
SECTION 10 – ENVIRONMENTAL CONTROLS AT WORK SITE

10-1 DUST CONTROL

Dust control shall conform to Section 17, “Dust Control”, of these Specifications.

10-2 AIR POLLUTION CONTROL

The Contractor shall comply with all Federal, State, City, and local air pollution control rules, regulations, ordinances, and statutes that apply to the Work. The Contractor shall also comply with the requirements of any permits issued to the City as noted in the Special Provisions.

10-3 BURNING

Unless otherwise provided in the Special Provisions or approved by the City in writing, material shall not be burned on site.

10-4 EROSION, SEDIMENT, AND WATER POLLUTION CONTROL

10-4.01 General

The Federal Clean Water Act requires construction sites to prevent pollutants from leaving the construction site and entering storm drain systems. Storm drain systems include both constructed and natural facilities, including streams, waterways, and other bodies of water. The Contractor shall protect the local storm drain system from pollution, and shall conduct and schedule operations to avoid erosion and sediments. Where erosion may cause water pollution due to the nature of the material or the season, the Contractor's operations shall be scheduled so temporary and/or permanent erosion control features are installed concurrently with, and/or immediately following, grading operations depending on the season.

The Contractor is responsible for organizing and scheduling the Work to prevent, control, and/or abate water pollution. In order to provide effective and continuous control of water pollution, it may be necessary for the Contractor to perform the Work in small or multiple units, on an out-of-phase schedule, and/or with modified construction procedures. The Contractor shall coordinate water pollution control work with all other Contract work.

10-4.02 City Requirements

Unless specified otherwise in the Contract, all construction projects in the City of Elk Grove must have a water pollution control program as follows:

- Construction projects disturbing more than the threshold number of acres as defined in the State General Construction Permit [currently one (1) acre] must have a site specific Stormwater Pollution Prevention Plan (SWPPP). (See Section 10-4.04 in this Section of these Specifications.)
- Construction involving the grading, filling, excavating, storage, or disposal of three hundred fifty (350) cubic yards or more of soil, or the clearing or grubbing of one (1) acre or more must have a Stormwater Pollution Prevention Plan (SWPPP). (See Section 10-4.05 in this Section of these Specifications.)
- All other construction must comply with the Minimum City Requirements.

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(See Section 10-4.06 in this Section of these Specifications.)

The minimum program required will be specified in the Special Provisions or by the City. Contractor may opt to comply with a more restrictive program than that which is required by the Special Provisions or the City. The Contractor must then conform to all requirements of both the minimum applicable program and the more restrictive program.

Before starting the Work, the Contractor shall develop a program for the control of water pollution during the Work. The program shall indicate how the Contractor proposes to effectively control water pollution during the Work. During the course of work the program shall also describe how the Contractor plans to monitor the effectiveness of the program. The program shall show erosion control work and all water pollution control measures the Contractor plans to implement in connection with the Work. The Contractor shall not perform any clearing, grubbing or earthwork on the project, other than that specifically authorized in writing by the City, without a water pollution control program. When requested by the City, the Contractor shall submit the program for review.

The City is not liable to the Contractor for any portion of the water pollution control program or subsequent revisions nor for any delays to the Work due to the Contractor's failure to prepare and implement a program nor for any delays as a result of City review.

10-4.03 Regulations, Ordinances, Permits, and Specifications

The Contractor is responsible for compliance with all Federal, State, City and local permits, rules, regulations, ordinances, statutes, and City directions that apply to erosion, sediment, and water pollution control. The Contractor, at a minimum, shall comply with the most stringent regulation, ordinance, permit, or specification of the following applicable to the Work. This includes, but is not limited to:

- These Specifications or the Project's Special Provisions
- State of California Construction Activities Storm Water General Permit
- Specific or general National Pollution Discharge Elimination System (NPDES) or other permits that cover the Work or are specific to the area of the Work
- The City of Elk Grove Municipal NPDES Permit

The Contractor's responsibility to provide water pollution control under this Section ends at Field Acceptance of the Work and proof of a "Notice of Termination" being filed with the SWRBC. (See Section 7-21, "Final Inspection and Field Acceptance", of these Specifications)

10-4.04 Stormwater Pollution Prevention Plan

Construction projects disturbing more than one (1) acre must obtain coverage under the State Water Resources Control Board (SWRCB) General Storm Water Permit to Discharge Storm Water Associated with Construction Activity (General Permit). The General Permit is issued by the SWRCB and is enforced by the City and the Central Valley Regional Water Quality Control Board (Regional Board). Failure to obtain General Permit coverage or to comply with the requirements of the General Permit could result in significant daily fines. General Permit coverage is obtained by certifying and filing a Notice

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of Intent (NOI) with the Regional Board. The Contractor will be responsible for filing the NOI unless specified otherwise in the Special Provisions. The General Permit also requires inspection of erosion and sediment control measures and all BMP categories before, during, and after storm events and at routine intervals in the rainy and non-rainy seasons.

The site specific SWPPP shall be prepared in accordance with the General Permit or other permit specified in the Special Provisions, regardless of whether or not the Work is subject to said permit. The site specific SWPPP shall be prepared using the California Storm Water Quality Association's (CASQA) Construction Storm Water Best Management Practices and shall be signed by the QSD. The SWPPP shall be implemented by the Contractor before Work commences. The Contractor may not be allowed to mobilize until the plan is accepted. The SWPPP shall be kept onsite at all times, updated for the various phases of the project, and made immediately available for City and Regional Board Inspectors upon request. Updates shall be submitted to the City immediately for review. At a minimum, the SWPPP shall include:

1. Site Drawing (to scale)
 - Indicate Best Management Practices (BMP's) locations and types.
 - Indicate location of soil stockpiles and solid waste containers.
 - Delineate vehicle and equipment fueling, servicing, cleaning and storage areas.
 - Designate material storage areas.
 - Show grading limits.
 - Indicate site drainage during execution of the Work.
 - Identify provisions for stabilization of vehicle access to site. Details
 - Provide drawings and information for BMP's and other pollution prevention measures.
 - Provide drawings for secondary containment.
2. Narrative
 - Indicate chemicals, potential pollutants and hazardous materials to be used and methods for safekeeping.
 - Describe the implementation and locations of erosion and sediment controls in both the wet and dry seasons.
 - Describe de-watering operations.
 - Describe methods for spill prevention and control.
 - Describe secondary containment.
 - Describe handling and disposal of solid waste.
 - Describe method and equipment for treatment and disposal of de-watering discharge.
 - Describe storage and dispensing of fuel and lubricants.

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- Describe cleanout and disposal of ready mix concrete.
 - Describe sanitation provisions.
 - Describe method for inspection and maintenance to ensure effectiveness of BMP's.
3. Monitoring procedures (including forms and schedules)
- Sampling and analysis for non-visible pollutants.

10-4.05 Erosion and Sediment Control Plan

Construction projects involving the grading, filling, excavating, storage, or disposal of three hundred fifty (350) cubic yards or more of soil, or the clearing or grubbing of one (1) acre or more, must prepare a site specific SWPPP. The SWPPP shall be prepared QSD and shall be reviewed by the City before work commences. Unless otherwise approved in writing by the City, the Contractor will not be allowed to mobilize until the plan is prepared and reviewed. If the Contractor's methods fail to prevent erosion or siltation, the Contractor shall revise and adjust the control measures to provide effective control, and shall be responsible for any damage resulting from erosion or siltation originating on the Work site and any other site the Contractor controls or passes through. No work, other than BMP installation, shall commence until a SWPPP Inspector has released the project by signing the SWPPP Compliance Release Form.

10-4.06 Minimum City Requirements

If the Work does not fall under Sections 10-4.04 or 10-4.05 in this Section of these Specifications, the Contractor, prior to commencing work, shall prepare a water pollution control program detailing the following:

- Implementation of erosion and sediment controls
- Location of soil stockpiles and solid waste containers
- Vehicle and equipment fueling, servicing, cleaning and storage areas
- Material storage areas
- Chemicals, potential pollutants and hazardous materials to be used and methods for safekeeping
- Site drainage during execution of the Work
- Stabilization of vehicle access to site
- De-watering operations
- Methods for spill prevention and control
- Secondary containment
- Handling and disposal of solid waste
- Storage and dispensing of fuel and lubricants
- Clean out and disposal of ready mix concrete

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- Sanitation provisions
- Monitoring procedures

When requested by the City, the water pollution control program shall be submitted to the City for review.

10-4.07 Compliance

Compliance with the provisions in this Section does not relieve the Contractor of the responsibility for compliance with other Contract provisions.

The Contractor shall perform routine inspection and maintenance of BMP's. Inspections shall be done prior to, during, and after each rain event, and routinely once a week during the rainy season and every two weeks during the non-rainy season regardless of weather. The Contractor is solely responsible for preparing and maintaining inspection and monitoring records; and for including those records in the SWPPP or, in the case of Erosion and Sediment Control Plans, the site or project Maintenance Log, copies of which shall be available to the City on site at all times.

The Contractor shall immediately correct or replace any ineffective BMP. If the measures taken by the Contractor are inadequate to effectively control water pollution, the City may direct the Contractor to revise the operations and water pollution control program. The City may restrict work from being performed until the water pollution control measures are adequate and, if required, a revised water pollution control program is in place. Continued non-compliance may result in the City suspending the Work in accordance with Section 5-21, "Temporary Suspension or Delay of Work", of these Specifications. The City reserves the right to take corrective action and withhold City costs for corrective action from progress payments or final payment in accordance with Section 8-8, "Withholdings/Denial of Progress Payment Request", of these Specifications.

Any fines, including third-party claims, levied against the City as a result of Contractor's non-compliance are the Contractor's sole responsibility and will be withheld from progress payments or final payment in accordance with Section 8-8, "Withholdings/Denial of Progress Payment Request", of these Specifications.

10-4.08 Payment

Except as otherwise provided in the Special Provisions, full compensation for compliance with all applicable erosion and sediment control and storm water pollution and prevention requirements will be included in the prices paid for the various Contract items of work and no additional compensation will be allowed.

10-5 CONTROL OF WATER IN THE WORK

When groundwater or surface run-off water is encountered, the Contractor shall furnish, install, maintain, and operate all necessary machinery, appliances, and equipment to keep excavations and wet areas reasonably free from water. De-watering operations shall remain in effect until the Work has been completed, inspected, and approved, and all danger of flotation and other damage is eliminated. Water pumped from waterways, trenches, excavations, or low spots shall be disposed as specified in the project SWPPP, Special Provisions or as directed by the City. The Contractor is not allowed to dispose of any water that contains sediment or other contaminants. The Contractor

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is responsible for providing filtration, settlement, or disposal facilities as required to comply with the requirements of Section 10-4, “Erosion, Sediment, and Water Pollution Control”, in this Section of these Specifications.

10-6 NOISE CONTROL

The Contractor shall comply with all local noise control and noise level rules, regulations, and laws that apply to the Work. The Special Provisions may contain specific or additional requirements. Internal combustion engines used for any purpose on the Work must be equipped with a muffler recommended by the manufacturer.

10-7 CONTAMINATED AND HAZARDOUS MATERIALS OR ENVIRONMENTS

10-7.01 Contaminated or Hazardous Materials

The Contractor shall comply with all Federal, State and local rules, regulations, ordinances, and statutes that apply to the handling, storage, and disposal of contaminated and hazardous materials. All work involving material containing asbestos must be performed in accordance with California Labor Code, Sections 6501.5 through 6510 and California Code of Regulations, Title 8, Section 5208 and any other pertinent regulations.

10-7.02 Hazardous Environments

Existing sewers and appurtenances exposed to sewage and industrial wastes are considered contaminated with disease-causing organisms. The Contractor shall advise all personnel (including Subcontractor personnel) in contact with contaminated facilities, debris, wastewater, or similar items of the necessary precautions to avoid disease. It is the Contractor's responsibility to urge all personnel to observe a strict regimen of proper hygienic precautions, including any inoculations recommended by the local public health officer.

10-8 USE OF EXPLOSIVES

The Contractor shall not use explosives on the Work unless the City grants permission in writing or the use of explosives is specified in the Contract Documents, and then only under such conditions as the City prescribes.

10-9 SANITARY REGULATIONS

The Contractor shall comply with all Federal, State and local rules, regulations, ordinances, and statutes with respect to sanitation. The Contractor shall obey and enforce such sanitary requirements, and shall take precautions against contagious or infectious diseases.

Sanitary conveniences for the use of the workers shall be obscured from the public and constructed or installed and maintained by the Contractor. The Contractor shall strictly enforce use of such facilities.

Any necessary facilities shall be in place prior to the start of work.

10-10 CONFINED SPACES

10-10.01 Contractor Responsibilities and Qualifications

When working in a confined space, the Contractor shall comply with all confined space requirements of Title 8, General Industry Safety Orders (Cal-OSHA), Article 108, Sections 5156 through 5159.

Prior to any confined space entry, the Contractor shall submit for City review:

1. The Contractor's procedures for confined space operations.
2. Copies of all documents and certificates that qualify the Contractor to safely perform work in permit-required confined spaces. The Contractor shall also submit all applicable Material Safety Data Sheets (MSDS) and hazard information on chemicals, products, materials, or procedures.
3. Sufficient documentation and evidence that a permit-required confined space entry can be made in accordance with Article 108. Documentation shall include, but not be limited to the following:
 - Equipment availability, suitability, and integrity
 - Personnel training
 - Experience
 - Supervision
 - Safety
 - Accident experience
 - Permit-required confined space policy
 - Hot work procedures (if applicable)
 - Lock-out/tag-out procedures (if applicable)

The Contractor's submittal shall be made thirty (30) days prior to any confined space entry in accordance with Section 5-8, "Contractor's Submittals", of these Specifications.

The Contractor will not be allowed to make a permit-required confined space entry until the City has reviewed the Contractor's qualifications and proposed methods.

The Contractor shall conform to the procedures established by the Contractor's submittal during all confined space operations. Contractor shall provide all monitoring and safety equipment necessary to perform pre-entry checks of confined spaces. The Contractor shall also provide all monitoring, safety, and communications equipment required for confined space operations.

10-10.02 City Responsibilities for Permit Confined Spaces

The Contractor shall be provided with information regarding known hazards and known or potential permit spaces.

After the City has reviewed the Contractor's submittal to perform permit-required confined space entry work, the Contractor will be provided with the following:

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- Notification of the location, physical characteristics, known hazards, etc. regarding the permit-required confined space the Contractor anticipates entering.
- Information regarding safety items (e.g. nearby emergency equipment), precautions, procedures, safeguards, etc. installed or implemented and that may be available to the Contractor's employees in or near the permit-required confined space.

A debriefing session will be held with the Contractor at the conclusion of the entry operation to ascertain if any hazards were encountered or created and remain.

The City's failure to identify a confined space does not relieve the Contractor of the responsibility for compliance with the requirements of Article 108 (Cal-OSHA) and this Section (Section 10).

10-10.03 Existing Sewers and Storm Drains

Because of the potential danger of solvents, gasoline, and other hazardous material in existing sewers and storm drainpipes, these areas shall be treated as permit-required confined spaces unless it has been proven, through appropriate testing, that no hazards exist or are expected to develop.

10-10.04 Joint City – Contractor Entries

Unless otherwise directed in writing by the City, when City employees work alongside the Contractor in a permit-required confined space, the permit procedures for both the City and the Contractor shall be used. The Entry Supervisor shall coordinate the requirements of both permit procedures prior to entry.

10-11 CLEANING UP

The Contractor shall keep the site in a neat and presentable condition throughout the duration of work. The Contractor shall dispose of surplus materials, clean out all drainage ditches and structures, and repair any fences or other property damaged during the progress of the Work. When material is disposed of outside of an easement, street, or highway right-of-way, or other City-owned properties, the Contractor shall do so in accordance with the Contract Documents.

10-12 ARCHEOLOGICAL AND CULTURAL RESOURCES

If archeological or cultural resources are discovered during the Work, the Contractor shall cease all construction operations in the vicinity of the discovery until a qualified archeologist can assess the value of these resources and make recommendations to the State Historic Preservation Officer. Archeological and cultural resources include artifacts, large amounts of bone, shell, or flaked stone, and other evidence of human activity. If the State Historic Preservation Officer or the City directs that work be temporarily ceased at the location of an archeological or cultural find, the Contractor shall temporarily suspend work at the location.

If the City or the State Historic Preservation Officer temporarily suspends a portion of the Work for cultural purposes, any associated delays are considered unavoidable in accordance with Section 7-12.02, "Unavoidable Delays", of these Specifications.

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10-13 PROTECTION OF EXISTING TREES

Special attention shall be given to protection of certain native and ornamental trees or shrubs, landmark trees, and all native oak trees in the City of Elk Grove. Additional requirements for specific trees may be shown on the Plans, or designated in the Special Provisions or by the City. No native oak trees shall be removed or disturbed unless specifically designated for removal on the Plans or by the City. Every reasonable effort shall be made to avoid creating conditions adverse to the tree's health. The natural ground within the dripline of protected trees shall remain as undisturbed as possible. The dripline area shall be identified on the ground by a circle with a radius measurement from the trunk of the tree to the tip of its longest limb. The limb cannot be cut back in order to change the dripline. The area within the dripline is a critical portion of the root zone and defines the minimum protected area of each tree. Removing limbs within the dripline does not change the originally protected root zone. Measures required for protection of existing trees shall be in accordance with EGMC 19.12.