MONTEREY PENINSULA WATER SUPPLY PROJECT
SLANT WELL INTAKE SYSTEM - CIVIL CONSTRUCTION

SUPPLEMENTAL GENERAL CONDITIONS

April 2019

CALIFORNIA AMERICAN WATER
MONTEREY DIVISION

MONTEREY PENINSULA WATER SUPPLY PROJECT
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SUPPLEMENTAL GENERAL CONDITIONS
SECTION 1
GENERAL PROJECT REQUIREMENTS

PART 1 - PROJECT INFORMATION

A. Introduction

California-American Water Company (CAW), hereafter referred to as the OWNER, wishes to construct the Slant Well Intake System at the CEMEX facility located near Marina, California as part of the Monterey Peninsula Water Supply Project (MPWSP). The purpose of this intake system is to provide seawater, pumped from the subsea portion of a regional ground water aquifer, as feed water supply for a planned seawater reverse osmosis (SWRO) desalination facility. The SWRO facility will provide potable water to the Monterey peninsula area through CAW distribution systems.

Construction of the slant well intake system will be achieved through two construction contracts: Well Drilling and Equipping (Boart Longyear) and the Slant Well Intake Civil Works (this contract). In addition, the OWNER will separately procure all Super Duplex materials for the Slant Wells, including the permanent well pumps, pump column, well casings and screens, and miscellaneous down-hole items. The CONTRACTOR will be expected to work in close coordination with Boart Longyear within a confined work area.

These Supplemental General Conditions, Technical Specifications, and construction drawings are for MPWSP Slant Well Intake System - Civil Construction and supplement CAW's Standard General Conditions in the contract documents. The Project to be executed by the CONTRACTOR entails constructing well mechanical piping vaults; pump to waste basins, an electrical power supply system including electrical enclosures, and instrumentation and controls.

B. Schedule and Sequence

1.	Mandatory Pre-Proposal Meeting	Week of June 3, 2019
2.	Written Questions / Comments on RFP and Contract	July 1, 2019
3.	CAWC issued Addendum answers to written questions	July 8, 2019
4.	Proposals Due	July 22, 2019
5.	Selection / Notice of Award	July 31, 2019
6.	Governance Committee Meeting for Approval	August 21, 2019
7.	Contract Execution	August 30, 2019
8.	Notice to Proceed	October 15, 2019
9.	Mobilize On-site (earliest allowable date)	November 1, 2019
10.	Substantial Completion	April 1, 2021
11.	Project Closeout (Final Completion)	August 15, 2021

The well drilling equipment used by Boart Longyear may be within the CONTRACTOR's work area for part of the work period, and they may be required to operate 24 hours per day, 7 days per week. Due to the tight frame for the Contractor's work, the CONTRACTOR will be required to schedule the Work such that it does not delay the work of Boart Longyear in any way. The construction sequence for the Work will be approximately as follows:

1. Mobilize on-site and grade and compact area around well head to provide work area for Boart Longyear. Protect sensitive native plant material in place as directed by ENGINEER. Stockpile of graded material on CEMEX property will be at a location determined by ENGINEER in coordination with CEMEX.
2. The CONTRACTOR will not be allowed to perform any construction activities that interfere with Boart Longyear tasks a) through o), below. During the time that Boart Longyear is performing tasks a) though o), it is expected that the CONTRACTOR will install the feed water pipeline and electrical power supply conduit from the service connection to the vicinity of each well site. For reference, Boart Longyear Tasks a) through o) are:
    a) Mobilize one or two DR-40 Dual Rotary reverse circulation drilling rig.
    b) Install rig anchors in front and back of the footprint for the Dual Rotary drilling rig.
    c) Install sound barriers.
    d) Install erosion and runoff control measures.
    e) Install baffled Baker tanks, discharge cyclone separator, roll off bins and other measures required for closed system cuttings and fluids control.
    f) Drill temporary drill casings
    g) Flush the interior of the temporary drill casing to remove residual cuttings, remove dual-tube drill string from the temporary casing.
    h) Install stainless OWNER-furnished steel louvered screens and blank casings.
    i) Install filter pack.
    j) Develop the screen by airlifting and swabbing.
    k) Install sand-cement grout in the annular space between the casing and the temporary drill casing as the temporary drill casing is removed.
    l) Install temporary above-ground discharge system including above ground discharge piping, temporary flow meters and required valves to a point of connection with the disposal pipeline (to be installed by Schedule 3 contractor, see step 1. above.)
    m) Demobilize dual rotary drilling rig and associated drilling equipment.
    n) Mobilize pump hoist for installation of development and pumping test equipment.
    o) Install a submersible test pump.
3. Following completion of task o) by Boart Longyear, the CONTRACTOR will provide and install the following, while maintaining close coordination with Boart Longyear:
    a) Mechanical Piping vault and cover,
    b) Electrical/control enclosure,

c) Piping, valve, and meter in vault and final piping connections to pump to waste and feed water pipeline,

d) Electrical service and instrument signal connections from electrical/control panel to permanent well pump (provided and installed by others) and other equipment in the vault,

e) Final electrical service connection to electrical/control panel,

f) Restore graded areas to original grade using stockpiled native materials,

g) Start-up and Operation; and

h) Final site clean-up.

The above general outline of principal features of the project do not in any way limit the responsibility of CONTRACTOR to perform all Work and furnish the required materials, equipment, labor and means as shown or required by the Contract Documents.

C. Key Project Personnel

- OWNER: California-American Water Company (CAW)
  511 Forest Lodge Road, Suite 100, Pacific Grove, CA 93950
  (831) 646-3291 (office) - (831) 320-1384 (cell)
  Contact: Tim O'Halloran (Engineering Manager)

- LAND OWNER: RMC Pacific Materials (CEMEX Aggregates)
  Lapis Road, P.O. Box 337, Marina, CA 93933
  (650) 369-9189
  Contact: Jim Cruddas

- ENGINEER: Michael Baker International, Inc.
  9755 Clairemont Mesa Blvd, San Diego, CA 92124
  (858) 614-5000
  Contact: Makrom Shatila, P.E.

- GEOHYDROLOGIST: GEOSCIENCE Support Services, Inc.
  P.O. Box 220, Claremont, CA 91711
  620 W. Arrow Hwy, Suite 2000, La Verne, CA 91750
  (909) 451-6650
  Contact: Brian Villalobos

- WELL DRILLER: Boart Longyear Drilling Services
  (385) 234-3809
  Contact: Jason Lamb (Commercial Manager)

- COUNTY: Monterey County Health Department
  1200 Aguajito Road, Monterey, CA 93940
  (831) 647-7654
  Contact: Cheryl Sandoval

- OUTFALL OWNER: Monterey One Water (formerly MRWPCA)
  5 Harris Court, Monterey, CA 93940
  (831) 424-1108
  Contact: Bob Holden

PART 2 - WORK LOCATION AND BOUNDARIES

A. The Work is to be performed on private property and within easements or designated construction areas as shown on the Drawings and described in these specifications. All work shall be performed by CONTRACTOR within these boundaries. CONTRACTOR shall not enter on or occupy with men, tools, equipment, or material, any ground outside the specified area of the property of CEMEX, without the written consent of the OWNER and CEMEX.

B. Subcontractors and employees or agents of CEMEX may for all necessary purposes enter upon the work site and premises used by CONTRACTOR.

C. The CONTRACTOR shall abide by the speed limit (10 MPH) for the CEMEX facility access roadway. Utmost caution shall be exercised by CONTRACTOR when traveling on the access roadway, and when working within the CEMEX property, due to the industrial/mining nature of the property, as well as in consideration for CEMEX employees.

D. CONTRACTOR shall satisfy itself by personal investigation of all local conditions affecting its work. If conditions exist that affect his work, CONTRACTOR shall either modify its operation accordingly, or shall supply in writing the conditions that cannot be modified. Neither information contained in these specifications, nor that derived from maps or plans, or from OWNER, its representatives or employees, shall relieve CONTRACTOR from any responsibility either specified herein, or from fulfilling any and all terms and requirements of its contract.

PART 3 - COORDINATION AND MEETINGS

A. Prior to mobilization to the site, CONTRACTOR shall attend a pre-construction conference at OWNER'S Pacific Grove offices to review the project schedule, discuss the scope of work, establish procedures for coordinating activities with other Contractors, visit the site, and clarify any remaining issues regarding the requirements of the Work.

B. OWNER will provide CONTRACTOR with the date and time of the pre-construction conference at least one week prior.

C. At the time of the pre-construction conference, CONTRACTOR shall provide a list of phone numbers for key personnel who are involved in the project, as well as a copy of his safety plan and work schedule

D. During the course of the Work, CONTRACTOR shall attend regularly scheduled bi-weekly status meetings that shall be held at the site, as well as any other scheduled meetings that are held at the request of ENGINEER or OWNER.

E. CONTRACTOR will be required to coordinate its work, phase its construction operations, and provide, install and maintain any temporary connections necessary to prevent interference with the operation of existing facilities or the activities of other contractors on the site.

PART 4 - CONTRACTOR'S SAFETY PROGRAM

A. CONTRACTOR shall develop, publish, and implement an overall Safety Program for the project. This program shall conform to all applicable codes and laws. The program shall subsequently be distributed to and implemented by CONTRACTOR's personnel as well as its subcontractors and suppliers.

B. A copy of CONTRACTOR's safety plan shall be submitted to OWNER at least two days prior to the pre-construction conference and shall comply with safety measures per Article 6.13 of the Standard General Conditions. CONTRACTOR shall also present a completed Safety Certification Form as provided in Appendix B of these technical specifications. CONTRACTOR shall post appropriate safety signs and other warnings throughout the work area.

PART 5 - PERMITS, CERTIFICATION, LICENSES, LAWS AND ORDINANCES

The CONTRACTOR shall comply with these and all applicable federal, state and local laws, ordinances, or rules and regulations relating to the performance of the Work.

A. With the exception of those listed below, CONTRACTOR shall, at his own expense, procure all necessary permits, certificates, and licenses required of him by law for the execution of the work.

B. CONTRACTOR shall hold all other necessary certificates and licenses required by law for the execution of this work. CONTRACTOR shall comply with all federal, state and local laws, ordinances, or rules and regulations relating to the performance of the work, and shall have a valid State of California Contractor License.

C. Prior to any excavation activities, CONTRACTOR shall contact Underground Services Alert (USA) at (800) 227-2600, www.usanorth.org, or by dialing 811 to obtain required utility clearances. Dig Alert ticket numbers provided by USA shall be kept onsite at all times during the work.

D. Other than temporarily stockpiled materials that are stored on CEMEX in approved and designated areas, excess clean excavated materials (i.e., soil, sand, and gravel) shall be disposed at the MRWMD Monterey Peninsula Landfill, located at 141 Del Monte Blvd, Marina, California, or as otherwise approved by ENGINEER (see Appendix D).

PART 6 - NPDES DISCHARGE REQUIREMENTS

A. Under no circumstances shall water from any source related to the Work or storm runoff be allowed to leave the work site or approved stockpile areas.

B. All discharge water generated during dewatering operations shall be discharged to the nearby ocean outfall via a connection to the disposal pipeline. CONTRACTOR shall be responsible for making the connection to the disposal pipeline and for complying with all requirements of Monterey Regional Water Pollution Control Agency (MRWCPA) regarding discharge to the outfall.

C. Prior to each discharge event, fluids shall be initially conveyed to a temporary storage tank of sufficient capacity to allow for settling of suspended sediments prior to discharge to the disposal pipeline.

D. Prior to and during major storms, discharge may be temporarily halted.

PART 7 - CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

A. Construction Staking

CONTRACTOR shall be solely responsible for layout and construction staking and shall at its own expense and responsibility, stake and designate construction areas and staging areas within the limits of construction, and any other areas required by CONTRACTOR for project. Survey Control Data will be provided to the CONTRACTOR, by the ENGINEER. All storage and staging areas must be approved by CEMEX and OWNER prior to mobilization.

B. Occupying Private Land

CONTRACTOR shall not enter or occupy with workers, tools, materials, or equipment, any land outside the specified area of the property or limits of construction, unless written consent has been obtained from CEMEX and the OWNER.

C. Public Conveyance

CONTRACTOR shall at all times conduct its Work so as to insure the least possible obstruction to traffic and inconvenience to CEMEX. No public roadway or street shall be closed to the public except with the permission of the proper authorities. CONTRACTOR shall coordinate traffic and route access to CEMEX property with CEMEX, and shall obtain approval from CEMEX regarding the access plan prior to mobilization. CONTRACTOR shall provide OWNER with confirmation of CEMEX approval of site access and traffic coordination.

PART 8 - PROTECTION OF PROJECT AREA, DISPOSAL OF SOILS AND DISCHARGED FLUID

A. Construction activities shall be conducted in such a way as to prevent the introduction of pollutants to the ground surface during construction.

B. CONTRACTOR shall provide a copy of his Erosion Control Plan and Spill Prevention and Response Plan and shall keep onsite at all times copies of both as well as copies of Material Safety Data Sheets (MSDS) for all potentially hazardous materials stored and used onsite.

C. CONTRACTOR shall provide a copy of his horizontal directional drilling (HDD) Frac Out Contingency Plan and shall keep a copy onsite at all times.

D. Accordingly, any equipment and/or materials brought to the project area must be managed in accordance with the following procedures:

1. Drip pans shall be used to catch leaks and residual material in hoses and spigots under all stationary equipment. Drip pans shall be checked daily and emptied as needed by disposing of it properly at CONTRACTOR's expense.

2. Hazardous materials spills shall be contained immediately using sand, dirt, and/or absorbent materials. Such spills shall be cleaned up promptly along with the contaminant material and shall be disposed of properly at CONTRACTOR's expense.

3. Outdoor storage of all oils, solvents, cleaners and other liquid materials shall be within secondary containment. The area shall be covered, as necessary, to prevent storm water accumulation in the containment.

4. Bentonite, cement, and any other powdered product shall be stored on pallets and away from any drainage path. The storage area shall be covered and protected, if necessary, to prevent pollution runoff by wind or storm water.
5. Chemicals, bagged material, or drums shall be stored on pallets within secondary containment.

E. Waste products generated during the Work must be managed in accordance with the following procedures:

1. Containerized waste shall not be allowed to overflow. Any waste that requires storage in containers shall be removed from the project area on a regular basis and disposed of at an approved facility at CONTRACTOR's expense.
2. Cleaning of any equipment shall be conducted within a fully contained area or outside the project area in a place approved by ENGINEER. All fluids generated during cleaning shall be contained.

F. The use and maintenance of equipment and support vehicles shall be in accordance with the following procedures:

1. Mobile vehicles and Mobile equipment shall not be fueled or maintained onsite.
2. During fueling or maintenance operations of stationary equipment, drip pans shall be used to catch leaks. "Topping off" of fuel tanks is not allowed. Daily inspections of support vehicles and equipment shall be made to check for leaks. Any leaks detected shall be fixed immediately.
3. All CONTRACTOR employees and subcontractors shall be educated in the proper handling and storage of construction materials used during the project.
4. Small spills shall be soaked up using absorbent materials and disposed of properly at CONTRACTOR's expense. Washing down (dilution) or burial of spilled materials shall not be allowed.
5. Steam cleaning of equipment must be within a designated area, to be approved by OWNER. The cleaning area shall be enclosed with a berm or otherwise contained to prevent runoff. All wastewater generated from cleaning equipment must be containerized and disposed of at CONTRACTOR's expense. Any soap used during cleaning must be phosphate-free and biodegradable.

G. CONTRACTOR shall contain all excavated materials to prevent the flow of fluids from the work area or from stockpile areas into the ocean, beaches, or sensitive habitat. Disposal of fluids that could potentially drain or flow excavated material to such sensitive areas shall be collected and discharged to the temporary storage tank (see Part 7 B) for settling of suspended sediments prior to discharge to the disposal pipeline. All discharges to the disposal pipeline shall comply with the requirements of the Monterey Regional Water Pollution Control Agency (MRWPCA).

H. All costs incurred in the disposal of excavated material and water generated at the site shall be at CONTRACTOR's expense.

PART 9 - PROTECTION OF NATIVE PLANTS AND WILDLIFE

A. Parking, driving and project staging of equipment and vehicles (i.e., lay down area) shall be limited to already disturbed areas. Access to the project sites shall utilize existing roads and paved surfaces.

B. All equipment and/or vehicles shall be power-washed before mobilizing to the project site to control the spread of invasive (non-native) vegetative species.

C. CONTRACTOR's activities shall not damage or disturb special status plants, animals, or birds or their habitat outside the construction and staging areas shown on the plans or as designated by the ENGINEER. Refer to Appendix C for the Environmental Mitigation Monitoring and Reporting Plan for the Project.

D. CONTRACTOR shall participate in an Employee Education Program (EEP), which will be provided by the OWNER for all construction personnel. The OWNER-provided biologist shall meet with the construction crew at the project site at the onset of construction to provide training on the following topics:

1. A review of the project boundaries including staging and stockpile areas and access routes;
2. The special-status species that may be present, their habitat, and proper identification;
3. The specific mitigation measures that will be incorporated into the construction effort;
4. The general provisions and protections afforded by the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (DFG); and
5. The proper procedures if a special-status animal is encountered within the project site.

PART 10 - SITE SECURITY

A. CONTRACTOR shall make adequate provision for the protection of his work areas and the borehole/well against vandalism, theft and fire, and also for the protection of the public against exposure to injury as a result of CONTRACTOR's activities.

B. CONTRACTOR shall enclose the work site and associated staging area with a temporary minimum six foot high chain link construction fence with attached privacy panels, including a lockable gate.

C. Fences and gates shall be provided as required to protect the work area, equipment, and temporary facilities against acts of theft, trespass, violence or vandalism.

D. In locations where the probability of such acts of theft and vandalism is reasonably expected, this fencing requirement shall be enforced to include the enclosure of all equipment, well construction materials, and storage areas.

E. CONTRACTOR shall bear the responsibility for protection of equipment and materials at the worksite.

F. To prevent intrusion by unauthorized persons, gates shall be kept locked during the times that CONTRACTOR's personnel are not on site.

G. During times when no work is being performed at the site, CONTRACTOR shall provide temporary closures, signage, and/or guard services to protect the site. All openings in the fence shall be temporary and shall be kept closed when not immediately in use.

H. Site security in the form of locked temporary enclosures, covered excavations and covered and locked tanks shall be provided by CONTRACTOR during all non-working hours.

PART 11 - TEMPORARY LIGHTING

If night time construction is required, CONTRACTOR is responsible for lighting facilities that abide by an approved lighting plan.

PART 12 - DUST CONTROL

A. In order to control dust in the work areas CONTRACTOR shall prepare a Dust Control Plant which will establish whatever steps, procedures or means are required to prevent abnormal dust conditions from being created by its operations in connection with the execution of the Work. Required dust control measures are listed in the SGC, Section 3 - Environmental Mitigation Requirements.

B. Dust control at the well site shall be accomplished by dampening with water, providing a cover of acceptable material on the active working areas of the site, modification of operations, or any other means deemed necessary by the ENGINEER. Dust control measures shall be approved by the ENGINEER prior to implementation. The ENGINEER will assist the CONTRACTOR with identifying a water source, and will pay any applicable water use fees; however, CONTRACTOR is responsible for providing all equipment associated with application of the water, including vehicles.

PART 13 - NOISE CONTROL

A. At the work site, construction activities shall be performed in a manner to minimize unnecessary noise generation and minimize disturbance to wintering western snowy plovers and CEMEX employees.

PART 14 - CLEANING UP AND CLEANLINESS OF WORK SITE

A. CONTRACTOR shall maintain site cleanliness and neatness and shall not allow dirt, debris, waste, cigarette butts, or rubbish to accumulate.

B. CONTRACTOR shall provide adequate trash receptacles at the work site to ensure proper housekeeping is maintained on a daily basis.

C. CONTRACTOR is responsible for disposal of all trash generated by workers or subcontractors at the site. A waste disposal bin of sufficient size, equipped with a locking cover, shall be located at the work site at all times.

D. Trash receptacles shall be emptied weekly, or as necessary, during the progress of work and the completion of the Work. The cost of all disposal shall be borne by CONTRACTOR.

E. Care shall be taken to prevent the spilling of either fluids or solid materials on any public roads or streets over which hauling is being done. If any such spillage occurs or debris is deposited on public roads or streets due to CONTRACTOR's activities, it shall be immediately removed and cleaned up at CONTRACTOR's expense.

PART 15 - HOURS OF WORK AND WORK SCHEDULE

A. Work hours shall be as necessary, up to 12 hours per day and 7 days per week, to complete the Work by August 15, 2019. 24-hour operation shall only be as approved by the OWNER and CEMEX. Periodic scheduled shut down periods may be allowed by the OWNER to provide project personnel time off, if it is determined the overall schedule will be met.

B. The Work in this Schedule is not expected to require construction during major federal holidays; However, it may be necessary, if directed by the ENGINEER, that work will be performed during Federal Holidays to accomplish the desired construction.

PART 16 - SITE COMMUNICATION

A. CONTRACTOR shall have at the work site means for communicating (i.e. cellular telephones) between workmen at the site, their office, the OWNER, and the ENGINEER. Two-way radios are an acceptable form of communication. Due to poor cell phone reception near the well sites, two-way radios are required in work trucks and to be carried by foreman/leads at all times for site safety and communication with Cemex office. Battery FPS type radios are required. The telephone numbers of such devices shall be provided to OWNER and ENGINEER before the start of the Work.

B. Emergency (24 hours/day) telephone numbers of all key CONTRACTOR personnel involved with the project shall be provided to ENGINEER and OWNER at the time of the pre-construction meeting.

PART 17 - DAILY CONSTRUCTION REPORTS

A. Construction reports shall be provided by CONTRACTOR and shall be submitted to ENGINEER on a daily basis.

B. The daily reports shall summarize all work performed at the site on a daily basis, and shall include all necessary information required by OWNER per the requirements of Article 6.12 in the Standard General Conditions.

C. A separate report shall be provided for each day of work.

PART 18 - PERSONNEL AND SITE SUPERVISION

A. All such work shall be performed under the direct supervision of an experienced supervisor satisfactory to OWNER. In addition to directing all of the Work, the supervisor shall be capable of coordinating all work with personnel, subcontractors, GEOHYDROLOGIST, ENGINEER and OWNER so that the overall project is successfully executed without unnecessary conflicts or delays.

B. No changes in personnel shall be allowed without approval of OWNER. Approval may be granted provided the qualifications and experience of the replacement worker are equivalent or better than the initial worker.

C. CONTRACTOR shall provide effective supervision as per Article 6.01 of the Standard General Conditions, using its best skill and attention, and shall provide and keep on the Work at all times a competent onsite supervisor and any necessary assistants, all of whom shall be satisfactory to OWNER.

D. In accordance with generally accepted construction practices, CONTRACTOR shall be solely and completely responsible for conditions at the jobsite, including the safety of all persons and property during the performance of the Work.

E. CONTRACTOR shall fully comply with all federal, state, and local laws, rules, regulations, orders, and ordinances relating to the safety of workers and others. CONTRACTOR alone shall be responsible for the safety, efficiency, and adequacy of its plant, appliances, and methods.

PART 19 - CONTRACTOR SUBMITTALS

A. During the Project, and in addition to the submittals required in the Technical Specifications, the CONTRACTOR shall submit the following information.

SUBMITTAL NO.	DESCRIPTION	SPECIFICATIONS SECTION
PRE-CONSTRUCTION MEETING		
1	Key Personnel and Contact Information	SGC Section 1 Part 18
2	Safety Program	SGC Section 1 Part 4
3	Erosion Control Plan	SGC Section 5
4	Spill Prevention and Response Plan	SGC Section 1 Part 8
5	Frac Out Contingency Plan	SGC Section 1 Part 8
6	Dust Control Plan	SGC Section 1 Part 12
MOBILIZATION		
7	Dig Alert notification and clearance	SGC Section 1 Part 5
8	Staging Areas and Fencing layouts	SGC Section 1 Part 10
DAILY, OR OTHERWISE AS INDICATED		
9	Daily construction reports and measurements	SGC Section 1 Part 17

PART 20 - CONSTRUCTION INSPECTION

A. CONTRACTOR shall be required to contact the ENGINEER at various stages of construction for the purpose of job inspection. The list of required inspections will be provided to the CONTRACTOR at the pre-construction meeting.

****END OF SECTION****

SUPPLEMENTAL GENERAL CONDITIONS
SECTION 2
STANDBY TIME

PART 1 - GENERAL

A. Description

During the progress of construction, and during times when the CONTRACTOR's Project Schedule had scheduled activities, it may be necessary to perform work that will require the CONTRACTOR's crew and equipment to be idle for a period of time. In such an event, ENGINEER will request, in writing, CONTRACTOR temporarily cease operations. The anticipated extent of the shutdown period shall be stated and CONTRACTOR shall immediately cease work. During these periods, CONTRACTOR will be compensated for either active standby time where the crew and equipment is available (i.e., equipment is fully staffed and capable of immediately continuing to work) or inactive standby time; where the equipment is on site and the crew is capable of returning to the job site within 24 hours.

B. Measurement and Payment

1. Payment for active standby time shall be made a unit price to be negotiated prior to Notice to Proceed. Payment shall be according to the actual number of active standby hours demonstrated by CONTRACTOR and as approved by OWNER.
2. Payment for inactive standby time shall be made at a unit price to be negotiated prior to Notice to Proceed. Payment shall be according to the actual number of inactive standby hours demonstrated by CONTRACTOR and as approved by OWNER.
3. ENGINEER shall request, in writing, CONTRACTOR to cease operations and take whatever steps are required to prevent loss or damage to the jobsite.
4. The CONTRACTOR will not be paid for downtime for the equipment and crew not requested by the ENGINEER for repair or maintenance to construction equipment.

C. Submittals

2. Written claim showing the number of hours charged to each type of standby time.

PART 2 - MATERIALS (NOT USED)

PART 3 - EXECUTION

The following types of idle periods shall not be attributed to standby time:

A. The 24-hour period following placement of any cement.

B. The time required for a pipeline to remain idle during disinfection, etc.

****END OF SECTION****

SUPPLEMENTAL GENERAL CONDITIONS
SECTION 3
ENVIRONMENTAL MITIGATION MEASURE REQUIREMENTS
(BID ITEM 3)

Implementation of the Environmental Mitigation Monitoring and Reporting Plan (MMRP) is the responsibility of the OWNER and the OWNER's representatives. CONTRACTOR shall coordinate construction activities and execution of the Work to facilitate OWNER's compliance with the MMRP.

EIR/EIS Mitigation Measure 4.6-1b: Construction Worker Environmental Awareness Training and Education Program.

Prior to starting work, all construction workers at the project areas shall attend a Construction Worker Environmental Awareness Training and Education Program (ONSITE) developed and presented by the Lead Biologist (provided by others), appointed qualified biologist, and/or qualified biological monitor. The program shall include information on each federal and state-listed species, as well as other special-status wildlife and plant species and sensitive natural communities that may be encountered during construction activities. The training shall include: information on special-status species' life history and legal protections; the definition of "take" under the Federal Endangered Species Act (FESA) and California Endangered Species Act (CESA); the measures CAW and/or its contractors have committed to implementing to protect special-status species and sensitive natural communities; reporting requirements and communication protocols; specific measures that each worker shall employ to avoid "take" of special-status species; and penalties for violation of FESA and/or CESA. Training shall be documented as follows:

1. An acknowledgement form shall be signed by each worker indicating that environmental training has been completed.

2. A sticker shall be placed on hard hats indicating that the workers have completed the environmental training. Construction workers shall not be permitted to operate equipment within the construction area unless they have attended the training and are wearing hard hats with the required sticker.

3. A copy of the training transcript/training video and/or DVD, as well as a list of the names of all personnel who attended the training and copies of the signed acknowledgement forms, shall be submitted to the CPUC.

EIR/EIS Mitigation Measure 4.6-1c: General Avoidance and Minimization Measures.

CAW's construction contractor(s) shall implement the following general avoidance and minimization measures to protect special-status species and sensitive natural communities at the facility sites during construction:

1. The construction footprint, staging areas, equipment access routes, and disposal or temporary placement of spoils, shall be delineated with stakes and flagging prior to construction to avoid natural resources outside of the project area. Any construction-related disturbance outside of these boundaries, including driving, parking, temporary access, sampling or testing, or storage of materials, shall be prohibited without explicit approval of the Lead Biologist.

2. New access driveways shall not extend beyond the delineated construction work area boundary. Construction vehicles shall pass and turn around only within the delineated construction work area boundary or local road network. Where new access is required outside of existing roads or the construction work area, the route shall be clearly marked (i.e., flagged and/or staked) prior to being used, subject to review and approval of the Lead Biologist.

3. Vehicle speeds within the project area shall not exceed **15 miles per hour** (mph) on roads within the sites.

4. Excavated soils shall be stockpiled in disturbed areas lacking native vegetation. Stockpile areas shall be marked by the Lead Biologist (provided by others) to define the limits where stockpiling can occur.

5. In addition to what is shown in the construction drawings (Sheet 20-21), Standard best management practices (such as setbacks and use of silt fences and fiber rolls) shall be employed to prevent loss of habitat due to erosion caused by project related impacts (i.e., grading or clearing for new roads). All detected erosion shall be remedied immediately upon discovery.

6. Fueling of construction equipment shall take place within existing paved areas, and at least 50 feet from drainages (including streams, creeks, ditches, culverts, or storm drain inlets) and native habitats. Contractor equipment shall be checked for leaks prior to operation and repaired when leaks are detected. Fuel containers shall be stored within appropriately-sized secondary containment barriers.

7. The introduction of exotic plant species shall be avoided through physical or chemical removal and prevention. Measures to prevent the introduction of exotic plants into the construction site via vehicular sources shall include implementing Track clean or other method of vehicle cleaning for vehicles coming to the site and leaving the site. Earthmoving equipment shall be cleaned prior to transport to the project area. Weed-free rice straw or other certified weed-free straw shall be used for erosion control. Weed populations introduced into the site during construction shall be eliminated by chemical and/or mechanical means approved by California Department of Fish and Wildlife (CDFW) and the United States Fish and Wildlife Service (USFWS).

8. Use of herbicides as vegetation control measures shall be used only when mechanical means have been deemed ineffective. All uses of such herbicidal compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and state and federal legislation as well as additional project-related restrictions deemed necessary by the CDFW and/or USFWS. No rodenticides shall be used.

9. Prior to the start of construction at any proposed facility site where special-status amphibians, reptiles and mammals have a moderate or high potential to occur, the construction work area boundary shall be fenced with a temporary exclusion fence to prevent special-status wildlife from entering the site during construction (see Table 4.6-6 for the list of special-status species that could be significantly impacted at each project facility site). The exclusion fencing shall be

constructed of metal flashing, plastic sheeting, or other materials that will prohibit California horned lizards, Monterey shrews, and other special-status reptiles, amphibians, and rodents from climbing the fence. If meshing is used it shall be of a size that would not catch wildlife. The fencing shall be buried a minimum of 6 inches below grade to secure the fence and extend a minimum of 30 inches above grade. The fencing shall be inspected by the Lead Biologist or qualified biological monitor on a daily basis during construction activities to ensure fence integrity. Any needed repairs to the fence shall be performed on the day of their discovery. Fencing shall be installed and maintained during all phases of construction. Final fence design and location shall be determined in consultation with USFWS and CDFW. Exclusion fencing shall be removed once construction activities are complete.

10. If special-status wildlife species are found on the site immediately prior to construction or during project construction, construction activities shall cease near the animal until the animal moves on its own (if possible, as determined by the Lead Biologist or biological monitor) outside of the project area. Additional mitigation measures specific to special-status plants; Smith's blue butterfly; black legless lizard, silvery legless lizard, and coast horned lizard; western burrowing; American badger; Monterey dusky-footed woodrat, California red-legged frog and California tiger salamander are described in Mitigation Measure 4.6-1f, 4.6-1g, 4.6-1h, 4.6-1j 4.6-1k, and 4.6-1o. The Lead Biologist and Lead Agencies shall consult with wildlife resource agency(ies) with jurisdiction over the species regarding any additional avoidance, minimization, or mitigation measures that may be necessary if the animal does not move on its own. A report shall be prepared by the Lead Biologist to document the activities of the animal within the site; all fence construction, modification, and repair efforts; and movements of the animal once again outside the exclusion fence. This report shall be submitted to the CPUC and pertinent wildlife agencies with jurisdiction over the wildlife species.

11. Vegetation removal and grading activities shall be conducted during daylight hours. Immediately prior to conducting vegetation removal or grading activities inside fenced exclusion areas, the Lead Biologist or a qualified biologist shall survey within the exclusion area to ensure that no special-status species are present. The Lead Biologist or a qualified biologist shall also monitor vegetation removal or grading activities inside fenced exclusion areas for the presence of special-status species. If special-status species are present, then measure 10 above shall be implemented.

12. To prevent the inadvertent entrapment of special-status wildlife during construction, all excavated, steep-walled holes or trenches more than 2 feet deep shall be covered with plywood or similar materials at the close of each working day, or escape ramps constructed of earth fill or wooden planks shall be positioned within the excavations to allow special-status wildlife to escape on their own. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped animals. If trapped animals are observed, escape ramps or structures shall be installed immediately to allow escape. If listed species are trapped, they shall only be relocated with authorization from USFWS and/or CDFW, as appropriate.

13. All construction pipes, culverts, or similar structures that are stored at a construction site for one or more overnight periods and with a diameter of 4 inches or more shall be inspected for

special-status wildlife before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a special-status animal is discovered inside a pipe, that section of pipe shall not be moved until the appropriate resource agency, with jurisdiction over that species, has been consulted to determine the appropriate method for relocation. If necessary, under the direct supervision of the qualified biologist, the pipe may be moved once to remove it from the path of construction activity until the animal has escaped.

14. All vertical tubes used in project construction, such as chain link fencing poles or signage mounts, shall be temporarily or permanently capped at the time they are installed to avoid the entrapment and death of special-status birds.

15. Water used for dust abatement shall be minimized in an effort to avoid the formation of puddles that could attract common ravens and other predators to the construction work areas.

16. No vehicle or equipment parked in the project area shall be moved prior to inspecting the ground beneath the vehicle or equipment for the presence of wildlife. If present, the animal shall be left to move on its own.

17. All vehicles and equipment shall be in proper working condition to ensure that there is no potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. The Lead Biologist shall be informed of any hazardous spills within 24 hours of the incident. Hazardous spills shall be immediately cleaned up and the contaminated soil shall be properly disposed of at a licensed facility.

18. A trash abatement program shall be implemented during construction. Trash and food items shall be contained in closed containers and removed from the construction site daily to reduce the attractiveness to opportunistic predators such as common ravens, coyotes, and feral dogs.

19. Workers shall be prohibited from feeding wildlife and bringing pets and firearms to the construction work areas.

20. Intentional killing or collection of wildlife species, including special-status species in the project area and surrounding areas shall be strictly prohibited.

21. All temporarily disturbed areas shall be returned to pre-project conditions or better. Existing access roads within the CEMEX site shall be returned to their existing use.

22. Only natural-fiber, biodegradable meshes and coir rolls shall be used for erosion control and landscaping. Photodegradable and other plastic mesh erosion control products shall not be used.

23. Invasive plant species shall not be installed at any restoration or mitigation site. This measure also applies to periodic maintenance of the subsurface slant wells.

EIR/EIS Mitigation Measure 4.6-1d: Protective Measures for Western Snowy Plover.

Contractors shall be required to implement the following measures to protect western snowy plover:

1. Contractor(s) shall implement all avoidance and minimization measures required by USFWS as part of the FESA Section 7 consultation between the ONMS and USFWS.

2. Construction work at the slant well heads and along the segment of the Feed Water Pipeline located west of the CEMEX processing plant shall occur during the western snowy plover non-breeding season (defined as October 1 through February 28) unless otherwise approved by the USFWS.

EIR/EIS Mitigation Measure 4.10-1a: Equipment with High-Tiered Engine Standards.

For diesel-fueled off-road construction equipment of more than 50 horsepower, CAW and/or its construction contractor shall make a good faith effort to use available construction equipment that meets the highest USEPA-certified tiered emission standards or is alternatively powered (e.g., with electricity, natural gas, propane, methanol and ethanol blends, or gasoline) construction equipment. For all pieces of equipment that would neither meet Tier 4 emission standards nor be alternatively powered, CAW or its construction contractor shall provide to the CPUC documentation from two local heavy construction equipment rental companies that indicate that the companies do not have access to higher-tiered equipment or alternatively powered equipment for the given class of equipment. Such documentation shall be provided to the CPUC at least two weeks prior to the anticipated use of those pieces of equipment.

EIR/EIS Mitigation Measure 4.10-1b: Idling Restrictions.

In order to ensure that idling time for on road vehicles with a gross vehicular weight rating of 10,000 pounds or greater does not exceed the 5-minute limit established in Section 2485 of Title 13 CCR Section 2485, and that idling time for off-road engines does not exceed the 5-minute limit established in Title 13 CCR Section 2449(d)(3), contractor(s) shall prepare and implement a written idling policy and distribute it to all equipment operators. The idling policy shall extend the 5-minute idling limit to cover all on road vehicles (regardless of gross vehicular weight rating) and shall further require that for all diesel-powered off-road engines, the idling limit is reduced to 2 minutes, while maintaining the exceptions specified in Title 13 CCR Section 2449(d)(3). Clear signage of these requirements shall be provided for construction workers at all access points to construction areas.

EIR/EIS Mitigation Measure 4.10-1c: Construction Fugitive Dust Control Plan.

Contractor(s) must implement a dust control plan that includes, at minimum, the following dust control measures:

- Water all active construction areas at least three times daily;
- Cover all trucks hauling soil, sand, and other loose materials and require trucks to maintain at least 2 feet of freeboard;
- Apply water three times daily, or apply (non-toxic) soil stabilizers, on unpaved access roads, parking areas, and staging areas at construction sites;
- Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas at construction sites;

- Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets;
- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more);
- Enclose, cover, or water twice daily exposed stockpiles (dirt, sand, etc.); Limit traffic speeds on unpaved roads to 15 miles per hour;
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways;
- Re-plant native, drought-tolerant vegetation in disturbed areas as quickly as possible;
- Wheel washers shall be installed and used by truck operators at the exits of the construction sites to the slant wells; and
- Post a publicly visible sign that specifies the telephone number and person to contact regarding dust complaints. This person shall respond to complaints and take corrective action within 48 hours. The phone number of the Monterey Bay Unified Air Pollution Control District (MBUAPCD) shall also be visible to ensure compliance with MBUAPCD rules.

EIR/EIS Mitigation Measure 4.13-1c: Safeguard Employees from Potential Accidents Related to Underground Utilities

When any excavation is open, the construction contractor(s) shall protect, support, or remove underground utilities as necessary to safeguard employees. The contractor(s) shall be required to provide weekly updates to CAW and construction workers regarding the planned excavations for the upcoming week, and to specify when construction will occur near a high-priority utility (i.e., pipelines carrying petroleum products, oxygen, chlorine, or toxic or flammable gases; natural gas pipelines greater than 6 inches in diameter or with normal operating pressures greater than 60 pounds per square inch gauge; and underground electric supply lines, conductors, or cables that have a potential to ground more than 300 volts that do not have effectively grounded sheaths). Construction managers shall hold regular tailgate meetings with construction staff on days when work near high-priority utilities will occur to review all safety measures regarding such excavations, including measures identified in the Mitigation Monitoring and Reporting Program and in construction specifications—. The contractor shall designate a qualified Health and Safety Officer who shall specify a safe distance to work near high-priority utilities. Excavation near such utility lines shall not be authorized until the designated Health and Safety Officer confirms and documents in the construction records that: (1) the line was appropriately located in the field by the utility owner using as-built drawings and a pipeline-locating device; and (2) the location was verified by hand by the construction contractor.

EIR/EIS Mitigation Measure 4.13-2: Construction Waste Reduction and Recycling Plan

The construction contractor(s) shall prepare and implement a construction waste reduction and recycling plan identifying the types of debris the project will generate and the manner in which those waste streams will be handled. In accordance with the California Integrated Waste Management Act of 1989, the plan shall emphasize source reduction measures, followed by recycling and composting methods, to ensure that construction and demolition waste generated by the project is managed consistent with applicable statutes and regulations. In accordance with the California Green Building Standards Code and local regulations, the plan shall specify that all trees, stumps, rocks, and associated vegetation and soils, and 50 percent of all other

nonhazardous construction and demolition waste, be diverted from landfill disposal. The plan shall be prepared in coordination with the Monterey Regional Waste Management District and be consistent with Monterey County's Integrated Waste Management Plan. Upon project completion, CAW shall collect the receipts from the contractor(s) and submit them to the CPUC as documentation that the waste reduction, recycling, and diversion goals have been met.

EIR/EIS Mitigation Measure 4.15-2b: Inadvertent Discovery of Cultural Resources

If prehistoric or historic-era cultural materials are encountered, all construction activities within 100 feet shall halt and the Lead Agencies shall be notified. For discoveries on lands other than Army-owned lands, a Secretary of the Interior-qualified archaeologist shall inspect the find within 24 hours of discovery.

In the event of discovery or recognition of any human remains during construction activities, such activities within 100 feet of the find shall cease. For discoveries on lands other than Army-owned lands, the Monterey County Coroner shall be contacted immediately.

EIR/EIS Mitigation Measure 4.18-1: Construction Equipment and Vehicle Efficiency Plan

CAW shall contract a qualified professional (i.e., construction planner/energy efficiency expert) to prepare a Construction Equipment Efficiency Plan that identifies the specific measures and performance standards that CAW (and its construction contractors) will implement as part of project construction and decommissioning to increase the efficient use of construction equipment and vehicles to the maximum extent feasible. Such measures shall include, but not necessarily be limited to: procedures to ensure that all construction equipment is properly tuned and maintained at all times; requirement to provide options for worker carpooling; a commitment to utilize existing electricity sources where feasible rather than portable diesel-powered generators; and identification of procedures (including the routing of haul trips) that will be followed to ensure that all materials and debris hauling is conducted in a fuel-efficient manner. The plan shall be submitted to CPUC and the Sanctuary for review and approval at least 30 days prior to the beginning of construction activities and at least 30 days prior to the beginning of decommissioning activities.

****END OF SECTION****

SUPPLEMENTAL GENERAL CONDITIONS
SECTION 4
MOBILIZATION/SET UP/ DEMOBILIZATION
(BID ITEM 1)

PART 1 – GENERAL

A. Description

1. Mobilization encompasses payment and performance bonds and insurance, including all prerequisite preparation, specialized tooling, installation of all temporary facilities required to operate equipment and provide for personnel, access and obtaining the required permits and licenses, attendance at specialized on-site training to be provided by the OWNER; provision of temporary construction fencing; and provision of sanitary and other support facilities as set forth in Section 1 of these Supplemental Conditions.

2. Demobilization includes final site clean-up and restoration activities as described in Section 1 of these Supplemental General Conditions, completion of punch-list items, and removal of all equipment from the work site.

3. OWNER's representative shall identify and mark the location of special status species that occur adjacent to the staging and construction areas. OWNER's representative shall provide training for CONTRACTOR personnel regarding identification and protection of special species found in close proximity to the site.

B. Measurement and Payment

1. See Technical Specification Section 01025 for Measurement and Payment

C. Submittals

1. A complete set of Material Safety Data Sheets (MSDS) for all chemical compounds and substances stored or used onsite during the Work shall be provided to GEOHYDROLOGIST at the time of mobilization.

PART 2 – EQUIPMENT AND MATERIALS

A. General

CONTRACTOR shall provide all tools, accessories, power, and equipment necessary for the completion of the Work.

B. Personnel and Equipment

Equipment operation shall comply with the requirements of Appendix C – Mitigation and Monitoring Reporting Plan. The replacement of any equipment later found to be unsuitable shall be at CONTRACTOR expense. CONTRACTOR shall provide experienced personnel necessary to conduct an efficient and safe operation.

C. MSDS Sheets

All chemicals used in the performance of the Work must comply with environmental standards and shall be inert. Material Safety Data Sheets (MSDS) for all controlled materials used in the performance of the Work shall be provided to Engineer prior to the start of the Work.

D. Temporary Construction Fencing

CONTRACTOR shall bear the responsibility for protection of all of CONTRACTOR's equipment and material at the worksite. CONTRACTOR shall enclose the work site and associated staging areas with a temporary 6 ft high (minimum) chain link construction fence. (The location of the staging area shall be determined by ENGINEER in consultation with CEMEX. The CONTRACTOR may possibly share the staging area with other contractor. The area enclosed with temporary fencing shall include a suitably sized lockable gate. CONTRACTOR is required to enclose open excavations and equipment storage and staging areas with temporary chain link construction fencing, including posting safety signs and other appropriate warnings throughout the work area. CONTRACTOR is required to have fencing design and construction method approved by the ENGINEER prior to fencing construction. Shop drawings of fence layout, gates and typical fence construction shall be submitted prior to installation.

PART 3 – EXECUTION

A. Site Sanitation

CONTRACTOR shall provide all necessary sanitary facilities (i.e., chemical toilets) for the use by employees during work at the site. Sanitary facilities shall be located as close as possible to the work site in order to minimize travel on interior CEMEX roads, shall be maintained and cleaned at least twice per week, shall be kept in a clean condition and adequately supplied with chemicals and adequate supply of toilet paper, etc. CONTRACTOR shall provide an alcohol-based hand sanitizer or a portable hand-washing sink attached to a small holding tank for clean water and a soap dispenser. CONTRACTOR shall provide for an adequate supply of clean, potable drinking water, dispensed through approved sanitary facilities.

CONTRACTOR shall obey and enforce such sanitary regulations as may be prescribed by the State Department of Public Health and other government entities having jurisdiction.

B. Traffic Control

When moving equipment on public roadways, CONTRACTOR shall provide a flagman at points of vehicular ingress and egress to control the movement of traffic near the site in a manner and to the extent required by applicable county and city ordinances, and/or regulations, and as acceptable to site owners. Flagman shall wear a brightly-colored reflective safety vest at all times when directing traffic. Traffic barricades shall be placed in accordance with the latest edition of the Work Area Traffic Control Handbook (2009 WATCH manual, 11th edition) that is approved and endorsed by the Institute of Transportation Engineers, American Public Works Association, and City Traffic Engineers.

C. Nuisance Water

It is anticipated that nuisance water, such as rainfall, perched groundwater or surface runoff may be encountered within the construction site during the period of construction under this Contract. CONTRACTOR shall at all times protect the Work from damage by such waters and shall take all due measures to prevent delays in progress of work caused by such nuisance waters. CONTRACTOR shall dispose of nuisance water at his own expense and without adverse effects upon OWNER property or any other property. All discharges shall comply with the appropriate discharge requirements.

D. Protection and Restoration of Existing Facilities

CONTRACTOR shall be responsible for the protection of public and private properties at and adjacent to the Work and shall exercise due caution to avoid damage to such properties. CONTRACTOR shall repair or replace all existing improvements that are damage or removed as a result of his operations. Repair and replacements shall be at least equal to existing improvements and shall match them in finish and dimension. The conditions of Article 6.11 of the Standard General Conditions shall prevail.

E. Bonds and Insurance

CONTRACTOR shall provide a 100% Performance Bond and 100% Payment Bond. Insurance requirements and certificates are found in the Agreement, Bonds and Insurance section of this document. Payment shall be as per Bid Item 1.

****END OF SECTION****

SUPPLEMENTAL GENERAL CONDITIONS
SECTION 5
EROSION CONTROL AND DISCHARGE MANAGEMENT
(BID ITEM 4)

PART 1 – GENERAL

A. Description

Provide all work and take all measures necessary to control soil erosion resulting from construction operations; prevent surface flows of sediment, stormwater runoff, or fluid from construction site; contain construction materials (including excavation and backfill) within protected working areas; and comply with all applicable permit and environmental mitigation requirements, as indicated in Section 3, Environmental Mitigation Measure Requirements.

1. Appropriate erosion control devices including plastic sheeting, sand bags, silt fencing and straw waddles shall be used to control run off of fluids during construction.

2. CONTRACTOR shall not damage plants or habitat or harm wildlife living within the environmentally sensitive dune areas.

B. Measurement and Payment

1. Payment for erosion control measures shall be included as part of Bid Item 4.

2. All costs incurred in the temporary containment, permit compliance and treatment of storm water or dewatering water, shall be at CONTRACTOR's expense as part of the Work.

C. Submittals

1. CONTRACTOR shall provide an erosion control plan to prevent run off of stormwater, fluids or other materials from the worksite to beaches or sensitive habitat shall be provided to ENGINEER prior to mobilization. The erosion control plan shall provide measures and means for temporarily containment and proper disposal of stormwater and/or dewatering water generated during excavation operations.

PART 2 – MATERIALS AND METHODS

A. Erosion control devices shall include K-rails, plastic sheeting, sandbags, or straw wattles, or any other device necessary to contain storm water and water generated during the Work.

B. Discharge management shall include construction of a collection and diversion channel system and on-site detention/percolation facilities as required to prevent stormwater from leaving the work site as surface flow.

PART 3 – EXECUTION

A. Erosion Control (also see Specification 02540)

CONTRACTOR shall install erosion control measures and devices to prevent worksite storm runoff or dewatering water generated by from excavations from leaving the site as surface flow. Under no circumstances shall water from any source related to the Work or storm runoff be allowed to leave any site other than through proper disposal means and complying with the appropriate NPDES discharge permit. At the end of the Work, CONTRACTOR shall properly dispose of all erosion control devices in an acceptable location. CONTRACTOR shall comply with the erosion control standards listed in Article 6.11 of the Standard General Conditions.

B. Tracking of Mud and Soil onto Improved Roadways

Disturbance to natural surfaces shall be limited to the area strictly required for the project. The requirements of Article 6.11 of the Standard General Conditions will apply to the Work. If work activities occur in wet weather conditions, CONTRACTOR shall prevent tracking mud onto paved roadways when leaving the work site. If additional measures are necessary, CONTRACTOR shall be compensated at fixed cost plus markup for delivery and materials.

Utmost care shall be taken to avoid tracking mud from the work sites and onto paved roadways. Any mud or dirt that is tracked onto paved roadways shall be immediately cleaned up by CONTRACTOR using dry methods (such as sweeping using a broom, or by scraping using a shovel). Soil shall be prevented from entering the storm drain system. Under no circumstances shall water from any source related to the Work or storm runoff be allowed to leave either site other than by proper disposal methods.

****END OF SECTION****