion for the Annual 8-Hour HAZWOPER Refresher.

Provide a list of proposed subcontractors, relevant project experience and the work that each will perform related to environmental or regulated substances services.

Company/Firm's Name Company/Firm's Address

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Contact Name Contact Title

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Phone Number Email Address

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Work To Be Performed

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| Personnel\* | Duties | Years Related Experience | HAZWOPER 40-Hour (Y/N) | 8-Hour HAZWOPER Refresher Date | 8-Hour Supervisor Training (Y/N) |
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\* Personnel includes those physically conducting soils monitoring, soil disposal and other regulated substances field activities, the person preparing the RSHASP and related duties.

Is the contractor or firm pre-qualified in Hazardous Waste by IDOT?  Yes  No

Hazardous Waste - Simple  Hazardous Waste - Advanced

SEFC ID Number Date Approved (Not Submitted)

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If not pre-qualified, complete Section 3.B.

### Contractors and Subcontractors Completing Regulated Substance Work or Disposal of Uncontaminated Soil

### Project Experience (5 projects minimum)

Project # 1 Name IEPA LCP Number

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IEMA Incident Number Applicable Regulation(s)

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Period Firm Worked on Project

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| --- | --- | --- | --- |
| From Date |  | To Date |  |

Company/Firm's Responsibilities

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Project Status (Include NFR or 4Y Date, if applicable)

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Project # 2 Name IEPA LCP Number

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IEMA Incident Number Applicable Regulation(s)

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Period Firm Worked on Project

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| From Date |  | To Date |  |

Company/Firm's Responsibilities

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Project Status (Include NFR or 4Y Date, if applicable)

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Project # 3 Name IEPA LCP Number

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IEMA Incident Number Applicable Regulation(s)

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Period Firm Worked on Project

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| From Date |  | To Date |  |

Company/Firm's Responsibilities

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Project Status (Include NFR or 4Y Date, if applicable)

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Project # 4 Name IEPA LCP Number

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IEMA Incident Number Applicable Regulation(s)

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Period Firm Worked on Project

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| From Date |  | To Date |  |

Company/Firm's Responsibilities

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Project Status (Include NFR or 4Y Date, if applicable)

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Project # 5 Name IEPA LCP Number

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IEMA Incident Number Applicable Regulation(s)

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Period Firm Worked on Project

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| From Date |  | To Date |  |

Company/Firm's Responsibilities

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Project Status (Include NFR or 4Y Date, if applicable)

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### Attach resume for soils monitoring and other personnel required to have specialized training for the work to be performed as Attachment 2.

1. **Contractor must attach a copy of the current certification of completion of the Annual 8-Hour HAZWOPER Refresher for each person assigned soils monitoring duties as Attachment 3. (Include personnel preparing the RSHASP)**

Does the Contractor or subcontractor have any current or former ties within, adjoining or potentially affecting this construction project?

Yes  No

If yes, please describe

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### Section 4. Soil Disposal Operation Plan (SDOP) (Disposal of Regulated Substances and Uncontaminated Soil special provision)

Does the contract include Disposal of Regulated Substances and Uncontaminated Soil special provision AND more than 300 cubic yards of earthwork excavation?  Yes  No

**If yes, complete Section 4. If no, Section 4 is not required.**

1. **Mark all Earthwork Management concerns that apply.**

Soil Management

UST Removal

Engineered Barriers

Groundwater Management

Backfill Plugs

Landfill Waste Disposal Characterization Sample(s)

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Number of Landfill Waste Disposal Characterization Samples

Other, describe below

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### Outline the procedures to mobilize all required subcontractors’ materials and equipment in a timely fashion and provisions to continue work in the regulated substances areas identified in the plans and special provision.

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1. **Describe the methods that will be used to manage soil and/or groundwater for each regulated area. Include a description of disposal methods and name of receiving facility for regulated substances and uncontaminated soil, if applicable, or state if the material will remain on-site. If material is taken to a location other than a CCDD/USFO facility or landfill, provide an approval letter from the property owner as Attachment 4.**

(Best Management Practice - copy and paste regulated substances special provision and discuss each area)

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### Provide as Attachment 5: site maps illustrating location(s) of soil and/or ground waste management areas, engineered barriers, backfilled plugs, landfill waste disposal characterization sample locations, stations and other pertinent information.

**Section 5. Regulated Substances Health and Safety Plan (RSHASP) (Hazardous Waste or Disposal Type 1)**

Does the contract include 1) hazardous waste OR 2) non-special waste (Disposal Type 1) as defined in the Disposal of Regulated Substances and Uncontaminated Soil special provision AND more than 300 cubic yards of earthwork excavation?  Yes  No

**If yes, complete Section 5. If no, Section 5 is not required.**

The contractor shall develop a project specific RSHASP and submit the plan as Attachment 6.

The RSHASP shall specify procedures and equipment to protect site workers and observers from hazards encountered during activities in locations containing regulated substances. **A qualified Industrial Hygienist or Health and Safety Specialist shall prepare the Regulated Substances Health and Safety Plan. The Contractor's Corporate Officer responsible for worker health and safety shall approve and sign the plan before submittal to the Illinois Tollway.**

A qualified Industrial Hygienist is defined as having a minimum of five years of experience in the industrial hygiene field, an academic degree in a related science field, and successful completion of two days of testing presented by the American Board of Industrial Hygiene. A Certified Industrial Hygienist (CIH) meets the above definition.

A qualified Health and Safety Specialist is defined as having a minimum of three years of experience in hazardous waste operations, familiar with applicable health and safety procedures and protocols and holds current training status according to 29 CFR 1910.120. This person may be a Certified Safety Professional (CSP) or an Illinois Registered Professional Engineer. A CSP has a minimum of four years of professional safety experience, has a baccalaureate degree in safety and has successfully completed the safety fundamentals examination and subsequent specialty examination presented by the Board of Certified Safety Professionals.

The Contractor's corporate officer responsible for the Contractor's health and safety program and approval of the RSHASP shall be able to identify hazards; assess employee exposure and risk; have knowledge of Occupational Safety and Health Administration (OSHA) standards, hazards correction techniques and practices, work place safety and health program requirements. This person shall also be able to effectively communicate this knowledge both orally and in writing or contract for these abilities with a qualified Industrial Hygienist or Health and Safety Specialist.

The responsibility for the implementation and enforcement of all health and safety requirements lies solely with the Contractor. The Contractor shall take all necessary precautions for the safety of, and provide the necessary protection to prevent damage, injury or loss to construction personnel performing work within the exclusion and decontamination zones. The Contractor shall ensure all workers involved in any activities within the regulated substances locations or associated with the regulated substances are conversant with all the requirements of RSHASP and have signed off and dated personal acknowledgment of the plan. The Contractor shall post copies of RSHASP at various locations throughout the work area to facilitate spontaneous review.

1. Zones. Three distinct zones (exclusion, decontamination, and support) shall apply to projects adjacent to or within documented leaking underground storage tank (LUST) incidents, or under management in accordance with the requirements of the Site Remediation Program (SRP) Resource Conservation and Recovery Act (RCRA) or Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) or as deemed necessary in the special provision(s).
   1. Exclusion Zones are the areas where contamination does or could occur. These zones have the highest inhalation exposure potential and/or a high probability of skin contact with potential contaminants/contaminated material. The exclusion zone designation shall remain until the entire excavated area has been completely backfilled. The Contractor shall ensure that neither their employees nor subcontractors execute maintenance nor repair operations on equipment located in the exclusion zone.
   2. Decontamination Zones are areas established to prevent the transfer of contaminants outside the exclusion zones. This zone eliminates the possibility of the physical transfer of contaminating substances on people, equipment, or in the air to unregulated areas. A combination of decontamination, distance from active work areas, zone restrictions, and work function shall eliminate the possibility of physical transfer of contamination. This zone has the next highest inhalation hazard, but does not pose a high probability of skin contact. This zone shall contain the equipment decontamination facility, areas designated for personnel decontamination and emergency equipment.
   3. Support zones shall include the remaining areas of the job site. This zone shall contain the change and shower rooms, lunch and break areas, operation direction and support facilities (including supplies, equipment storage and maintenance areas). No equipment or personnel shall enter the support zone from the exclusion zone without passing through the personnel or equipment decontamination zone. Eating, drinking, smoking, etc., shall be allowed only in this zone.

The Contractor shall ensure each worker has the proper personal protective equipment for the zone and location in which he/ she is to perform construction or material management activities. The Contractor shall be responsible for providing all personal protective equipment required by the Illinois Tollway and Contractor personnel. The Contractor shall define the provisions for personal protective equipment in the RSHASP.

The Contractor, through the RSHASP, shall determine the appropriate level of protection. The Contractor shall ensure the appropriate protective equipment is being used during activities in the exclusion zone and decontamination zone. The Contractor shall notify the Engineer of any variations from the defined levels of protection as stipulated in the Contractor's health and safety plan in writing before implementation of the modifications.

1. Decontamination. All personnel who have participated in construction or soil management activities within the exclusion zone shall go through decontamination. Additionally, the Contractor shall perform a wet and/or dry decontamination process on excavation and construction equipment as specified when equipment is in contact with contaminated material. No equipment or vehicle shall track visible material from a contaminated facility.
   1. Personnel Decontamination. All outer protective clothing used by personnel who contact contaminated material while in the exclusion zone shall be collected in plastic bags and placed in leak-proof sealable containers, such as 55 gal (208 L) open-top drums. The Contractor shall transport all containers to a secure staging area for temporary storage. The Contractor shall inform the Engineer of the time and manner of disposal of containers containing contaminated protective clothing. The Contractor shall be responsible for transporting and disposing of the containers. The Contractor shall be responsible for ensuring the personnel decontamination portion of this zone contains clean, unused 6 mil (150 micron) polyethylene sheeting.
   2. Equipment Decontamination.
      1. Dry Decontamination. The Contractor shall perform dry decontamination on equipment that has contacted material classified as a non-special waste, special waste or hazardous waste before moving that equipment to any other location, whether the new location is contaminated or uncontaminated. Dry equipment decontamination shall consist of the removal of material from excavation and construction equipment parts, such as shovels, wheel tracks, and buckets. During dry decontamination, the Contractor shall ensure that removed contaminated material does not contact the ground surface. The Contractor shall place all contaminated material removed during dry decontamination with contaminated material of similar classification and dispose of it with other excavated material from the facility location.
      2. Wet Decontamination. The Contractor shall perform the wet decontamination process when construction/soil management activities associated with non-special waste, special waste, or hazardous waste are followed by construction/soil management activities associated with uncontaminated excavation or fill material. If the Engineer observes residual and/ or non-special waste, special waste or hazardous waste material during the initial (or subsequent) inspection of equipment, the Engineer will require the Contractor to perform either wet and/or dry decontamination before approving equipment for use at another location. Before departure from the project area, all equipment and vehicles contacting contaminated material shall be wet decontaminated by the Contractor.

Personnel shall perform all wet equipment decontamination within the decontamination zone on equipment decontamination pad(s). The Contractor shall be responsible for the construction and maintenance of the decontamination pad(s) and for all equipment, materials and personnel. The pad(s) shall be designed to prevent loss of decontamination liquids to the surrounding environment through vertical infiltration and/or surface runoff from any part of the pad(s).

The Contractor shall place all removed wastes from the decontamination pad(s) in leak-proof containers and store temporarily in a secure staging area. The Contractor shall containerize the solids separate from the liquids. The Contractor shall be responsible for the transport and disposal of all waste generated from the decontamination process.

1. Health and Safety Training. The Contractor shall indicate the designated environmental professional and the project safety officer responsible for monitoring activities within designated exclusion or decontamination zones have successfully completed the initial 40-hour Health and Safety Training Course and are current with refresher training pursuant to applicable federal, State and/or local standards, including OSHA requirements under 29 CFR 1910.120 (HAZWOPER). The personnel required to have training in accordance with 29 CFR 1910.120 shall have certifications of completion for the Annual 8-Hour HAZWOPER Refresher with them on the jobsite while working in areas regulated under the special provision(s). The designated environmental professional responsible for monitoring activities shall also have successfully completed an additional 8-Hour Supervisor Training Course pursuant to applicable federal, State and/or local standards, including OSHA requirements under 29 CFR 1910.120. The Contractor is responsible for ensuring that other contractor and subcontractor personnel required to be trained under 29 CFR 1920.120 have received required training and updates.
2. Medical Exams. The Contractor shall indicate all personnel in his/her work force who are required to have the training described in Section 5C of this form have received and passed a current medical examination as required under applicable federal, State and/or local standards. The Contractor is responsible for ensuring that other contractor and subcontractor personnel subject to medical monitoring under 29 CFR 1910.120 have received and passed a current medical examination under applicable federal, State and/or local standards.

RSHASP is attached:  Yes  No

Are medical exams for field personnel required under 29 CFR 1910.120?  Yes  No

If yes, are medical exams current for field personnel?  Yes  No

### Section 6. Regulated Substances Erosion Control Plan (RSECP) (Hazardous Waste or Disposal Type 1)

Does the contract include 1) hazardous waste OR 2) non-special waste (Disposal Type 1) as defined in the Disposal of Regulated Substances and Uncontaminated Soil special provision AND more than 300 cubic yards of earthwork excavation?  Yes  No

**If yes, complete Section 6. If no, Section 6 is not required.**

The Contractor shall prevent flow of precipitation storm water into excavated areas that contain regulated substances. The Contractor shall divert all storm water away from the exclusion and decontamination zones using appropriate storm water erosion control methods.

Provide a description of how the Contractor plans to prevent precipitation storm water flowing into excavated areas and how all storm water will be diverted away from the exclusion and decontamination zones.

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Failure to use appropriate measures to divert storm water will subject the Contractor to removing and properly containing the water at their own expense. The Contractor shall provide pumps and collect standing water from the excavation before continuing removal activities or other construction activities. The Contractor shall collect the removed water, place it in leak-proof storage containers and store it in a secure staging area for future testing by the Contractor. The Contractor shall ensure the storage containers have access points to facilitate sampling. The Contractor shall inform the Engineer about management and disposal requirements for the water following the evaluation of the analytical results.

Provide a description of the Contractor's plan to collect, transfer, test, store and dispose of potentially impacted water from construction areas.

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The Contractor shall control and minimize the release of dust during non-special waste, special waste or hazardous waste removal activities. The Contractor may use water or acceptable chemicals to control dust emissions. Within the RSECP, the Contractor shall include a description of intended dust control measures.

Provide a description of the Contractor's plan for dust control measures.

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