

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

OFFICE ENGINEER

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May 2, 2014

04-SM-101-16.3/17.1
04-235844
Project ID 0400000684
ACNHP-Q101(237)E
CML-6204(113)

Addendum No. 4

Dear Contractor:

This addendum is being issued to the contract for CONSTRUCTION ON STATE HIGHWAY IN SAN MATEO COUNTY IN BURLINGAME FROM 0.3 MILE NORTH OF ANZA BOULEVARD TO 0.9 MILE SOUTH OF MILLBRAE AVENUE OVERCROSSING.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on Tuesday, May 13, 2014.

This addendum is being issued to revise the project plans, the Notice to Bidders and Special Provisions, the Bid Book, and the Federal Minimum Wages with Modification Number 7 dated 05/02/2014.

Project plan sheets 98, 105, 260, 261, 262, 263, 264 and 452 are replaced and attached for substitution for the like-numbered sheets.

In the Special Provisions, Section 8-1.10B, is added as follows:

"Add to section 8-1.10B:

Liquidated damages for not completing all work within the Temporary Construction Easement (TCE) within 408 working days are \$2,500 per day."

In the Special Provisions, Section 14-8.03, is added as attached.

In the Special Provisions, Section 14-8.04, is added as attached.

In the Special Provisions, Section 14-11.11, is replaced as attached.

In the Special Provisions, Section 14-11.12, is added as attached.

In the Special Provisions, Section 16-1.01, is deleted.

In the Special Provisions, the section "Add to Section 16-1.03A:" is deleted.

In the Special Provisions, DIVISION XI "BUILDING CONSTRUCTION," Section 99, is added as attached.

Addendum No. 4
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May 2, 2014

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In the *Bid* book, in the "Bid Item List," Item 346 is added and Items 206 and 345 are deleted as attached.

To *Bid* book holders:

In the *Bid* book, page 13 and 20 of the "Bid Item List" are replaced as attached. The attached Bid Item List is to be used in the bid.

Inquiries or questions in regard to this addendum must be communicated as a bidder inquiry and must be made as noted in the *Notice to Bidders* section of the *Notice to Bidders and Special Provisions*.

Indicate receipt of this addendum by filling in the number of this addendum in the space provided on the signature page of the *Bid* book.

Submit bids in the *Bid* book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.

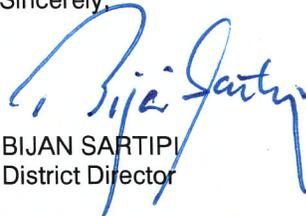
Inform subcontractors and suppliers as necessary.

This addendum, attachments and the modified wage rates are available for the Contractors' download on the Web site:

http://www.dot.ca.gov/hq/esc/oe/project_ads_addenda/04/04-235844

If you are not a *Bid* book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,



BIJAN SARTIPI
District Director

Attachments

**Add to section 14-8:
Replace section 14-8.03 with:**

14-8.03 VIBRATION MONITORING

14-8.03A General

14-8.03A(1) Summary

Section 14-8.03 includes specifications for furnishing, installing and maintaining vibration monitoring instruments; collecting vibration data; and interpreting and reporting the results of vibration monitoring for the building at 1222 Rollins Rd, Burlingame, CA 94010. This work includes the implementation of any required remedial and precautionary measures, using the vibration monitoring data, to protect the building from excessive vibration during all impact demolition activities.

You will:

1. Furnish and install vibration-monitoring instruments (portable seismographs).
2. Protect from damage and repair or replace damaged or inoperable instruments immediately, to ensure continuous monitoring.
3. Collect, interpret, and report vibration data.
4. Implement response actions.

14-8.03A(2) Vibration Monitoring Personnel

The vibration monitoring personnel must have the qualifications specified herein. The vibration monitoring personnel may be your employee. The vibration monitoring personnel must include a Vibration Instrumentation Engineer who meets one of the following minimum qualifications:

1. Registered Geophysicist or Professional Engineer in the State of California with at least 5 years of experience in the installation and use of vibration-monitoring instruments and data interpretation.
2. Professional with Graduate level degree from an accredited University in Physics or Acoustics with at least 5 years experience in the installation and use of vibration-monitoring instruments and data interpretation.

The Vibration Instrumentation Engineer must:

1. Be on-site and supervise the initial installation of vibration-monitoring instruments.
2. Supervise interpretations of vibration-monitoring data.

14-8.03A(3) Submittals

14-8.03A(3)(a) Vibration Monitoring Plan

At least 30 days before any work requiring vibration monitoring, submit 4 copies of the Vibration Monitoring Plan. Allow 14 days for review and authorization. If revisions are required, revise and resubmit the plan within 7 days of receipt of comments. Allow 7 days for review of the revisions. Submit 4 copies of the Vibration Monitoring Plan incorporating the required changes after authorization. Minor changes or clarifications to the initial submittal may be made and attached as amendments to the plan.

The vibration monitoring plan must include the followings:

1. The name of the qualified vibration monitoring specialist providing the vibration monitoring services.
2. Description of the instruments and equipment to be used.
3. Measurement locations and methods for mounting the seismographs.
4. Procedures for data collection and analysis.
5. Means and methods of providing warning when the particle velocity equals or exceeds specified threshold.
6. Name of the designated "responsible person." The responsible person must have the authority to stop the work causing the vibration.
7. The résumés of the Vibration Instrumentation Engineer and technical support personnel.

14-8.03A(3)(b) Vibration Mitigation Plan

At least 30 days before the start of any work requiring vibration monitoring, submit 4 copies of the Vibration Mitigation Plan. The Vibration Mitigation Plan must include generalized plans of action to be implemented in the event the particle velocity equals or exceeds specified threshold. The generalized plans of action must include positive measures to control vibrations (e.g. using alternative construction methods) and measures to protect the building.

Allow 14 days for review and **authorization**. If revisions are required, revise and resubmit the plan within 7 days of receipt of comments. Allow 7 days for review of the revisions. Submit 4 copies of the Vibration Mitigation Plan incorporating the required changes after **authorization**. Minor changes or clarifications to the initial submittal may be made and attached as amendments to the plan. The Vibration Monitoring Plan may be conditionally accepted while minor revisions or amendments are being completed.

14-8.03A(3)(c) Manufacturer's Data

Within 5 days of receipt of each portable seismograph at the site, submit a copy of the instruction manual, product data, and laboratory calibration record and certification. The certificate of calibration must show that the seismographs are calibrated and maintained in accordance with the equipment manufacturer's calibration requirements and that calibrations are traceable to the U. S. National Institute of Standards and Technology (NIST).

14-8.03A(3)(d) Vibration Data Report

Within 14 days after the completion of the vibration monitoring, submit a hard copy and an electronic report documenting the results at the seismograph locations.

During construction, submit daily hard copy and electronic report summarizing data collected at the seismograph locations. Submit the reports on or before the end of the following day.

Electronic reports must be in dBase Plus 8 (.dbf) format on compact disc or USB flash drive.

All reports must be signed by the Vibration Instrumentation Engineer, and include the following:

1. Project identification, including District, County, Route, Post Mile, Project Name and ID as shown on the project plans.
2. Location of the seismographs.
3. Location of vibration sources (e.g. traffic, demolition equipment, etc.)
4. Summary tables indicating the date, time and magnitude and frequency of maximum single-component peak particle velocity measured during each one-hour interval of the monitoring period.
5. Field data forms (construction vibration monitoring only).
6. Appendix graphs of the strip charts printed during the monitoring periods.

Do not disclose any instrumentation data to third parties nor publish data without the Department's written consent.

14-8.03B Materials

Not Used

14-8.03C Construction

14-8.03C(1) Vibration Monitoring Equipment

14-8.03C(1)(a) General

Portable seismographs must have the following minimum features:

1. Seismic range: 0.01 to 4 inches per second with an accuracy of ± 5 percent of the measured peak particle velocity or better at frequencies between 10 Hertz and 100 Hertz, and with a resolution of 0.01 inch per second or less.
2. Frequency response (± 3 dB points): 2 to 200 Hertz.
3. Three channels for simultaneous time-domain monitoring of vibration velocities in digital format on three perpendicular axes.
4. Two power sources: internal rechargeable battery and charger and 115 volts (ac). Battery must be capable of supplying power to monitor vibrations continuously for up to 24 hours.
5. Capable of internal, dynamic calibration.
6. Direct writing to printer and capability to transfer data from memory to external device. Instruments must be capable of producing strip chart recordings of readings on site within one hour of obtaining the readings. Provide computer software to perform analysis and produce reports of continuous monitoring.
7. Continuous monitoring mode must be capable of automatic recording of single-component peak particle velocities and frequency of peaks with an interval of one minute or less.
8. Able to give warning immediately when threshold particle velocity is exceeded.
9. One seismograph must be waterproof and capable of downhole stationing.

Mount the seismographs firmly on the surface slab of concrete or asphalt, or set in undisturbed soil. Align the seismographs' longitudinal direction of measurement parallel to the facility's alignment. Align the seismographs' transverse direction of measurement perpendicular to the facility's alignment.

Place seismographs within 3 feet of the exterior of designated facility on the side facing construction activities. The spacing between the seismographs must be less than 100'. Use a minimum of 3 seismographs along each facility line.

14-8.03C(1)(b) Calibration

All equipment must be calibrated by the manufacturer or certified calibration laboratory within one year of their use on site.

14-8.03C(2) Vibration Monitoring

14-8.03C(2)(a) General

Before starting any work requiring vibration monitoring, establish the existing baseline vibration levels along the facilities being monitored.

Monitor and record vibration data during the course of all vibration producing activity, when that activity occurs within 100' of the building. The 100' impact zone is measured from the edge of the construction activity.

Work within the 100' impact zone is only allowed while monitoring equipment are installed and operational.

Set up the seismographs to give immediate warning when particle velocity equal to or exceeding the threshold value of 0.25-inch per second is produced. The warning emitted must be instantaneously transmitted to the designated responsible person and the Engineer by warning lights, audible sounds, or electronic transmission.

When any reading equals or exceeds the specified threshold value, cease work immediately and notify the Engineer. Submit a detailed plan of action to reduce vibrations within 24 hours. Do not resume work unless authorized.

14-8.03C(2)(b) Data Collection

Collect data for the following scenarios as described:

1. Baseline: A continuous recording of the maximum single-component peak particle velocities for one-minute intervals printed on a strip chart and in electronic format. Perform baseline recording for a minimum of two consecutive workdays during regularly scheduled work hours.
2. Vibration Producing Activities: A continuous recording of the maximum single-component peak particle velocities for one-minute intervals printed on a strip chart and in electronic format. Document all events responsible for the measured vibration levels.

Record data from all seismographs simultaneously and plot data continuously on the strip charts. Show time-domain wave traces (particle velocity versus time) for each seismograph using the same vertical and horizontal axis scale.

14-8.03D Payment

Not Used

Replace Section 14-8.04 with:

14-8.04 CRACK MONITORING

14-8.04A General

14-8.04A(1) Summary

Section 14-8.04 includes specifications for performing pre-construction crack survey and crack monitoring of the building at 1222 Rollins Rd, Burlingame, CA 94010.

The pre-construction crack survey and monitoring of the building must be performed at least 30 days before beginning the demolition work. Additional survey and monitoring must be performed as the demolition work progresses and as directed by the Engineer. A post construction survey and monitoring must be performed on the building within 10 days after the completion of the demolition work.

Notify the Engineer 48 hours before beginning the survey and crack monitoring work.

14-8.04A(2) Submittals

14-8.04A(2)(a) Crack Monitoring Plan

At least 30 days before any work requiring crack monitoring, submit 4 copies of the Crack Monitoring Plan. Allow 14 days for review authorization. If revisions are required, revise and resubmit the plan within 7 days of receipt of comments. Allow 7 days for review of the revisions. Submit 4 copies of the Crack Monitoring Plan incorporating the required changes after authorization. Minor changes or clarifications to the initial submittal may be made and attached as amendments to the plan.

The crack monitoring plan must include the following:

1. The name of the personnel providing the crack monitoring services. The personnel must provide services under guidance of a licensed land surveyor in State of California.
2. Description of the devices, instruments and equipment to be used.
3. Measurement locations and methods for mounting the equipment.
4. Procedures for data collection and analysis.
5. Means and methods of providing warning when the crack equals or exceeds specified threshold.
6. Name of the designated "responsible person." The responsible person must be a licensed structural engineer in State of California and must have the authority to stop the work causing a new crack or further widening of any existing cracks.

14-8.04A(2)(b) Crack Monitoring Report

A written report of the record of observations must be submitted. The observations must include raw data produced from the devices and net amount of horizontal and vertical displacement. The written report must include the date and time of the recordings and the locations within the building.

14-8.04B Materials

Not Used

14-8.04C Construction

14-8.04C(1) Crack Monitoring

14-8.04C(1)(a) General

Before starting any work requiring crack monitoring, locate any existing cracks and locations of the cracks along the building being monitored.

Crack monitoring must be performed on all existing cracks in the adjacent property concurrent with the photo survey. Crack monitoring must be performed using, a calibrated crack monitoring device authorized by the Engineer. The device must be capable of measuring cracks to the nearest 1/20th of an inch. The device installation must be done concurrent with the pre-construction photo survey.

Building demolition work within a 100' zone of the building at 1222 Rollins Road is only allowed while crack monitoring equipment is installed and operational.

Cracks must be monitored during the preconstruction photo survey and daily throughout the duration of any work that has a potential to cause damage to the building. Comply with section 99 for photo survey requirements.

Set up the crack monitors to give immediate warning when a threshold value of 0.01ft is reached. The warning emitted must be instantaneously transmitted to the designated responsible person and the Engineer by warning lights, audible sounds, or electronic transmission.

When any reading equals or exceeds the specified threshold value, cease work immediately and notify the Engineer. Submit a detailed plan of action to stop increasing the crack dimensions within 24 hours. Do not resume work unless authorized.

14-8.04D Payment

Not Used

Replace section 14-11.11 with:

14-11.11 MANAGEMENT OF ASBESTOS-CONTAINING MATERIALS

14-11.11A General

14-11.11A(1) Summary

Section 14-11.11 includes specifications for removal, and disposal of asbestos-containing material (ACM). Friable ACM generated as part of this work is Department-generated hazardous waste under 14-11.02F.

14-11.11A(2) Definitions

asbestos: Includes chrysotile, amosite, crocidolite, tremolite, anthrophyllite, actinolite and any of these minerals that has been chemically treated and/or altered.

asbestos-containing material (ACM): Any building material, including asbestos cement pipe containing commercial asbestos in an amount greater than 1% by weight, area, or count.

certified asbestos consultant (CAC): An asbestos consultant certified by Cal/OSHA under 8 CA Code of Regs § 341.15 and 1529.

friable ACM: Any material containing more than 1 percent asbestos by area that hand pressure can crumble, pulverize or reduce to powder when dry.

non-friable ACM: Asbestos fibers are tightly bound into the matrix of the material and should not become an airborne hazard as long as the material remains intact and undamaged, and is not sawed, sanded, drilled or otherwise abraded during removal (Asbestos Hazard Emergency Response Act (AHERA)).

14-11.11A(3) Asbestos Survey Results

Asbestos was detected at 1212 through 1220 Rollins Road, in the popcorn ceiling, roofing, bituminous material, soft material, and mastic. The complete report entitled "U.S. 101/Broadway Interchange Replacement Project, Hazardous Material Report for 1212, 1216, 1218, and 1220 Rollins Road, at Parcel APN 026-134-080" is included in the "Information Handout."

14-11.11A(4) Submittals

14-11.11A(4)(a) Asbestos Surveying Work Plan for Sampling

Not Used

14-11.11A(4)(b) Asbestos Sampling and Analysis Report

Not Used

14-11.11A(4)(c) Air Quality Management District (AQMD) or Air Pollution Control District (APCD) Notification of Demolition

Submit a copy of the NESHAP notification form and attachments, required under section 14-9.02, before submittal to the AQMD or APCD.

14-11.11A(4)(d) Asbestos Compliance Plan

Prepare an Asbestos Compliance Plan (ACP) to prevent or minimize exposure to asbestos. The ACP must be signed by a CIH before submission to the Engineer for review and authorization. Submit the ACP to the Engineer at least 15 business days before beginning removal work in areas containing or suspected to contain asbestos. The ACP must contain:

1. Identification of key personnel for the project
2. Scope of work and equipment that will be used
3. Job hazard analysis for work assignments
4. Summary of risk assessment
5. Personal protective equipment

6. Delineation of work zones on-site
7. Decontamination procedures
8. General safe work practices
9. Security measures
10. Emergency response plans
11. Worker training

14-11.11A(4)(e) Removal Work Plan

Prepare a work plan for the removal, storage, transportation and disposal of ACM.

The work plan must include:

1. Installing asbestos warning signs at perimeters of abatement work areas
2. Wetting asbestos materials with sprayers
3. Containing large volumes of asbestos materials in disposal bins for temporary storage until removed from the site
4. Providing manifests for disposal upon completion for the Engineer to sign
5. Providing transporters registered to transport hazardous waste in the state of California under the Health and Safety Code Ch 6.5, Div 20 and 22 CA Code of Regs, Div 4.5
6. Disposing of asbestos materials at a disposal facility permitted by the California Environmental Protection Agency
7. Compliance with federal, state, and local requirements for asbestos work, transport, and disposal

14-11.11A(4)(f) Certification of Completion of Safety Training

Submit a certification of completion of safety training for all trained personnel before starting work in areas containing or suspected to contain asbestos.

14-11.11A(4)(g) Waste Shipment Records

Submit a copy of all waste shipment records within 30 days after shipment.

14-11.11A(5) Quality Control and Assurance

14-11.11A(5)(a) Qualifications

The person in charge of asbestos inspection and abatement planning must be a CAC.

The person in charge of asbestos removal must be registered under Labor Code § 6501.5 and certified under Bus & Prof Code § 7058.6.

Laboratories used to perform asbestos analysis must be certified by the CDPH Environmental Laboratory Accreditation Program for all analyses to be performed.

14-11.11A(5)(b) Regulatory Requirements

Codes which govern removal and disposal of materials containing asbestos include:

1. CA Health and Safety Code, Division 20, Chapter 6.5, Hazardous Waste Control
2. 8 CA Code of Regs, General Industry Safety Order 5208 Asbestos
3. 8 CA Code of Reg, § 1529 and 341
4. 22 CA Code of Regs, Division 4.5
5. Cal/OSHA, Part 26 (amended), of 29 CFR
6. 40 CFR, Part 61, subpart M

14-11.11B Materials

Not Used

14-11.11C Construction

14-11.11C(1) General

Notify Cal/OSHA of changes in work locations or conditions under 8 CA Code of Regs § 341.9.

Before starting work in areas containing or suspected to contain asbestos, provide safety training that meets the requirements of 8 CA Code of Regs § 1529 to personnel who have no prior training or are not current in their training status, including State personnel.

Provide training, personal protective equipment, and medical surveillance required by the Asbestos Compliance Plan to 5 State personnel.

14-11.11C(2) Unanticipated Suspected ACM Discovered During Demolition or Excavation

If unanticipated suspected ACM is discovered during demolition, the portion of the work that involves the unanticipated suspected ACM must be performed by or under the direction of CAC. Test the suspected ACM in compliance with USEPA "Asbestos/NESHAP Regulated Asbestos Containing Materials Guidance."

Notify the APCD or the AQMD of changes to removal or demolition plans, including discovery of ACM during demolition, within 2 business days of the change.

14-11.11C(3) Removal

Comply with 8 CA Code of Regs § 1529 and § 341. Remove friable ACM using the wetting method. Remove and handle all non-friable ACM to prevent breakage. The removal of ACM encased in concrete or other similar structural material is not required before demolition, but the ACM must be adequately wetted whenever exposed during demolition. Prevent visible emissions from all ACM removal activities.

Mark all regulated work areas with the following or equivalent warning:

**DANGER
ASBESTOS
CANCER AND LUNG DISEASE HAZARD
AUTHORIZED PERSONNEL ONLY**

14-11.11C(4) Packaging

Comply with 22 CA Code of Regs, Div 4.5, Chapter 12, Article 3 requirements for packaging and labeling removed ACM. Place removed ACM in approved containers (double ply, 0.06-inch minimum thickness, plastic bags) with caution labels affixed to bags. Caution labels must have conspicuous, legible lettering, that spells out the following or equivalent warning:

**DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD**

Place removed materials containing asbestos directly into a covered, lockable roll off or drop box that has the same caution label affixed on all sides.

14-11.11C(5) Transportation

All haulers of friable ACM must have current registration with DTSC for transporting hazardous waste and must have a U.S. Environmental Protection Agency Identification Number (U.S. EPA I.D. Number). All vehicles used to transport hazardous waste material must carry a valid registration during transport. Transport non-friable (non-hazardous waste) ACM to the disposal facility with a shipping document or waste shipment record.

14-11.11C(6) Disposal

Dispose of friable and non-friable waste containing asbestos at a disposal facility permitted to accept the waste and that meets all the requirements specified by federal, state and local regulations. Notify the proper authorities at the disposal site in advance of delivery of ACM.

14-11.11D Payment

Not Used

Replace Section 14-11.12 with:

14-11.12 LEAD RELATED CONSTRUCTION WORK

14-11.12A General

14-11.12A(1) Summary

This section includes specifications for lead related construction work.

If lead containing materials (LCM) will be disturbed in order to perform the work for this project, any disturbance of LCM must comply with the regulations. Apply the most stringent requirements if there is a conflict or overlap of requirements.

The results of the LCM survey conducted at 1212-1220 Rollins Road are contained in the report entitled "U.S. 101 / Broadway Interchange Replacement Project– Hazardous Material Report For 1212, 1216, 1 218, and 1220 Rollins Road at Parcel APN 026-134-080, April 2014", prepared by URS Corporation. This report provides information on the materials and substrates that were tested and the results. A copy of the report is included in the Information Handout.

Notify the Engineer immediately if any of the following occur:

1. Construction activities, other than those already described in the construction work plan, will or may disturb LCM identified in the LCM survey report.
2. LCM, not previously identified in the LCM survey report, are discovered during construction activities.

14-11.12A(2) Definitions

Regulations: All Federal, State, and local codes, regulations, laws, and requirements.

14-11.12A(3) Submittals

Work Plans:

1. For construction work that will disturb LCM, submit a construction work plan that includes:
 - 1.1. Schedule, phasing, description, and location of activities that will disturb LCM. Include starting and completion dates.
 - 1.2. Summary of techniques to be used for complying with the regulations
 - 1.3. Methods for complying with the requirements in "Methods of compliance" under 8 CA Code of Regs § 1532.1. Include a written compliance program.
 - 1.4. Medical surveillance program under 8 CA Code of Regs § 1532.1, or certify that one is not required
 - 1.5. Respiratory protection program under 8 CA Code of Regs § 5144, or certify that one is not required
 - 1.6. Personnel monitoring procedures
 - 1.7. Documentation of required employee training, including required medical examinations, respirator fit test records, and certifications, for all individuals who will perform this work
 - 1.8. Standard procedures for protecting other workers, visitors, and any Department personnel at the jobsite, and for protection of spaces outside the work area from contamination
 - 1.9. Sampling protocol and procedures for performing the waste analysis
 - 1.10. Qualifications of sampling personnel performing the waste analysis
 - 1.11. Methods for any required protection of heating, ventilation, or air conditioning systems
 - 1.12. Locations of required signage and hygiene facilities
 - 1.13. Federal, State, and local agencies that require notification
 - 1.14. Identification of responsible parties and emergency contacts
 - 1.15. Names, addresses, phone numbers, and certifications for the analytical laboratory, waste transport firm, and disposal facility to be used

- 1.16. Worker roster, including name, address, and telephone number of each worker, who will be used for each phase or location of work
- 1.17. Contractor and worker qualifications
- 1.18. Name, address, and telephone of subcontractors who will perform this work

Submit the construction work plan to the Engineer before performing any lead related construction work. Allow 5 days for review and authorization.

Correct any rejected construction work plan and resubmit a corrected plan within 5 days of notification by the Engineer, at which time a new review period of 5 days will begin.

Do not perform any lead related construction work until the construction work plan has been authorized by the Engineer. The Engineer's review and authorization does not waive any contract requirements and does not relieve you from complying with the regulations.

2. For lead containing construction debris that is determined to be a hazardous waste, submit a hazardous waste work plan that includes:
 - 2.1. Summary of methods and techniques to be used for complying with the regulations for handling, packaging, storing, transporting, and disposing of the hazardous waste.
 - 2.2. Contractor and worker qualifications.
 - 2.3. Analytical results from the waste analysis, including sample types, sample locations, chain of custody documentation, and name of analytical laboratory.
 - 2.4. Name, address, phone number, U.S. EPA identification number, and DTSC Registered Hazardous Waste Transporters registration number for the waste transport firm. Include method of transportation.
 - 2.5. Name, address, phone number, certification, U.S. EPA identification number, and class of the disposal facility to be used.
 - 2.6. Proposed job site location to be used for storing any hazardous waste containers.

Submit the hazardous waste work plan to the Engineer before, packaging, storing, transporting, or disposing of any hazardous waste. Allow 3 days for review and authorization.

Correct any rejected hazardous waste work plan and resubmit a corrected plan within 2 days of notification by the Engineer, at which time a new review period of 3 days will begin.

Do not store, transport, or dispose of any hazardous waste until the hazardous waste work plan has been authorized by the Engineer. The Engineer's review and authorization does not waive any contract requirements and does not relieve you from complying with the regulations.

Worker Roster: An updated worker roster must be submitted and authorized before any worker, not on the current roster, performs any work. Allow 3 days for review and authorization.

Notifications: Submit copies of all notifications required by the regulations, except for employee notifications required by CA Code of Regs § 1532.1.

Analytical Test Results From Waste Analysis:

Submit analytical test results from the waste analysis, including sample types, sample locations, chain of custody documentation, and name of analytical laboratory. Allow 2 days for review and authorization before:

1. Requesting that the Engineer obtain an EPA ID number, if required
2. Requesting the Engineer's signature on the waste analysis requested by the disposal facility, if required
3. Removing any of the debris from the job site

U.S. Environmental Protection Agency Identification Number Request: If required, submit a request for the U.S. EPA ID number.

Hazardous Waste Manifest: If required, submit a copy of the hazardous waste manifest for each shipment of hazardous waste.

Disposal Documentation: Submit documentation from disposal facility indicating proper disposal of all hazardous waste and nonhazardous lead containing construction debris, within 5 days of transporting the debris from the job site.

At the conclusion of lead related construction work, submit a statement that the work has been performed under the regulations and these special provisions.

Final Records:

Submit copies of final records indicating that the lead related construction work has been performed under the regulations and these special provisions, including:

1. Records of any worker protection monitoring performed
2. Records required to be maintained by CA Code of Regs § 1532.1, subsection (n), including any:
 - 2.1. Exposure assessment
 - 2.2. Medical surveillance
 - 2.3. Medical removals
 - 2.4. "Objective data for exemption from requirement for initial monitoring"
3. Daily progress logs
4. List of workers who performed any lead related construction work. Include name and any required certifications for each worker.
5. Permits and approvals obtained

Lead Awareness Training: Submit descriptive information for the contents of the lead awareness training.

14-11.12A(4) Quality Control and Assurance

Follow all regulations, including:

Federal:

1. 29 CFR 1926.62

State:

1. 8 CA Code of Regs § 1532.1. Lead
2. 8 CA Code of Regs § 5144. Respiratory Protection
3. 17 CA Code of Regs
4. 22 CA Code of Regs, Division 4.5. Environmental Health Standards For The Management Of Hazardous Waste

Local:

1. Follow all local regulations applicable to the project location.

Qualifications:

All work must be performed by competent persons trained, knowledgeable, qualified, and certified in lead related construction work, including removal, demolition, handling, and disposal.

All analytical testing must be performed by an analytical laboratory certified by the California Department of Public Health (CDPH) Environmental Laboratory Accreditation Program.

The following items must be prepared, signed, and stamped by a lead professional currently certified by the CDPH Lead-Related Construction Program:

1. Construction work plan
2. Hazardous waste work plan, if required
3. Written compliance program

Lead Awareness Training: You must provide 8 hours of lead awareness training, complying with the provisions in 8 CA Code of Regs § 1532.1. Lead and 8 CA Code of Regs § 5194. Hazard Communication, for a maximum of 4 Department personnel.

Preconstruction Meeting:

Before performing any lead related construction work, attend a preconstruction meeting with your subcontractors and their competent person, key personnel, and field supervisors, who will be performing or overseeing the work. Be prepared to discuss the following topics and documents:

1. Submittals, including the authorized construction work plan and the authorized hazardous waste work plan, if required
2. "Field Quality Control" requirements specified below

The Engineer will determine the time and location of the meeting.

14-11.12B Materials

Not Used

14-11.12C Construction

14-11.12C(1) General

Notify the Engineer at least 15 days before performing any lead related construction work.

Perform lead related construction work under the authorized construction work plan and the hazardous waste work plan, if required.

Only workers listed on the roster in the authorized work plans must be used to perform the work.

Minimize disturbance of LCM that are to remain in place.

14-11.12C(2) Lead Containing Construction Debris

Sample, analyze, handle, package, store, transport, and dispose of all lead containing construction debris under the regulations. Apply the most stringent requirements if there is a conflict or overlap of requirements.

Waste Analysis: A waste analysis for lead must be performed on the lead containing construction debris as required by the regulations and the disposal facility.

Nonhazardous Lead Containing Construction Debris: If the results of the waste analysis demonstrate that the lead containing construction debris is a nonhazardous waste and the Engineer authorizes the results, dispose of the debris at an appropriately permitted disposal facility.

Hazardous Waste: If the results of the waste analysis demonstrate that the lead containing construction debris is a hazardous waste, comply with the following additional requirements:

1. In addition to the labeling and marking requirements in 22 CA Code of Regs §§ 66262.31 and 66262.32, mark labels with:
 - 1.1. Date the hazardous waste was generated
 - 1.2. Composition and physical state of the hazardous waste
 - 1.3. Contractor or subcontractor name

- 1.4. Contract number
- 1.5. Name, address, and telephone number of the Engineer
2. If containers are stored within the job site limits, store them in a secured enclosure. Acceptable secure enclosures include a locked chain link fenced area or a lockable shipping container located within the job site limits.
3. After the Engineer authorizes the analytical test results, dispose of the waste at an appropriately permitted hazardous waste disposal facility, located in California, under the requirements of the disposal facility operator, within 30 days of authorization.
4. The Engineer will obtain the U.S. EPA ID number and will sign all manifests as the generator, within 2 days of receiving and authorizing the analytical test results and your request for the number.

14-11.12C(3) Field Quality Control

Not Used **14-11.12D Payment**

Not Used

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DIVISION XI BUILDING CONSTRUCTION
99 BUILDING CONSTRUCTION

Replace "Reserved" in section 99 with:
99-1 GENERAL REQUIREMENTS

SECTION 010000 GENERAL REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section 99-1 includes general specifications for performing building construction work.
- B. Building construction work includes demolition of buildings shown on the Constructions Details sheet.
- C. Sections 15 and 87 through 98 do not apply to building construction work.
- D. The styles of section 99 differ from the styles of the other sections in that:
 - 1. The 5-digit number that follows "99-" and the title of each correlate with the 16-division CSI MasterFormat number and title except as specified below.
 - 2. Within section 99, the Department is gradually changing the specifications to align with CSI's MasterFormat styles and 50-division CSI MasterFormat numbers. Because of this transition, the format, organization, and language may vary between sections. Until the transition is complete, a 50-division section number will be located in the division that correlates with the 16-division CSI MasterFormat.
 - 3. Some section 99 specifications are in a streamlined form. In these specifications, interpret a colon as "must be."

1.2 ABBREVIATIONS

- A. Interpret the meaning of an abbreviation as shown in the following table:

Abbreviations

Abbreviation	Meaning
AAMA	American Architectural Manufacturers' Association
ADAAG	ADA Accessibility Guidelines for Buildings and Facilities
AGA	American Gas Association
AITC	American Institute of Timber Construction
ALSC	American Lumber Standard Committee
AMCA	Air Movement and Control Association International
APA	Engineered Wood Association
AHRI	Air-Conditioning, Heating, and Refrigeration Institute
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
BIA	Brick Industry Association
CEC	California Electrical Code
CMC	California Mechanical Code
CPC	California Plumbing Code
CRRC	Cool Roof Rating Council
CSA	Canadian Standards Association
ESO	Electrical Safety Orders
FM	FM Global
FS	Federal Specification
GA	Gypsum Association
GANA	Glass Association of North America
IGMA	Insulating Glass Manufacturers Alliance
ISO	International Organization for Standardization
NAAMM	National Association of Architectural Metal Manufacturers
PEI	Porcelain Enamel Institute
RIS	Redwood Inspection Service
SMACNA	Sheet Metal and Air Conditioning Contractors' National Association
TCNA	Tile Council of North America
TPI	Truss Plate Institute
WCLB	Grade stamp issued by West Coast Lumber Inspection Bureau
WI	Woodwork Institute
WWPA	Western Wood Products Association

1.3 DEFINITIONS (Not Used)

1.4 COORDINATION WITH THE DEPARTMENT

- A. The Department will be working at or near the job site. Coordinate activities with the Department to avoid delays.
- B. Comply with security policies of the Department facility.
- C. Submit a request for authorization before interrupting any service for the purpose of making or breaking a connection. Include in the request the proposed time necessary to complete the work. Allow 5 days for the review of each request.
- D. You may obtain electrical power and water from existing Department electrical power and water outlets on the job site for Contract operations at no cost to you. The Engineer determines which outlets you may use. You must not modify outlets.
- E. Do not use Department telephones.

1.5 QUALITY CONTROL AND ASSURANCE (Not Used)

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

1.1 INSPECTION

- A. Any work that will be covered or not visible in the completed work must be inspected and accepted by the Engineer before progress of work conceals portions to be inspected. Notify the Engineer at least 3 business days before needing inspection.

END OF SECTION 99-01000

99-2 SITEWORK

SECTION 024116 - STRUCTURE DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Demolition and removal of buildings, foundations, parking lot pavement, elevator, fencing and other private property appurtenances within construction area. This includes removal and disposal of all materials including materials containing lead and asbestos.
 - 2. Abandoning in-place and removing below-grade construction.
 - 3. Disconnecting, capping or sealing, and removing site utilities.
 - 4. Obtaining City of Burlingame building division permit for the demolition work.
- B. Comply with Standard Specification Section 14-8.03, "Vibration Monitoring" and Section 15-9, "Crack Monitoring."

1.2 DEFINITIONS

Remove: Detach items from existing construction and legally dispose of them off-site.

1.3 MATERIALS OWNERSHIP

Unless otherwise indicated, demolition waste becomes property of Contractor.

1.4 ACTION SUBMITTALS

- A. Proposed Demolition Plan: Submit proposed demolition plan signed and stamped by a Licensed Professional Engineer in State of California for the removal of all buildings. Include specific details for the separation of Building No. 2A and 2B from the building to remain, any temporary shoring if necessary, equipment, staging sketches. Verify the elevation of the top and bottom of concrete foundation for the building to remain and the buildings to be removed. Verify if the foundation of Building 2A and 2B is supporting the building to remain.
- B. City of Burlingame Building Permit: Submit a demolition permit issued by the City of Burlingame Building Division. The permit can be obtained by contacting City of Burlingame at (650) 558-7260.

- C. Predemolition documentation and photos of any existing crack(s) within the building to remain. Predemolition documentation must include the following:
 - 1. Photos of any existing crack(s)
 - 2. Photos showing the width of the existing crack(s)
 - 3. Photos of tools used to measure each existing crack

1.5 INFORMATIONAL SUBMITTALS

- A. Proposed Protection Measures: Submit informational report, including Drawings, that indicates the measures proposed for protecting individuals and property, for environmental protection, for dust control and, for noise control. Indicate proposed locations and construction of barriers.
 - 1. Adjacent Building: Detail special measures proposed to protect adjacent building to remain including means of entrance to and egress from those buildings.
- B. Schedule of Building Demolition Activities: Indicate the following:
 - 1. Detailed sequence of demolition work with starting and ending dates for each activity.
 - 2. Shutoff and capping of utility services.
- C. Inventory: Submit a list of items to be removed and deliver to the Engineer prior to start of demolition.
- D. Predemolition Photographs or Video: Show existing conditions of adjoining property, construction and site improvements, including finish surfaces, that might be misconstrued as damage caused by demolition operations. Comply with Section 013233 "Photographic Documentation." Submit before the Work begins.
- E. Final demolition Photographs and Video: Show conditions of building to remain, construction and site improvements post demolition. Include same areas as predemolition photographs. Comply with Section 013233 "Photographic Documentation."
- F. Landfill Records: Indicate receipt and acceptance of hazardous wastes by a landfill facility licensed to accept hazardous wastes.

1.6 QUALITY ASSURANCE

- A. Refrigerant Recovery Technician Qualifications: Certified by EPA-approved certification program.
- B. Regulatory Requirements: Comply with governing EPA notification regulations before beginning demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- C. Standards: Comply with ANSI/ASSE A10.6 and NFPA 241.
- D. Predemolition Conference: Conduct conference at 1212-1220 Rollins Road minimum five business days before start of demolition.
 - 1. Inspect and discuss condition of construction to be demolished.
 - 2. Review structural load limitations of existing structures.
 - 3. Review and finalize building demolition schedule and verify availability of demolition personnel, equipment, and facilities needed to make progress and avoid delays.
 - 4. Review and finalize protection requirements.
 - 5. Review procedures for noise control and dust control.
 - 6. Review procedures for protection of adjacent buildings.
 - 7. Review items to be salvaged and returned to the Department.

1.7 PROJECT CONDITIONS

- A. Buildings to be demolished will be vacated and their use discontinued before start of the Work.
- B. Building immediately adjacent to demolition area is currently occupied and will be occupied during demolition. Conduct building demolition so operations of occupied buildings will not be disrupted. Access to the demolition area for demolition work is only available on Saturdays and Sundays 8am to 6pm.

1. Provide not less than 96 hours notice to the Department and adjacent property owner before starting activities that will affect operations of adjacent occupied buildings.
2. Maintain access to existing walkways, exits, and other facilities used by occupants of adjacent buildings.
 - a. Do not close or obstruct walkways, exits, or other facilities used by occupants of adjacent buildings without written permission from the Engineer.
 - b. Nerli Lane must remain open to traffic to allow for access to the adjacent businesses.
- C. The Department assumes no responsibility for buildings and structures to be demolished.
 1. Conditions existing at time of inspection for bidding purpose will be maintained by the Department as far as practical.
- D. Hazardous Materials: Hazardous materials are present in buildings and structures to be demolished. A report on the presence of hazardous materials is on file for review and use. Examine report to become aware of locations where hazardous materials are present.
 1. Hazardous material remediation is specified elsewhere in the Contract Documents.
 2. Do not disturb hazardous materials or items suspected of containing hazardous materials except under procedures specified elsewhere in the Contract Documents.
- E. On-site storage or sale of removed items or materials is not permitted. On-site usage of the area as storage or field construction office is not permitted.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped before starting demolition operations.
- B. Take inventory of and record the condition of items to be removed. Provide photographs or video of conditions that might be misconstrued as damage caused by salvage operations. Comply with Section 013233 "Photographic Documentation."
- C. Engage a professional engineer to perform an engineering survey of condition of building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures during building demolition operations.
- D. Verify that hazardous materials have been remediated before proceeding with building demolition operations.

3.2 PREPARATION

- A. Refrigerant: Remove refrigerant from mechanical equipment according to 40 CFR 82 and regulations of the California Air Resources Board before starting demolition.
- B. Existing Utilities: Locate, identify, disconnect, and seal or cap off indicated utilities serving buildings and structures to be demolished.
 1. The Contractor must arrange to shut off and abandon the utilities as determined by the utility companies before the demolition of the buildings.
 2. If removal, relocation, or abandonment of utility services will affect adjacent occupied buildings, then provide temporary utilities that bypass buildings and structures to be demolished and that maintain continuity of service to other buildings and structures.

3. Cut off pipe or conduit a minimum of 24 inches below grade. Cap, valve, or plug and seal remaining portion of pipe or conduit after bypassing according to requirements of 24 CA Code of Regs.
- C. Temporary Shoring: Provide and maintain interior and exterior shoring, bracing, or structural support to preserve stability and prevent unexpected movement or collapse of construction being demolished.
1. Strengthen or add new supports when required during progress of demolition.

3.3 PROTECTION

- A. Existing Facilities: Protect adjacent property, walkways, loading docks, building entries, and other building facilities during demolition operations. Maintain entrances to and exits from existing buildings.
- B. Existing Utilities: Maintain utility services to remain and protect from damage during demolition operations.
1. Do not interrupt existing utilities serving adjacent occupied or operating facilities unless authorized in writing by the Engineer.
- C. Temporary Protection: Erect temporary protection, such as walks, fences, railings, canopies, and covered passageways, where required by 24 CA Code of Regs and as indicated.
1. Protect adjacent buildings and facilities from damage due to demolition activities.
 2. Protect existing site improvements, appurtenances, and landscaping to remain.
 3. Erect a plainly visible fence around drip line of individual trees or around perimeter drip line of groups of trees to remain.
 4. Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
 5. Provide protection to ensure safe passage of people around building demolition area and to and from occupied portions of adjacent buildings and structures.
 6. Protect walls, windows, roofs, and other adjacent exterior construction that are to remain and that are exposed to building demolition operations.
 7. Erect and maintain dustproof partitions and temporary enclosures to limit dust, noise, and dirt migration to occupied portions of adjacent buildings.
- D. Remove temporary barriers and protections where hazards no longer exist. Where open excavations or other hazardous conditions remain, leave temporary barriers and protections in place.

3.4 DEMOLITION, GENERAL

- A. General: Demolish indicated structures, foundations, parking lot pavements, elevator, fencing and other private property appurtenances completely. Use methods required to complete the Work within limitations of governing regulations and as follows:
1. Do not use cutting torches until work area is cleared of flammable materials. Maintain portable fire-suppression devices during flame-cutting operations.
 2. Maintain fire watch during and for at least 4 hours after flame cutting operations.
 3. Maintain adequate ventilation when using cutting torches.
 4. Locate building demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.

5. Obtain a list of property owners from the Engineer. Obtain authorization before notifying the property owners. Notify the property owners at least 7 days before the start of demolition work to schedule a pre demolition walk through. Notify the property owners 48 hours before the completion of the demolition to schedule a final walk through and approval of final documentation and photographs, post completion of the demolition work.
- B. Engineering Surveys: During demolition, perform surveys to detect hazards that may result from building demolition activities.
- C. Site Access and Temporary Controls: Conduct building demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
 1. Do not close or obstruct streets, walks, walkways, or other adjacent occupied or used facilities without permission from the Engineer and authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by authorities having jurisdiction.
 2. Use water mist and other suitable methods to limit spread of dust and dirt. Comply with governing environmental-protection regulations. Do not use water when it may damage adjacent construction or create hazardous or objectionable conditions, such as ice, flooding, and pollution.
- D. Explosives: Use of explosives is not permitted.
- E. Explosives: Use of explosives is not permitted.

3.5 DEMOLITION BY MECHANICAL MEANS

- A. Proceed with demolition of structural framing members systematically, from higher to lower level. Complete building demolition operations above each floor or tier before disturbing supporting members on the next lower level.
- B. Remove debris from elevated portions of the building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
 1. Remove structural framing members and lower to ground by method suitable to minimize ground impact and dust generation.
- C. Below-Grade Construction: Demolish foundation walls and other below-grade construction.
 1. Remove below-grade construction, including basements, foundation walls, and footings, to at least 12 inches below grade .
- D. Existing Utilities: Demolish and remove existing utilities and below-grade utility structures within the property line.
 1. Piping: Disconnect piping at unions, flanges, valves, or fittings.
 2. Wiring Ducts: Disassemble into unit lengths and remove plug-in and disconnecting devices.

3.6 SITE RESTORATION

- A. Site Grading: Uniformly rough grade area of demolished construction to a smooth surface, free from irregular surface changes. Provide a smooth transition between adjacent existing grades and new grades.

3.7 REPAIRS

- A. Promptly repair damage to adjacent buildings caused by demolition operations.

3.8 DISPOSAL OF DEMOLISHED MATERIALS

- A. Remove demolition waste materials from Project site and dispose of them. See Sections 13 and 14 of the 2010 Standard Specifications" for disposal of demolition waste.
 - 1. Do not allow demolished materials to accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Do not burn demolished materials.

3.9 CLEANING

- A. Clean adjacent structures and improvements of dust, dirt, and debris caused by building demolition operations. Return adjacent areas to condition existing before building demolition operations began.
 - 1. Clean roadways of debris caused by debris transport.

END OF SECTION 024116

SECTION 013233 - PHOTOGRAPHIC DOCUMENTATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for the following:
 - 1. Predemolition photographs.
 - 2. Periodic demolition photographs.
 - 3. Final completion demolition photographs.
 - 4. Photo survey showing the condition of the adjacent building, including, but not limited to, any and all deficiencies in the facility such as cracks and settlement. Predemolition and final documentation and photos will need to be acquired from the inside and outside of the adjacent building (Hanson building).

1.2 INFORMATIONAL SUBMITTALS

- A. Key Plan: Submit key plan of Project site and building with notation of vantage points marked for location and direction of each photograph.
- B. Digital Photographs: Submit image files within three days of taking photographs.
 - 1. Digital Camera: Minimum sensor resolution of 8 megapixels.
 - 2. Format: Minimum 3200 by 2400 pixels, in unaltered original files, with same aspect ratio as the sensor, uncropped, date and time stamped, in folder named by date of photograph, accompanied by key plan file.
 - 3. Identification: Provide the following information with each image description in file metadata tag:
 - a. Name of Project.
 - b. Name and contact information for photographer.
 - c. Name of Engineer.
 - d. Name of Contractor.
 - e. Date photograph was taken.

- f. Description of vantage point, indicating location, direction , and elevation or story of construction.
 - g. Unique sequential identifier keyed to accompanying key plan.
 4. Submit a letter of authenticity certifying that all digital photo images in the submittal have not been modified using photographic software.
- C. Demolition Photographs: Submit two prints of each photographic view within seven days of taking photographs.
1. Format: 8-by-10-inch smooth-surface matte prints on single-weight, commercial-grade photographic paper; enclosed back to back in clear plastic sleeves that are punched for standard three-ring binder.
 2. Identification: On back of each print, provide an applied label or rubber-stamped impression with the following information:
 - a. Name of Project.
 - b. Name and contact information for photographer.
 - c. Name of Engineer and Construction Manager.
 - d. Name of Contractor.
 - e. Date photograph was taken if not date stamped by camera.
 - f. Description of vantage point, indicating location, direction (by compass point), and elevation or story of construction.
 - g. Unique sequential identifier keyed to accompanying key plan.
- D. Video Recordings: Submit video recordings within seven days of recording.
1. Submit video recordings in digital video disc format acceptable to Engineer of the adjacent building.
 2. Identification: With each submittal, provide the following information:
 - a. Name of building to remain.
 - b. Name and address of photographer.
 - c. Name of Engineer
 - d. Name of Contractor.
 - e. Date video recording was recorded.
 - f. Description of vantage point, indicating location, direction (by compass point), and elevation or story of construction.
 - g. Weather conditions at time of recording

PART 2 - PRODUCTS

2.1 PHOTOGRAPHIC MEDIA

- A. Digital Images: Provide images in JPG format, produced by a digital camera with minimum sensor size of 8megapixels, and at an image resolution of not less than 3200 by 2400pixels.
- B. Digital Video Recordings: Provide high-resolution, digital video disc.

PART 3 - EXECUTION

3.1 DEMOLITION PHOTOGRAPHS

- A. General: Take photographs using the maximum range of depth of field, and that are in focus, to clearly show the Work. Photographs with blurry or out-of-focus areas will not be accepted.
 1. Maintain key plan with each set of construction photographs that identifies each photographic location.

- B. Digital Images: Submit digital images exactly as originally recorded in the digital camera, without alteration, manipulation, editing, or modifications using image-editing software.
 - 1. Date and Time: Include date and time in file name for each image.
 - 2. Field Office Images: Maintain one set of images accessible in the field office at Project site, available at all times for reference. Identify images in the same manner as those submitted to Engineer and Construction Manager.
- C. Predemolition Photographs: Before starting demolition, take photographs of Project site and surrounding properties, from different vantage points, as directed by Engineer.
 - 1. Flag excavation areas before taking demolition photographs.
 - 2. Take 20 photographs of existing buildings either on or adjoining property to accurately record physical conditions at start of demolition.
 - 3. Take additional photographs as required to record settlement or cracking of adjacent structures, pavements, and improvements.
- D. Final Demolition Photographs: Take 20 color photographs after date of Substantial Completion for submission as project record documents. Engineer [Construction Manager] will inform photographer of desired vantage points.

3.2 VIDEO RECORDINGS

- A. Video recording of the existing condition of the building to remain including, but not limited to, any and all deficiencies in the facility such as cracks, settlement and water damage due to leakage.

END OF SECTION 013233

99-3 CONCRETE AND REINFORCEMENT

Not Used

99-4 MASONRY

- Not Used

99-5 METALS

Not Used

99-6 WOOD AND PLASTICS

Not Used

99-7 THERMAL AND MOISTURE PROTECTION

Not Used

99-8 DOORS AND WINDOWS

Not Used

99-9 FINISHES

Not Used

99-10 SPECIALTIES

Not Used

99-11 EQUIPMENT

Not Used

99-12 FURNISHINGS

Not Used

99-13 SPECIAL CONSTRUCTION

Not Used

99-14 CONVEYING SYSTEMS

Not Used

99-15 MECHANICAL

Not Used

99-16 ELECTRICAL

BID ITEM LIST

04-235844

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
201 (F)	520102	BAR REINFORCING STEEL (BRIDGE)	LB	868,060		
202 (F)	520103	BAR REINFORCING STEEL (RETAINING WALL)	LB	104,000		
203 (F)	520107	BAR REINFORCING STEEL (BOX CULVERT)	LB	20,443		
204 (F)	520110	BAR REINFORCING STEEL (EPOXY COATED) (BRIDGE)	LB	2,550		
205 (F)	520120	HEADED BAR REINFORCEMENT	EA	580		
206	BLANK					
207 (F)	560218	FURNISH SIGN STRUCTURE (TRUSS)	LB	22,500		
208 (F)	560219	INSTALL SIGN STRUCTURE (TRUSS)	LB	22,500		
209	560244	FURNISH LAMINATED PANEL SIGN (1"-TYPE A)	SQFT	320		
210	560245	FURNISH LAMINATED PANEL SIGN (1"-TYPE B)	SQFT	350		
211	560248	FURNISH SINGLE SHEET ALUMINUM SIGN (0.063"-UNFRAMED)	SQFT	620		
212	560249	FURNISH SINGLE SHEET ALUMINUM SIGN (0.080"-UNFRAMED)	SQFT	420		
213	560251	FURNISH SINGLE SHEET ALUMINUM SIGN (0.063"-FRAMED)	SQFT	94		
214	560252	FURNISH SINGLE SHEET ALUMINUM SIGN (0.080"-FRAMED)	SQFT	160		
215	562001	METAL (ROADSIDE SIGN)	LB	2,040		
216	566011	ROADSIDE SIGN - ONE POST	EA	32		
217	566012	ROADSIDE SIGN - TWO POST	EA	17		
218	568001	INSTALL SIGN (STRAP AND SADDLE BRACKET METHOD)	EA	37		
219	597600	PREPARE AND PAINT CONCRETE	SQFT	6		
220	620060	12" ALTERNATIVE PIPE CULVERT	LF	98		

BID ITEM LIST
04-235844

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
341	BLANK					
342	090100	TIME RELATED OVERHEAD (WDAY)	WDAY	600		
343	193001	STRUCTURE BACKFILL	CY	139		
344	498052	60" CAST IN DRILLED HOLE CONCRETE PILE (SIGN FOUNDATION)	LF	35		
345	BLANK					
346	994650	BUILDING WORK	LS	LUMP SUM	LUMP SUM	
347	999990	MOBILIZATION	LS	LUMP SUM	LUMP SUM	

TOTAL BID:

\$
