

CITY OF CERES
DEPARTMENT OF ENGINEERING

CALIFORNIA

NOTICE INVITING BIDS
BID FORMS
SAMPLE CONTRACT DOCUMENTS
SPECIAL PROVISIONS

FOR

PROJECT NUMBER 2402

ROCKEFELLER WATER BULDING IMPOVEMENTS

Javier Lopez - Mayor

Daniel A. Martinez – Vice Mayor

Rosalinda L. Vierra – Council Member

James Casey – Council Member

Otero Cerina – Council Member

Douglas D. Dunford – City Manager

Nubia Goldstein – City Attorney

Michael R Beltran II, PE – City Engineer

A handwritten signature in blue ink, appearing to be 'M. Beltran II', is positioned below the printed name of the City Engineer.

PREBID MEETING: February 12, 2026 at 2:00 p.m.

BID OPENING: February 26, 2026 at 2:00 p.m.

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BID DOCUMENTS

CITY OF CERES
DEPARTMENT OF ENGINEERING

NOTICE INVITING BIDS

N-1 NOTICE IS HEREBY GIVEN that sealed bids for the work shown on the plans entitled:

**PROJECT NUMBER 2402
ROCKEFELLER WATER BUILDING IMPROVEMENTS**

will be received at the Office of the City Engineer of the City of Ceres, 2220 Magnolia Street Ceres, California, until **2:00 p.m. on February 26, 2026**, at which time they will be publicly opened, read, and recorded.

N-2 DESCRIPTION OF THE WORK: The work to be performed includes, but is not limited to:

North Building: Provide tenant improvement to existing building for service space. Work to include demolition of interior walls, plumbing, and electrical. New work to include new walls, ceilings, finishes, new mechanical, plumbing, electrical, and structural to support space configuration.

South Building: Provide tenant improvement to existing building to provide warehouse space. Work to include demolition of interior walls, plumbing, and electrical. New work to include toilet fixture replacement and lighting to support new space configuration.

Sitework: Modify existing site to provide new water service to north building.

Such other items or details, not mentioned above, that are required by the Drawings and Technical Specifications Plans, City of Ceres Standard Specifications and Typical Details, and the Special Conditions shall be performed, placed, constructed, or installed.

The project is located at **1921 Rockefeller Drive, Ceres California**. Bids are required for the entire work described herein.

N-3 AWARD OF CONTRACT: The City reserves the right after opening bids to reject any or all bids, to waive any informality (non-responsiveness) in a bid, or to make award to the lowest responsive, responsible bidder (as determined per the Instructions to Bidders) and reject all other bids, as it may best serve the interest of the City. As a condition of award, the successful bidder shall furnish a payment bond and a performance bond on the City's forms each in the full amount of the contract price. The successful bidder will also be required to submit proof of insurance for work involved.

N-4 BID SECURITY: Each bid shall be accompanied by a certified or cashier's check or Bid Bond in the amount of 10 percent of the total bid price, payable to the City of Ceres.

N-5 CONTRACTOR'S LICENSE CLASSIFICATION: The Contractor shall possess a valid **CLASS B** license at the time of submitting bids and for the duration of the project.

N-6 CALIFORNIA WAGE RATE AND LABOR CODE REQUIREMENTS: The Contractor shall pay the general prevailing rate of per diem wages as determined by the Director of Industrial Relations (DIR) of the State of California for the locality where the work is to be performed. A copy of said wage rates is on file at the office of the City Engineer. The Contractor and any subcontractors shall pay not less than said specified rates and shall post a copy of said wage rates at the project site.

No contractor or subcontractor may submit a bid, be listed on a bid proposal, or be awarded a contract for public work without proof of registration unless registered with the DIR pursuant to Labor Code section 1725.5. This project is subject to compliance monitoring and enforcement by the DIR.

N-7 PRE-BID CONFERENCE: A non-mandatory pre-bid conference will be held in the City Hall Annex conference room located at 2220 Magnolia Street, Ceres, CA 95307, on **February 12, at 2:00 p.m.** prevailing local time. A site walk will immediately follow for any interested contractors.

N-8 OBTAINING OR INSPECTING CONTRACT DOCUMENTS: Digital copies of the plans and specifications may be obtained from the City of Ceres Engineering Department by sending an email to **Kevin Silva** (kevin.silva@ceres.gov).

Bids must be filed with the Office of City Engineer, at 2220 Magnolia Street, Ceres, California 95307, not later than **February 26 2026, at 2:00 p.m.** prevailing local time, at which time the bids will be publicly opened, read, and recorded.

N-9 ADDRESS AND MARKING OF BIDS: The envelope enclosing the Bid shall be sealed and addressed to the City of Ceres, 2220 Magnolia Street, Ceres, CA 95307, and shall be hand delivered or mailed to the Office of the City Engineer before **2:00 p.m. on February 26, 2026**. The envelope shall be plainly marked in the upper left-hand corner with the name and address of the Bidder and shall bear the words "**Bid for Rockefeller Water Building Improvements, PROJECT NUMBER 2402, February 26, 2026 at 2:00 p.m.**" The certified or cashier's check or Bid Bond shall be enclosed in the same envelope with the Bid.

This contract is subject to state contract nondiscrimination and compliance requirements pursuant to Government Code, Section 12990.

DATED: 01/30/2026

CITY OF CERES

BY: 
Michael R. Beltran II, P.E.
City Engineer

INSTRUCTIONS TO BIDDERS

SECURING DOCUMENTS

Bids must be submitted to the City on the Bid Forms which are a part of the Bid Package for the Project. Bid and Contract documents may be obtained from the City of Ceres at 2220 Magnolia Street Ceres, CA 95307, as specified in the Notice Inviting Bids. Prospective bidders are encouraged to telephone in advance to determine the availability of the Contract. Any charge for the Contract is stated in the Notice Inviting Bids.

Addenda, if any, issued during the bid period will be sent to those contractors who have obtained documents from the City and will be posted on City of Ceres website as well as the builder's exchange. Failure to acknowledge addenda may make a bid nonresponsive and not eligible for award of the Contract.

EXAMINATION OF SITE AND CONTRACT

At its own expense and prior to submitting its Bid, each Bidder shall have the option to visit the site of the proposed work and fully acquaint itself with the conditions relating to the construction and labor required so that the Bidder may fully understand the work, including but not limited to difficulties and restrictions attending the execution of the work under the Contract. Each Bidder shall carefully examine the Drawings, and shall read the Specifications, Contract, and all other documents referenced herein. Each Bidder shall also determine the local conditions which may in any way affect the performance of the work, including local tax structure, contractors' licensing requirements, availability of required insurance, the prevailing wages and other relevant cost factors, shall familiarize itself with all federal, state and local laws, ordinances, rules, regulations and codes affecting the performance of the work, including the cost of permits and licenses required for the work, and shall make such surveys and investigations, including investigations of subsurface or latent physical conditions at the site or where work is to be performed as may be required. Bidders are responsible for consulting the standards referenced in the Contract. The failure or omission of any Bidder to receive or examine any Contract documents, forms, instruments, addenda, or other documents, or to visit the site and acquaint itself with conditions there existing shall in no way relieve any Bidder from any obligation with respect to its Bid or to the Contract and no relief for error or omission will be given except as required under State law. The submission of a Bid shall be taken as conclusive evidence of compliance with this Article.

INTERPRETATION OF DRAWINGS AND DOCUMENTS

Prospective Bidders unclear as to the true meaning of any part of the Drawings, Specifications or other proposed Contract documents may submit to the Engineer of the City a written request for interpretation. The prospective Bidder submitting the request is responsible for prompt delivery. Interpretation of the Drawings, Specifications or other proposed Contract documents will be made only by a written addendum duly issued and a copy of such addenda will be sent to those contractors who have obtained documents from the City and will be posted on City of Ceres website as well as the builder's exchange. The City will not be responsible for any other explanation or interpretations of the proposed documents. If a Prospective Bidders becomes aware of any errors or omissions in any part of the Contract, it is the obligation of the Prospective Bidder to promptly bring it to the attention of the City.

PRE-BID CONFERENCE

A non-mandatory Pre-Bid Conference will be held in the City Hall Annex Conference Room located in the Engineering Department at 2220 Magnolia Street, Ceres, CA 95307, on **February 12, 2026, at 2:00 p.m.** prevailing local time, to review the Project's existing conditions. Representatives of the City and consulting engineers, if any, will be present. Questions asked by Bidders at the Pre-Bid Conference not specifically addressed within the Contract shall be answered in writing and shall be sent to all Bidders present at the Pre-Bid Conference

ADDENDA

The City reserves the right to revise the Contract prior to the Bid opening date. Revisions, if any, shall be made by written Addendum. All Addenda issued by the City shall be included in the Bid and made part of the Contract. Pursuant to Public Contract Code Section 4104.5, if the City issues an Addendum which includes material changes to the Project less than 72 hours prior to the deadline for submission of Bids, the City will extend the deadline for submission of Bids. The City may determine, in its sole discretion, whether an Addendum warrants postponement of the Bid submission date. Each prospective Bidder shall provide City a name, address, email address, and facsimile number to which Addenda may be sent, as well as a telephone number by which the City can contact the Bidder. Copies of Addenda will be furnished by email, facsimile, first class mail, express mail or other proper means of delivery without charge to all parties who have obtained a copy of the Contract and provided such current information. Please note: Bidders are responsible for ensuring that they have received any and all Addenda. To this end, each Bidder should contact the Engineering Department to verify that it has received all Addenda issued, if any, prior to the Bid opening. The Bidder shall indicate the Addenda received prior to bidding in the space provided in the Bid Form. Failure to indicate all Addenda may be sufficient cause for rejecting the Bid. **The last day to submit questions for the project will be February 19, 2026, at 4:00 p.m. Any questions submitted after the deadline will not be answered.**

ALTERNATE BIDS

If alternate bid items are called for in the Contract, the time required for completion of the alternate bid items has already been factored into the Contract duration and no additional Contract time will be awarded for any of the alternate bid items. At the time of award, the City may elect to include one or more of the alternate bid items, or to otherwise remove certain work from the Project scope of work. Accordingly, each bidder must ensure that each bid item contains a proportionate share of profit, overhead, and other costs or expenses which will be incurred by the bidder.

LOWEST RESPONSIBLE BIDDER:

The lowest bid shall be determined on the amount of the base bid.

CONTRACT TIME

The Contract Time shall be **120 working days**, and liquidated damages for delay shall accrue. Liquidated damages shall be based on the bid amount as shown in the table in Caltrans Standard Specifications section 8-1.10 LIQUIDATED DAMAGES. See the Agreement and Contract Documents for additional details.

COMPLETION OF BID FORMS

Bids shall only be prepared using copies of the Bid Forms which are included in the Contract. The use of substitute Bid Forms other than clear and correct photocopies of those provided by the City will not be permitted. Bids shall be executed by an authorized signatory as described in these Instructions to Bidders. In addition, Bidders shall fill in all blank spaces (including inserting "N/A" where applicable), and initial all interlineations, alterations, or erasures to the Bid Forms. Bidders shall neither delete, modify, nor supplement the printed matter on the Bid Forms nor make substitutions thereon. USE OF BLACK OR BLUE INK, INDELIBLE PENCIL, OR A TYPEWRITER IS REQUIRED. Deviations in the Bid Forms may result in the Bid being deemed non-responsive.

MODIFICATIONS OF BIDS

Each Bidder shall submit its Bid in strict conformity with the requirements of the Contract. Unauthorized additions, modifications, revisions, conditions, limitations, exclusions, or provisions attached to a Bid may render it non-responsive and may cause its rejection. Bidders shall not delete, modify, or supplement the printed matter on the Bid Forms, or make substitutions thereon. Oral, telephonic, and electronic modifications will not be considered.

SUBCONTRACTORS

Bidder shall set forth the name, address of the place of business, and contractor license number of each subcontractor who will perform work, labor, furnish materials or render services to the bidder on said Contract and each subcontractor licensed by the State of California who, under subcontract to bidder, specially fabricates and installs a portion of the Work described in the Drawings and Specifications in an amount in excess of one half of one percent (0.5%) of the total bid price, and shall indicate the portion of the work to be done by such subcontractor in accordance with Public Contract Code Section 4104.

LICENSING REQUIREMENTS

Pursuant to Business and Professions Code Section 7028.15 and Public Contract Code Section 3300, all bidders must possess proper licenses for performance of this Contract, as well as the licenses indicated in the Notice to Bidders. Subcontractors must possess the appropriate licenses for each specialty subcontracted. Pursuant to Business and Professions Code Section 7028.5, the City shall consider any bid submitted by a contractor not currently licensed in accordance with state law and pursuant to the requirements found in the Contract to be nonresponsive, and the City shall reject the Bid. The City shall have the right to request, and Bidders shall provide within ten (10) calendar days, evidence satisfactory to the City of all valid license(s) currently held by that Bidder and each of the Bidder's subcontractors, before awarding the Contract.

Notwithstanding anything contained herein, if the Work involves federal funds, the Contractor shall be properly licensed by the time the Contract is awarded, pursuant to the provisions of Public Contract Code section 20103.5.

BID GUARANTEE (BOND)

Each bid shall be accompanied by (a) cash; (b) a certified or cashier's check made payable to City of Ceres; or (c) a Bid Bond secured from a surety company satisfactory to the City, the amount of which shall not be less than ten percent (10%) of the Total Bid Price, made payable to City of Ceres

as bid security. Personal sureties and unregistered surety companies are unacceptable. The surety insurer shall be California admitted surety insurer, as defined in Code of Civil Procedure Section 995.120. The bid security shall be provided as a guarantee that within ten (10) working days after the City provides the successful bidder the Notice of Award, the successful bidder will enter into a Contract and provide the necessary bonds and certificates of insurance. The bid security will be declared forfeited if the successful bidder fails to comply within said time, and City may enter into a Contract with the next lowest responsive responsible bidder or may call for new bids. No interest shall be paid on funds deposited with the City. City will return the security accompanying the bids of all unsuccessful bidders no later than 60 calendar days after award of the Contract.

RETAINAGE FROM PAYMENTS

The retainage from progress payments on this contract is five percent (5%) pursuant to Public Contract Code §§7201 and 9203. The Contractor may elect to receive 100 percent of payments due under the Contract Documents from time to time, without retention of any portion of the payment by the City, by depositing securities of equivalent value with the City.

IRAN CONTRACTING ACT OF 2010

In accordance with Public Contract Code Section 2200 et seq., the City requires that any person that submits a bid or proposal or otherwise proposes to enter into or renew a contract with the City with respect to goods or services of one million dollars (\$1,000,000) or more, certify at the time the bid is submitted or the contract is renewed, that the person is not identified on a list created pursuant to subdivision (b) of Public Contract Code Section 2203 as a person engaging in investment activities in Iran described in subdivision (a) of Public Contract Code Section 2202.5, or as a person described in subdivision (b) of Public Contract Code Section 2202.5, as applicable.

The form of such Iran Contracting Certificate is included with the bid package and must be signed and dated under penalty of perjury.

NONCOLLUSION DECLARATION

Bidders on all public works contracts are required to submit a declaration of non-collusion with their bid, pursuant to Public Contract Code section 7106. This form is included with the bid package and must be signed and dated under penalty of perjury.

BIDDER INFORMATION AND EXPERIENCE FORM

Each Bidder shall complete the questionnaire provided herein and shall submit the questionnaire along with its Bid. Failure to provide all information requested within the questionnaire along with the Bid may cause the bid to be rejected as non-responsive. The City reserves the right to reject any Bid if an investigation of the information submitted does not satisfy the Engineer that the Bidder is qualified to properly carry out the terms of the Contract.

WORKERS COMPENSATION CERTIFICATION

In accordance with the provisions of Labor Code Section 3700, Contractor shall secure the payment of compensation to its employees. Contractor shall sign and file with the City the following certificate prior to performing the work under this Contract:

I am aware of the provisions of Section 3700 of the Labor Code, which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract.

The form of such Workers' Compensation Certificate is included as part of this document.

SIGNING OF BIDS

All Bids submitted shall be executed by the Bidder or its authorized representative. Bidders may be asked to provide evidence in the form of an authenticated resolution of its Board of Directors or a Power of Attorney evidencing the capacity of the person signing the Bid to bind the Bidder to each Bid and to any Contract arising therefrom.

If a Bidder is a joint venture or partnership, it may be asked to submit an authenticated Power of Attorney executed by each joint venturer or partner appointing and designating one of the joint venturers or partners as a management sponsor to execute the Bid on behalf of Bidder. Only that joint venturer or partner shall execute the Bid. The Power of Attorney shall also: (1) authorize that particular joint venturer or partner to act for and bind Bidder in all matters relating to the Bid; and (2) provide that each venturer or partner shall be jointly and severally liable for any and all of the duties and obligations of Bidder assumed under the Bid and under any Contract arising therefrom. The Bid shall be executed by the designated joint venturer or partner on behalf of the joint venture or partnership in its legal name.

SUBMISSION OF SEALED BIDS

Once the Bid and supporting documents have been completed and signed as set forth herein, they shall be placed, along with the Bid Guarantee and other required materials, in a sealed envelope, addressed and delivered or mailed, postage prepaid, to the Engineering Department of the City before the time and day set for the receipt of bids. The envelope shall bear the title of the work and the name of the bidder. No oral or telephonic bids will be considered. No forms transmitted via the internet, e-mail, facsimile, or any other electronic means will be considered unless specifically authorized by the City as provided herein. Bids received after the time and day set for the receipt of bids shall be returned to the bidder unopened. The envelope shall also contain the following in the lower left-hand corner thereof:

Bid of _____
(Bidder's Name)

for ROCKEFELLER WATER BUILDING IMPROVEMENTS

Only where expressly permitted in the Notice Inviting Bids may bidders submit their bids via electronic transmission pursuant to Public Contract Code sections 1600 and 1601. Any acceptable method(s) of electronic transmission shall be stated in the Notice Inviting Bids. City may reject any bid not strictly complying with City's designated methods for delivery.

OPENING OF BIDS

At the time and place set for the opening and reading of bids, or any time thereafter, each and every bid received prior to the time and day set for the receipt of bids will be publicly opened and read.

The City will leave unopened any Bid received after the specified date and time, and any such unopened Bid will be returned to the bidder. It is the bidder's sole responsibility to ensure that its Bid is received as specified. Bids may be submitted earlier than the date(s) and time(s) indicated.

The public reading of each bid will include the following information:

- The name and business location of the bidder.
- The nature and amount of the bid security furnished by bidder.
- The bid amount.

Bidders or their representatives and other interested persons may be present at the opening of the bids. The City may, in its sole discretion, elect to postpone the opening of the submitted Bids. The City reserves the right to reject any or all Bids and to waive any informality or irregularity in any Bid.

WITHDRAWAL OF BID

Any bid may be withdrawn either personally or by written request, incurring no penalty, at any time prior to the scheduled closing time for receipt of bids. Requests to withdraw bids shall be worded so as not to reveal the amount of the original bid. Withdrawn bids may be resubmitted until the time and day set for the receipt of bids, provided that resubmitted bids are in conformance with the instructions herein.

Bids may be withdrawn after bid opening only by providing written notice to City within five (5) working days of the bid opening and in compliance with Public Contract Code Section 5100 et seq., or as otherwise may be allowed with the consent of the City.

BIDDERS INTERESTED IN MORE THAN ONE BID

No Bidder shall be allowed to make, file or be interested in more than one bid for the same work unless alternate bids are specifically called for. A person, firm or corporation that has submitted a sub-proposal to a Bidder, or that has quoted prices of materials to a Bidder, is not thereby disqualified from submitting a sub-proposal or quoting prices to other bidders. No person, firm, corporation, or other entity may submit a sub-proposal to a Bidder, or quote prices of materials to a Bidder, when also submitting a prime Bid on the same Project.

SUBSTITUTION OF SECURITY

The Contract call for monthly progress payments based upon the percentage of the Work completed. The City will retain a percentage of each progress payment as provided by the Contract. At the request and expense of the successful Bidder, the City will substitute securities for the amount so retained in accordance with Public Contract Code Section 22300.

PREVAILING WAGES

The City has obtained from the Director of the Department of Industrial Relations the general prevailing rate of per diem wages in the locality in which this work is to be performed for each craft or type of worker needed to execute the Contract. These rates are available at the City of Ceres's Engineering Department or may be obtained online at <http://www.dir.ca.gov>. Bidders are advised that a copy of these rates must be posted by the successful Bidder at the job site(s).

DEBARMENT OF CONTRACTORS AND SUBCONTRACTORS

In accordance with the provisions of the Labor Code, contractors or subcontractors may not perform work on a public works project with a subcontractor who is ineligible to perform work on a public project pursuant to Labor Code Sections 1777.1 or 1777.7. Any contract on a public works project entered into between a contractor and a debarred subcontractor is void as a matter of law. A debarred subcontractor may not receive any public money for performing work as a subcontractor on a public works contract. Any public money that is paid to a debarred subcontractor by the Contractor for the Project shall be returned to the City. The Contractor shall be responsible for the payment of wages to workers of a debarred subcontractor who has been allowed to work on the Project.

INSURANCE REQUIREMENTS

Prior to commencing work, the successful bidder shall purchase and maintain insurance as set forth in the Contract. Failure to meet the insurance requirements will cause the City to withdraw any award and the successful bidder will forfeit their bid bond. A payment bond, performance bond, guaranty and all insurance required for this contract must be filed with the contract documents and approved by the City Attorney before the Contractor enters upon performance of the work. Endorsement for additional insured shall be submitted on standard form CG 20101185. Endorsement forms CG 20101001 and CG 20371001, when used together, are acceptable in lieu of CG 20101185 for Public Works projects. Failure to meet the requirements will result in forfeiture of bid security. All Insurance required shall be from a California admitted insurance company.

PERFORMANCE BOND AND PAYMENT BOND REQUIREMENTS

The successful bidder will be required to furnish a Labor and Material Payment Bond and a Faithful Performance Bond each in an amount equal to one hundred percent (100%) of the contract price. Each bond shall be secured from a surety company that meets all State of California bonding requirements, as defined in California Code of Civil Procedure Section 995.120 and is admitted by the State of California. Each bond shall be accompanied, upon the request of City, with all documents required by California Code of Civil Procedure Section 995.660 to the extent required by law. All bonding and insurance requirements shall be completed and submitted to City within ten (10) working days from the date the City provides the successful bidder with the Notice of Award.

SALES AND OTHER APPLICABLE TAXES, PERMITS, LICENSES AND FEES

Contractor and its subcontractors performing work under this Contract will be required to pay California sales tax and other applicable taxes, and to pay for permits, licenses and fees required by the agencies with authority in the jurisdiction in which the Work will be located, unless otherwise expressly provided by the Contract.

FILING OF BID PROTESTS

Bidders may file a "protest" of a Bid with the City's City Engineer. In order for a Bidder's protest to be considered valid, the protest must:

- Be filed in writing within five (5) calendar days after the bid opening date;
- Clearly identify the specific irregularity or accusation;
- Clearly identify the specific City staff determination or recommendation being protested;
- Specify in detail the grounds for protest and the facts supporting the protest; and

- Include all relevant, supporting documentation with the protest at time of filing.

If the protest does not comply with each of these requirements, the City may reject the protest without further review.

If the protest is timely and complies with the above requirements, the City's City Engineer, or other designated City staff member, shall review the protest, any response from the challenged Bidder(s), and all other relevant information. The City Engineer will provide a written decision to the protestor.

The procedure and time limits set forth in this Article are mandatory and are the sole and exclusive remedy in the event of a Bid protest. Failure to comply with these procedures shall constitute a failure to exhaust administrative remedies and a waiver of any right to further pursue the Bid protest, including filing a Government Code Claim or legal proceedings.

BASIS OF AWARD; BALANCED BID

The City shall award the Contract to the lowest responsible Bidder submitting a responsive Bid. The lowest Bid will be determined on the basis of the Total Bid Price.

In the comparison of Bids, deductive bid items will be applied in the same alphabetical order of priority as listed in the Bid Form. To determine the Bid prices for purposes of comparison, Owner shall announce to all bidders a Project budget after receiving all Bids, but prior to opening them. For comparison purposes, if the Total Base Bid Amount exceeds the announced Project budget, deductive bid items will be accepted, following the order of priority established in the Bid Form, until doing so would allow the project to remain under budget. After determination of the Successful Bidder based on this comparative process and on the responsiveness, responsibility, and other factors, set forth in these Instructions, the award may be made to said Successful Bidder on its base Bid and any combination of its deductive item Bids for which Owner determines funds will be available at the time of award.

The City may reject any Bid which, in its opinion when compared to other Bids received or to the City's internal estimates, does not accurately reflect the cost to perform the Work. The City may reject as non-responsive any Bid which unevenly weights or allocates costs, including but not limited to overhead and profit to one or more particular bid items.

AWARD PROCESS

Once all Bids are opened and reviewed to determine the lowest responsive and responsible Bidder, the City Council may award the Contract. The apparent successful Bidder should begin to prepare the following documents: (1) the Performance Bond; (2) the Payment Bond; and (3) the required insurance certificates and endorsements. Once the City notifies the Bidder of the award, the Bidder will have ten (10) working days from the date of this notification to execute the Contract and supply the City with all of the required documents and certifications. Regardless of whether the Bidder supplies the required documents and certifications in a timely manner, the Contract time will begin to run twenty (20) working days from the date of the notification. Once the City receives all of the properly drafted and executed documents and certifications from the Bidder, the City shall issue a Notice to Proceed to that Bidder.

EXECUTION OF CONTRACT

As required herein the Bidder to whom an award is made shall execute the Contract in the amount determined by the Contract. The City may require appropriate evidence that the persons executing the Contract are duly empowered to do so. The Contract and bond forms to be executed by the successful Bidder are included within these Specifications and shall not be detached.

INTERNET BASED CONSTRUCTION MANAGEMENT SYSTEM

The Engineer and Contractor shall utilize Virtual Project Manager (<http://www.virtual-pm.com/>), herein after called VPM, for submission of all data and documents (unless specified otherwise in this Section) throughout the duration of the Contract. VPM is an electronic project management system accessible through the Internet used to create, share, and review construction management documentation. VPM is provided by the Engineer at no cost to the Contractor. VPM will be made available to all Contractors' personnel, subcontractor personnel, suppliers, consultants, Engineer, and any of Engineer's representatives or agents. The joint use of this system is to facilitate electronic exchange of information, automation of key processes, electronic notification of project activity, and overall management of contract documentation. VPM shall be the primary means of project information submission and management.

The Engineer will establish the Contractor's access to VPM by enabling access and assigning user profiles to Contractor personnel, including subcontractors and suppliers, as requested by Contractor. All authorized personnel shall have an individual user profile; no joint-use or shared user profiles will be allowed. Each user profile shall be assigned to a user group and have specific permission settings and privileges based on the user's need within VPM. Entry of information exchanged and transferred between the Contractor and its subcontractors and suppliers on VPM shall be the responsibility of the Contractor.

The Contractor shall use computer hardware and software that meets the requirements of the VPM system. As recommendations are modified by VPM, the Contractor will upgrade their system(s) to meet or exceed the recommendations. Upgrading of the Contractor's computer systems will not be justification for a cost or time modification to the Contract. The Contractor shall ensure its own connectivity to VPM through their internet service provider.

The Contractor shall be responsible for the validity of the information they place in VPM, for the training of their personnel to understand and utilize VPM, as well as the provision and accessibility of adequate resources to connect with VPM. Accepted users shall be knowledgeable in the use of computers, including Internet browsers, email programs, and the Portable Document Format (PDF) document type. The Contractor shall utilize the existing forms in VPM to the maximum extent possible. If a form does not exist in VPM the Contractor must include their own form or a form provided by the Engineer as an attachment to a submittal, RFI, or other document within VPM. Note that only the following file types are accepted as attachments to documents within VPM: PDF files, Microsoft Word (DOC) files, Microsoft Excel (XLS) files, picture files (JPG, TIFF, BMP, JPEG, etc.). PDF documents will be created through electronic conversion prior to uploading, such as through a "print to file" feature or "save as pdf" feature, rather than optically scanned whenever possible.

Contractor shall provide a list of key VPM personnel for the Engineer's acceptance. The list shall include the following information: first name, last name, address, title, office phone number, cell

phone number, and email address. The Engineer is responsible for adding and removing users from the system and establishing read, write, and approval permission levels.

QUESTIONS

Questions regarding this Notice Inviting Bids may be directed to **Kevin Silva**, at **209-538-5617** or email at **kevin.silva@ceres.gov**. No other members of the City's staff or City Council should be contacted about this procurement during the bidding process. Any and all inquiries and comments regarding this Bid must be communicated in writing, unless otherwise instructed by the City. The City may, in its sole discretion, disqualify any Bidder who engages in any prohibited communications.

BID FORMS

BID.

Bids will be received at 2220 Magnolia Street, Ceres, California 95307, until **2:00 p.m. on February 26, 2026.**

NAME OF BIDDER: _____

City of Ceres
2220 Magnolia Street
Ceres, California 95307

The undersigned hereby declare that we have carefully examined the location of the proposed Work, and have read and examined the Contract, including all plans, specifications, and all addenda, if any for the following Project:

ROCKEFELLER WATER BUILDING IMPROVEMENTS

We hereby propose to furnish all labor, materials, equipment, tools, transportation, and services, and to discharge all duties and obligations necessary and required to perform and complete the Project, as described and in strict conformity with the Drawings, and these Specifications for TOTAL BID PRICE indicated herein.

The undersigned acknowledges receipt, understanding, and full consideration of the following addenda to the Contract:

Addenda No. _____

Attached are the following documents:

1. Bid Bond
2. List of Subcontractors
3. Non-Collusion Declaration
4. Iran Contracting Act Certification
5. Bidder Information and Experience Form.

BID SCHEDULE

ITEM NO.	ITEM	UNIT OF MEASURE	ESTIMATED QUANTITY	UNIT PRICE (IN FIGURES)	ITEM TOTAL (IN FIGURES)
1	Construction of all work associated with the Rockefeller Water Building Improvements Project inclusive of tenant improvements and sitework	LS	1		
TOTAL BID					

The costs for any Work shown or required in the Contract, but not specifically identified as a line item are to be included in the related line items and no additional compensation shall be due to Contractor for the performance of the Work.

In case of discrepancy between the Unit Price and the Item Cost set forth for a unit basis item, the unit price shall prevail and shall be utilized as the basis for determining the lowest responsive, responsible Bidder. However, if the amount set forth as a unit price is ambiguous, unintelligible, or uncertain for any cause, or is omitted, or is the same amount as the entry in the "Item Cost" column, then the amount set forth in the "Item Cost" column for the item shall prevail and shall be divided by the estimated quantity for the item and the price thus obtained shall be the Unit Price.

For purposes of evaluating Bids, the City will correct any apparent errors in the extension of unit prices and any apparent errors in the addition of lump sum and extended prices.

The estimated quantities for Unit Price items are for purposes of comparing Bids only and the City makes no representation that the actual quantities of work performed will not vary from the estimates. Final payment shall be determined by the Engineer from measured quantities of work performed based upon the Unit Price.

TOTAL BID PRICE:

TOTAL BID PRICE BASED ON BID SCHEDULE TOTAL OF UNIT PRICES FOR ROCKEFELLER WATER BUILDING IMPROVEMENTS	
\$ _____	Total Bid Price in Numbers
\$ _____	Total Bid Price in Written Form

The undersigned agrees that this Bid Form constitutes a firm offer to the City which cannot be withdrawn for the number of calendar days indicated in the Notice Inviting Bids from and after the Bid opening, or until a Contract for the Work is fully executed by the City and a third party, whichever is earlier.

The successful bidder hereby agrees to sign the Contract and furnish the necessary bonds and certificates of insurance within ten (10) working days after the City provides the successful bidder with the Notice of Award.

Upon receipt of the signed Contract and other required documents, the Contract will be executed by the City, after which the City will prepare a letter giving Contractor Notice to Proceed. The official starting date shall be the date of the Notice to Proceed, unless otherwise specified. The undersigned agrees to begin the Work within ten (10) working days of the date of the Notice to Proceed, unless otherwise specified. The undersigned has examined the location of the proposed work and is familiar with the Drawings and Specifications and the local conditions at the place where work is to be done.

If awarded the Contract, the undersigned agrees that there shall be paid by the undersigned and by all subcontractors to all laborers, workers and mechanics employed in the execution of such Contract no less than the prevailing wage rate within Stanislaus County for each craft, classification, or type of worker needed to complete the Work contemplated by this Contract as established by the Director of the Department of Industrial Relations. A copy of the prevailing rate of per diem wages are on file at the City's Administration Office and shall be made available to interested parties upon request.

Enclosed find cash, bidder's bond, or cashier's or certified check No. _____ from the _____ Bank in the amount of _____, which is not less than ten percent (10%) of this bid, payable to City of Ceres as bid security and which is given as a guarantee that the undersigned will enter into a Contract and provide the necessary bonds and certificates of insurance if awarded the Work.

The bidder furthermore agrees that in case of bidder's default in executing said Contract and furnishing required bonds and certificates of insurance, the cash, bidder's bond, or cashier's or certified check accompanying this proposal and the money payable thereon shall become and shall remain the property of the City of Ceres.

Bidder is an individual _____, or corporation _____, or partnership _____, organized under the laws of the State of _____.

Bidder confirms license(s) required by California State Contractor's License Law for the performance of the subject project are in full effect and proper order. The following are the Bidder's applicable license number(s), with their expiration date(s) and class of license(s):

If the Bidder is a joint venture, each member of the joint venture must include the required licensing information.

Sureties that will furnish the Faithful Performance Bond and the Labor and Material Payment Bond, in the form specified herein, in an amount equal to one hundred percent (100%) of the contract price within ten (10) working days from the date the City provides the successful bidder the Notice of Award. Sureties must meet all of the State of California bonding requirements, as defined in California Code of Civil Procedure Section 995.120 and must be authorized by the State of California.

The insurance company or companies to provide the insurance required in the Contract documents must have a Financial Strength Rating of not less than "A-" and a Financial Size Category of not less than "Class VII" according to the latest Best Key Rating Guide. At the sole discretion of the City, the City may waive the Financial Strength Rating and the Financial Size Category classifications for Workers' Compensation insurance.

I hereby certify under penalty of perjury under the laws of the State of California that all of the information submitted in connection with this Bid and all of the representations made herein are true and correct.

Executed at _____, on this ____ day of _____, ____.

(Bidders Name – Print or Type)

(Name and Title)

(Corporate Seal)

(Signature)

Names of individual members of firm or names and titles of all officers of corporation and their addresses are listed below:

Name _____ Title _____

Complete Address _____

Phone _____ FAX _____

Name _____ Title _____

Complete Address _____

Phone _____ FAX _____

Name _____ Title _____

Complete Address _____

Phone _____ FAX _____

Name _____ Title _____

Complete Address _____

Phone _____ FAX _____

1. BID BOND

[Note: Not required when other form of Bidder's Security, e.g., cash, certified check, or cashier's check, accompanies bid.]

The makers of this bond are, _____, as Principal, and _____, as Surety and are held and firmly bound unto the City of Ceres, hereinafter called the City, in the penal sum of TEN PERCENT (10%) OF THE TOTAL BID PRICE of the Principal submitted to City for the work described below, for the payment of which sum in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that whereas the Principal has submitted the accompanying bid dated _____, 20____, for **ROCKEFELLER WATER BUILDING IMPROVEMENTS**

If the Principal does not withdraw its Bid within the time specified in the Contract; and if the Principal is awarded the Contract and provides all documents to the City as required by the Contract; then this obligation shall be null and void. Otherwise, this bond will remain in full force and effect.

Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the Contract shall in affect its obligation under this bond, and Surety does hereby waive notice of any such changes.

In the event a lawsuit is brought upon this bond by the City and judgment is recovered, the Surety shall pay all litigation expenses incurred by the City in such suit, including reasonable attorneys' fees, court costs, expert witness fees and expenses.

IN WITNESS WHEREOF, the above-bound parties have executed this instrument under their several seals this _____ day of _____, 20____, the name and corporate seal of each corporation.

(Corporate Seal)

Contractor/ Principal

By _____

Title _____

(Corporate Seal)

Surety _____

By _____

Attorney-in-Fact

(Attach Attorney-in-Fact Certificate) Title _____

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____, 20____, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory

Name(s) of Signer(s)

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

- ☐ Individual
☐ Corporate Officer

Title(s)

Title or Type of Document

- ☐ Partner(s) ☐ Limited
 ☐ General

Number of Pages

- ☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Date of Document

Signer is representing:
Name Of Person(s) Or Entity(ies)

Signer(s) Other Than Named Above

NOTE: This acknowledgment is to be completed for Contractor/Principal.

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____, 20____, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

- ☐ Individual
☐ Corporate Officer

Title(s)

- ☐ Partner(s) ☐ Limited
 ☐ General

- ☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Signer is representing:
Name Of Person(s) Or Entity(ies)

Title or Type of Document

Number of Pages

Date of Document

Signer(s) Other Than Named Above

NOTE: This acknowledgment is to be completed for the Attorney-in-Fact. The Power-of-Attorney to local representatives of the bonding company must also be attached.

END OF BID BOND

2. LIST OF SUBCONTRACTORS

In compliance with the Subletting and Subcontracting Fair Practices Act Chapter 4 (commencing at Section 4100), Part 1, Division 2 of the Public Contract Code of the State of California and any amendments thereof, Bidder shall set forth below: (a) the name and the location of the place of business, (b) the California contractor license number, (c) the DIR public works contractor registration number unless exempt pursuant to Labor Code Sections 1725.5 and 1771.1, and (d) the portion of the work which will be done by each subcontractor who will perform work or labor or render service to the Bidder in or about the construction of the work or improvement to be performed under this Contract in an amount in excess of one-half of one percent (0.5%) of the Bidder's Total Bid Price. Notwithstanding the foregoing, if the work involves the construction of streets and highways, then the Bidder shall list each subcontractor who will perform work or labor or render service to the Bidder in or about the work in an amount in excess of one-half of one percent (0.5%) of the Bidder's Total Bid Price or \$10,000, whichever is greater. No additional time shall be granted to provide the below requested information.

If a Bidder fails to specify a subcontractor or if a contractor specifies more than one subcontractor for the same portion of work, then the Bidder shall be deemed to have agreed that it is fully qualified to perform that portion of work and that it shall perform that portion itself.

Exhibit 12-B: Bidder's List of Subcontractor (DBE and Non-DBE) - Part 1

As of March 1, 2015 Contractors (and sub-contractors) wishing to bid on public works contracts must be registered with the State Division of Industrial Relations and certified to bid on Public Works contracts. Please register at <https://www.dir.ca.gov/Public-Works/Contractor-Registration.html>. The local agency will verify registration of all contractors and subcontractors on public works projects at bid and thereafter annually to assure that yearly registration is maintained throughout the life of the project.

In accordance with Title 49, Section 26.11 of the Code of Federal Regulations, and Section 4104 of the Public Contract Code of the State of California, as amended, the following information is required for each sub-contractor who will perform work amounting to more than one half of one percent (0.5%) of the Total Base Bid or \$10,000 (whichever is greater).

Photocopy this form for additional firms.

FEDERAL PROJECT NUMBER:

Subcontractor Name & Location	Line Item & Description	Subcontract Amount	Percentage of Bid Item Subcontracted	Contractor License Number	DBE (Y/N)	DBE Cert Number	Annual Gross Receipts
				DIR Reg Number			
NAME							< \$1 million
							< \$5 million
City, State							< \$10 million
							< \$15 million
							Age of Firm in years
NAME							< \$1 million
							< \$5 million
City, State							< \$10 million
							< \$15 million
							Age of Firm in years
NAME							< \$1 million
							< \$5 million
City, State							< \$10 million
							< \$15 million
							Age of Firm in years
NAME							< \$1 million
							< \$5 million
City, State							< \$10 million
							< \$15 million
							Age of Firm in years
NAME							< \$1 million
							< \$5 million
City, State							< \$10 million
							< \$15 million
							Age of Firm in years
NAME							< \$1 million
							< \$5 million
City, State							< \$10 million
							< \$15 million
							Age of Firm in years
NAME							< \$1 million
							< \$5 million
City, State							< \$10 million
							< \$15 million
							Age of Firm in years
NAME							< \$1 million
							< \$5 million
City, State							< \$10 million
							< \$15 million
							Age of Firm in years
NAME							< \$1 million
							< \$5 million
City, State							< \$10 million
							< \$15 million
							Age of Firm in years

Distribution — Original: Local Agency File; Copy: DLAE w/Award Package

Exhibit 12-B: Bidder's List of Subcontractor (DBE and Non-DBE) - Part 2

In accordance with Title 49, Section 26 of the Code of Federal Regulations, the Bidder shall list all subcontractors who provided a quote or bid but **were not selected** to participate as a subcontractor on this project.

Photocopy this form for additional firms.

FEDERAL PROJECT NUMBER:

Subcontractor Name & Location	Line Item & Description	Subcontract Amount	Percentage of Bid Item Subcontracted	Contractor License Number	DBE (Y/N)	DBE Cert Number	Annual Gross Receipts
				DIR Reg Number			
NAME							< \$1 million
							< \$5 million
							< \$10 million
City, State							< \$15 million
							Age of Firm in years
NAME							< \$1 million
							< \$5 million
							< \$10 million
City, State							< \$15 million
							Age of Firm in years
NAME							< \$1 million
							< \$5 million
							< \$10 million
City, State							< \$15 million
							Age of Firm in years
NAME							< \$1 million
							< \$5 million
							< \$10 million
City, State							< \$15 million
							Age of Firm in years
NAME							< \$1 million
							< \$5 million
							< \$10 million
City, State							< \$15 million
							Age of Firm in years
NAME							< \$1 million
							< \$5 million
							< \$10 million
City, State							< \$15 million
							Age of Firm in years
NAME							< \$1 million
							< \$5 million
							< \$10 million
City, State							< \$15 million
							Age of Firm in years
NAME							< \$1 million
							< \$5 million
							< \$10 million
City, State							< \$15 million
							Age of Firm in years
NAME							< \$1 million
							< \$5 million
							< \$10 million
City, State							< \$15 million
							Age of Firm in years

Distribution – Original: Local Agency File; Copy: DLAE w/Award Package

3. NONCOLLUSION DECLARATION

The undersigned declares:

I am the _____ of _____, the party making the foregoing Bid.

The Bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The Bid is genuine and not collusive or sham. The Bidder has not directly or indirectly induced or solicited any other Bidder to put in a false or sham bid. The Bidder has not directly or indirectly colluded, conspired, connived, or agreed with any Bidder or anyone else to put in a sham bid, or to refrain from bidding. The Bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the Bid Price of the Bidder or any other Bidder, or to fix any overhead, profit, or cost element of the Bid Price, or of that of any other Bidder. All statements contained in the Bid are true. The Bidder has not, directly or indirectly, submitted his or her Bid Price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a Bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the Bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____ [date], at _____ [city], _____ [state].

Name of Bidder _____

Signature _____

Name _____

Title _____

4. IRAN CONTRACTING ACT CERTIFICATION

(Public Contract Code section 2200 et seq.)

As required by California Public Contract Code Section 2204, the Contractor certifies subject to penalty for perjury that the option checked below relating to the Contractor's status in regard to the Iran Contracting Act of 2010 (Public Contract Code Section 2200 *et seq.*) is true and correct:

☐ The Contractor is not:

(1) identified on the current list of person and entities engaged in investment activities in Iran prepared by the California Department of General Services in accordance with subdivision (b) of Public Contract Code Section 2203; or

(2) a financial instruction that extends, for 45 days or more, credit in the amount of \$20,000,000 or more to any other person or entity identified on the current list of persons and entities engaging in investment activities in Iran prepared by the California Department of General Services in accordance with subdivision (b) of Public Contract Code Section 2203, if that person or entity uses or will use the credit to provide goods or services in the energy sector in Iran.

☐ The City has exempted the Contractor from the requirements of the Iran Contracting Act of 2010 after making a public finding that, absent the exemption, the City will be unable to obtain the goods and/or services to be provided pursuant to the Contract.

☐ The amount of the Contract payable to the Contractor for the Project does not exceed \$1,000,000.

Signature: _____

Printed Name: _____

Title: _____

Firm Name: _____

Date: _____

Note: In accordance with Public Contract Code Section 2205, false certification of this form shall be reported to the California Attorney General and may result in civil penalties equal to the greater of \$250,000 or twice the Contract amount, termination of the Contract and/or ineligibility to bid on contracts for three years.

5. BIDDER INFORMATION AND EXPERIENCE FORM

INFORMATION ABOUT BIDDER

(Indicate not applicable ("N/A") where appropriate.)

NOTE: Where Bidder is a joint venture, pages shall be duplicated and information provided for all parties to the joint venture.

1.0 Name of Bidder: _____

2.0 Type, if Entity: _____

3.0 Bidder Address: _____

Facsimile Number

Telephone Number

Email Address

4.0 How many years has Bidder's organization been in business as a Contractor?

5.0 How many years has Bidder's organization been in business under its present name? _____

5.1 Under what other or former names has Bidder's organization operated? _____

6.0 If Bidder's organization is a corporation, answer the following:

6.1 Date of Incorporation: _____

6.2 State of Incorporation: _____

6.3 President's Name: _____

6.4 Vice-President's Name(s): _____

6.5 Secretary's Name: _____

6.6 Treasurer's Name: _____

7.0 If an individual or a partnership, answer the following:

7.1 Date of Organization: _____

7.2 Name and address of all partners (state whether general or limited partnership):

8.0 If other than a corporation or partnership, describe organization and name principals:

9.0 List other states in which Bidder's organization is legally qualified to do business.

10.0 What type of work does the Bidder normally perform with its own forces?

11.0 Has Bidder ever failed to complete any work awarded to it? If so, note when, where, and why:

12.0 Within the last five years, has any officer or partner of Bidder's organization ever been an officer or partner of another organization when it failed to complete a contract? If so, attach a separate sheet of explanation:

13.0 List Trade References:

14.0 List Bank References (Bank and Branch Address):

15.0 Name of Bonding Company and Name and Address of Agent:

[REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

LIST OF CURRENT PROJECTS (BACKLOG)

[**Duplicate Page if needed for listing additional current projects.**]

Project	Description of Bidder's Work	Completion Date	Cost of Bidder's Work

LIST OF COMPLETED PROJECTS – LAST THREE YEARS

[**Duplicate Page if needed for listing additional completed projects.**]

Please include only those projects which are similar enough to demonstrate Bidder's ability to perform the required Work.

Project	Description of Bidder's Work	Completion Date	Cost of Bidder's Work

EXPERIENCE AND TECHNICAL QUALIFICATIONS QUESTIONNAIRE

The Bidder shall identify the key personnel to be assigned to this project in a management, construction supervision or engineering capacity.

1. List each person's job title, name and percent of time to be allocated to this project:

2. Summarize each person's specialized education:

3. List each person's years of construction experience relevant to the project:

4. Summarize such experience:

Bidder agrees that personnel named in this Bid will remain on this Project until completion of all relevant Work, unless substituted by personnel of equivalent experience and qualifications approved in advance by the City.

Changes Occurring Since Prequalification

If any substantive changes have occurred since Bidder submitted its prequalification package for this Project, Bidder shall list them below. If none are listed, Bidder certifies that no substantive changes have occurred.

Additional Bidder's Statements:

If the Bidder feels that there is additional information which has not been included in the questionnaire above, and which would contribute to the qualification review, it may add that information in a statement here or on an attached sheet, appropriately marked:

VERIFICATION AND EXECUTION

These Bid Forms shall be executed only by a duly authorized official of the Bidder:

I declare under penalty of perjury under the laws of the State of California that the foregoing information is true and correct:

Name of Bidder _____

Signature _____

Name _____

Title _____

Date _____

Contractor License No. _____

DIR Contractor Registration No. _____

SAMPLE CONTRACT DOCUMENTS

CITY OF CERES

CONSTRUCTION CONTRACT

ROCKEFELLER WATER BUILDING IMPROVEMENTS PROJECT NO. 2402

1. PARTIES AND DATE.

This Contract is made and entered into this Xth day of XXXXX, 20XX by and between the City of Ceres, a public agency and public corporation of the State of California ("City") and XXXXXXXXXXXXXXX, a corporation with its principal place of business at XXX XXXXXXXXXXXXXXX, XXXXXXXX, California XXXXX ("Contractor"). City and Contractor are sometimes individually referred to as "Party" and collectively as "Parties" in this Contract.

2. RECITALS.

2.1 City. City is a public agency organized under the laws of the State of California, with power to contract for services necessary to achieve its purpose.

2.2 Contractor. Contractor desires to perform and assume responsibility for the provision of certain construction services required by the City on the terms and conditions set forth in this Contract. Contractor represents that it is duly licensed and experienced in providing tenant improvement to existing building space. Work to include demolition of interior walls, plumbing, and electrical. New work to include new walls, ceilings, finishes, new mechanical, plumbing, electrical, and structural related construction services to public clients, that it and its employees or subcontractors have all necessary licenses and permits to perform the services in the State of California, and that it is familiar with the plans of City. The following license classifications are required for this Project: General Contractor license per IPBA standards for **Class B**

2.3 Project. City desires to engage Contractor to render such services for the Rockefeller Water Building Improvements Project ("Project") as set forth in this Contract.

2.4 Project Documents & Certifications. Contractor has obtained, and delivers concurrently herewith, a performance bond, a payment bond, and all insurance documentation, as required by the Contract.

3. TERMS

3.1 Incorporation of Documents. This Contract includes and hereby incorporates in full by reference the following documents, including all exhibits, drawings, specifications and documents therein, and attachments and addenda thereto:

- Services/Schedule (Exhibit "A")
- Plans and Specifications (Exhibit "B")
- Special Conditions (Exhibit "C")
- Contractor's Certificate Regarding Workers' Compensation (Exhibit "D")
- Public Works Contractor Registration Certification (Exhibit "E")
- Payment and Performance Bonds (Exhibit "F")

- Federal Requirements (Exhibit “G”)
- Addenda
- Change Orders executed by the City
- Latest Edition of the Standard Specifications for Public Works Construction (The Greenbook), Excluding Sections 1-9
- Notice Inviting Bids, if any
- Instructions to Bidders, if any
- Contractor’s Bid

3.2 Contractor’s Basic Obligation; Scope of Work. Contractor promises and agrees, at its own cost and expense, to furnish to the City all labor, materials, tools, equipment, services, and incidental and customary work necessary to fully and adequately complete the Project, including all structures and facilities necessary for the Project or described in the Contract (hereinafter sometimes referred to as the “Work”), for a Total Contract Price as specified pursuant to this Contract. All Work shall be subject to, and performed in accordance with the above referenced documents, as well as the exhibits attached hereto and incorporated herein by reference. The plans and specifications for the Work are further described in Exhibit “B” attached hereto and incorporated herein by this reference. Special Conditions, if any, relating to the Work are described in Exhibit “C” attached hereto and incorporated herein by this reference.

3.2.1 Change in Scope of Work. Any change in the scope of the Work, method of performance, nature of materials or price thereof, or any other matter materially affecting the performance or nature of the Work shall not be paid for or accepted unless such change, addition or deletion is approved in writing by a valid change order executed by the City. Should Contractor request a change order due to unforeseen circumstances affecting the performance of the Work, such request shall be made within five (5) business days of the date such circumstances are discovered or shall waive its right to request a change order due to such circumstances. If the Parties cannot agree on any change in price required by such change in the Work, the City may direct the Contractor to proceed with the performance of the change on a time and materials basis.

3.2.2 Substitutions/“Or Equal”. Pursuant to Public Contract Code Section 3400(b), the City may make a finding that designates certain products, things, or services by specific brand or trade name. Unless specifically designated in this Contract, whenever any material, process, or article is indicated or specified by grade, patent, or proprietary name or by name of manufacturer, such Specifications shall be deemed to be used for the purpose of facilitating the description of the material, process or article desired and shall be deemed to be followed by the words “or equal.”

Contractor may, unless otherwise stated, offer for substitution any material, process or article which shall be substantially equal or better in every respect to that so indicated or specified in this Contract. However, the City may have adopted certain uniform standards for certain materials, processes and articles. Contractor shall submit requests, together with substantiating data, for substitution of any “or equal” material, process or article no later than thirty-five (35) days after award of the Contract. To facilitate the construction schedule and sequencing, some requests may need to be submitted before thirty-five (35) days after award of Contract. Provisions regarding submission of “or equal” requests shall not in any way authorize an extension of time for performance of this Contract. If a proposed “or equal” substitution request is rejected, Contractor shall be responsible for providing the specified material, process or article. The burden of proof as to the equality of any material, process or article shall rest with Contractor.

The City has the complete and sole discretion to determine if a material, process or article is an "or equal" material, process or article that may be substituted. Data required to substantiate requests for substitutions of an "or equal" material, process or article data shall include a signed affidavit from Contractor stating that, and describing how, the substituted "or equal" material, process or article is equivalent to that specified in every way except as listed on the affidavit. Substantiating data shall include any and all illustrations, specifications, and other relevant data including catalog information which describes the requested substituted "or equal" material, process or article, and substantiates that it is an "or equal" to the material, process or article. The substantiating data must also include information regarding the durability and lifecycle cost of the requested substituted "or equal" material, process or article. Failure to submit all the required substantiating data, including the signed affidavit, to the City in a timely fashion will result in the rejection of the proposed substitution.

Contractor shall bear all of the City's costs associated with the review of substitution requests. Contractor shall be responsible for all costs related to a substituted "or equal" material, process or article. Contractor is directed to the Special Conditions (if any) to review any findings made pursuant to Public Contract Code section 3400.

3.3 Period of Performance and Liquidated Damages. Contractor shall perform and complete all Work under this Contract within 120 working days, beginning the effective date of the Notice to Proceed ("Contract Time"). Contractor shall perform its Work in strict accordance with any completion schedule, construction schedule or project milestones developed by the City. Such schedules or milestones may be included as part of Exhibits "A" or "B" attached hereto, or may be provided separately in writing to Contractor. Contractor agrees that if such Work is not completed within the aforementioned Contract Time and/or pursuant to any such completion schedule, construction schedule or project milestones developed pursuant to provisions of the Contract, it is understood, acknowledged and agreed that the City will suffer damage. Pursuant to Government Code Section 53069.85, Contractor shall pay to the City as fixed and liquidated damages the sum of **Five Thousand Two Hundred Dollars (\$5,200.00) per day** for each and every calendar day of delay beyond the Contract Time or beyond any completion schedule, construction schedule or Project milestones established pursuant to the Contract.

3.4 Standard of Performance; Performance of Employees. Contractor shall perform all Work under this Contract in a skillful and workmanlike manner, and consistent with the standards generally recognized as being employed by professionals in the same discipline in the State of California. Contractor represents and maintains that it is skilled in the professional calling necessary to perform the Work. Contractor warrants that all employees and subcontractors shall have sufficient skill and experience to perform the Work assigned to them. Finally, Contractor represents that it, its employees and subcontractors have all licenses, permits, qualifications and approvals of whatever nature that are legally required to perform the Work, including an City Business License, and that such licenses and approvals shall be maintained throughout the term of this Contract. As provided for in the indemnification provisions of this Contract, Contractor shall perform, at its own cost and expense and without reimbursement from the City, any work necessary to correct errors or omissions which are caused by Contractor's failure to comply with the standard of care provided for herein. Any employee who is determined by the City to be uncooperative, incompetent, a threat to the safety of persons or the Work, or any employee who fails or refuses to perform the Work in a manner acceptable to the City, shall be promptly removed from the Project by Contractor and shall not be re-employed on the Work.

3.5 Control and Payment of Subordinates; Contractual Relationship. City retains Contractor on an independent contractor basis and Contractor is not an employee of City. Any additional personnel performing the work governed by this Contract on behalf of Contractor shall

at all times be under Contractor's exclusive direction and control. Contractor shall pay all wages, salaries, and other amounts due such personnel in connection with their performance under this Contract and as required by law. Contractor shall be responsible for all reports and obligations respecting such additional personnel, including, but not limited to: social security taxes, income tax withholding, unemployment insurance, and workers' compensation insurance.

3.6 City's Basic Obligation. City agrees to engage and does hereby engage Contractor as an independent contractor to furnish all materials and to perform all Work according to the terms and conditions herein contained for the sum set forth above. Except as otherwise provided in the Contract, the City shall pay to Contractor, as full consideration for the satisfactory performance by Contractor of the services and obligations required by this Contract, the below-referenced compensation in accordance with compensation provisions set forth in the Contract.

3.7 Compensation and Payment.

3.7.1 Amount of Compensation. As consideration for performance of the Work required herein, City agrees to pay Contractor the Total Contract Price of XXXXXXXXXXXXXXXXXXXX Dollars (\$XXX,XXX.00) ("Total Contract Price") provided that such amount shall be subject to adjustment pursuant to the applicable terms of this Contract or written change orders approved and signed in advance by the City.

3.7.2 Payment of Compensation. If the Work is scheduled for completion in thirty (30) or less calendar days, City will arrange for payment of the Total Contract Price upon completion and approval by City of the Work. If the Work is scheduled for completion in more than thirty (30) calendar days, City will pay Contractor on a monthly basis as provided for herein. On or before the fifth (5th) day of each month, Contractor shall submit to the City an itemized application for payment in the format supplied by the City indicating the amount of Work completed since commencement of the Work or since the last progress payment. These applications shall be supported by evidence which is required by this Contract and such other documentation as the City may require. The Contractor shall certify that the Work for which payment is requested has been done and that the materials listed are stored where indicated. Contractor may be required to furnish a detailed schedule of values upon request of the City and in such detail and form as the City shall request, showing the quantities, unit prices, overhead, profit, and all other expenses involved in order to provide a basis for determining the amount of progress payments.

3.7.3 Prompt Payment. City shall review and pay all progress payment requests in accordance with the provisions set forth in Section 20104.50 of the California Public Contract Code. However, no progress payments will be made for Work not completed in accordance with this Contract. Contractor shall comply with all applicable laws, rules and regulations relating to the proper payment of its employees, subcontractors, suppliers or others.

3.7.4 Contract Retentions. From each approved progress estimate, five percent (5%) will be deducted and retained by the City, and the remainder will be paid to Contractor. All Contract retention shall be released and paid to Contractor and subcontractors pursuant to California Public Contract Code Section 7107.

3.7.5 Other Retentions. In addition to Contract retentions, the City may deduct from each progress payment an amount necessary to protect City from loss because of: (1) liquidated damages which have accrued as of the date of the application for payment; (2) any sums expended by the City in performing any of Contractor's obligations under the Contract which Contractor has failed to perform or has performed inadequately; (3) defective Work not remedied; (4) stop notices as allowed by state law; (5) reasonable doubt that the Work can be completed for the unpaid balance of the Total Contract Price or within the scheduled completion date; (6)

unsatisfactory prosecution of the Work by Contractor; (7) unauthorized deviations from the Contract; (8) failure of Contractor to maintain or submit on a timely basis proper and sufficient documentation as required by the Contract or by City during the prosecution of the Work; (9) erroneous or false estimates by Contractor of the value of the Work performed; (10) any sums representing expenses, losses, or damages as determined by the City, incurred by the City for which Contractor is liable under the Contract; and (11) any other sums which the City is entitled to recover from Contractor under the terms of the Contract or pursuant to state law, including Section 1727 of the California Labor Code. The failure by the City to deduct any of these sums from a progress payment shall not constitute a waiver of the City's right to such sums.

3.7.6 Substitutions for Contract Retentions. In accordance with California Public Contract Code Section 22300, the City will permit the substitution of securities for any monies withheld by the City to ensure performance under the Contract. At the request and expense of Contractor, securities equivalent to the amount withheld shall be deposited with the City, or with a state or federally chartered bank in California as the escrow agent, and thereafter the City shall then pay such monies to Contractor as they come due. Upon satisfactory completion of the Contract, the securities shall be returned to Contractor. For purposes of this Section and Section 22300 of the Public Contract Code, the term "satisfactory completion of the contract" shall mean the time the City has issued written final acceptance of the Work and filed a Notice of Completion as required by law and provisions of this Contract. Contractor shall be the beneficial owner of any securities substituted for monies withheld and shall receive any interest thereon. The escrow agreement used for the purposes of this Section shall be in the form provided by the City.

3.7.7 Title to Work. As security for partial, progress, or other payments, title to Work for which such payments are made shall pass to the City at the time of payment. To the extent that title has not previously been vested in the City by reason of payments, full title shall pass to the City at delivery of the Work at the destination and time specified in this Contract. Such transferred title shall in each case be good, free and clear from any and all security interests, liens, or other encumbrances. Contractor promises and agrees that it will not pledge, hypothecate, or otherwise encumber the items in any manner that would result in any lien, security interest, charge, or claim upon or against said items. Such transfer of title shall not imply acceptance by the City, nor relieve Contractor from the responsibility to strictly comply with the Contract, and shall not relieve Contractor of responsibility for any loss of or damage to items.

3.7.8 Labor and Material Releases. Contractor shall furnish City with labor and material releases from all subcontractors performing work on, or furnishing materials for, the Work governed by this Contract prior to final payment by City.

3.7.9 Prevailing Wages. Contractor is aware of the requirements of California Labor Code Section 1720 et seq., and 1770 et seq., as well as California Code of Regulations, Title 8, Section 16000 et seq., ("Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on "public works" and "maintenance" projects. Since the Services are being performed as part of an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and since the total compensation is \$1,000 or more, Contractor agrees to fully comply with such Prevailing Wage Laws. City shall provide Contractor with a copy of the prevailing rates of per diem wages in effect at the commencement of this Contract. Contractor shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to execute the Services available to interested parties upon request, and shall post copies at Contractor's principal place of business and at the project site. Contractor shall defend, indemnify and hold the City, its officials, officers, employees and agents free and harmless from any claim or liability arising out of any failure or alleged failure to comply with the Prevailing Wage Laws. Contractor and any subcontractor shall

forfeit a penalty of up to \$200 per calendar day or portion thereof for each worker paid less than the prevailing wage rates.

3.7.10 Apprenticeable Crafts. When Contractor employs workmen in an apprenticeable craft or trade, Contractor shall comply with the provisions of Section 1777.5 of the California Labor Code with respect to the employment of properly registered apprentices upon public works. The primary responsibility for compliance with said section for all apprenticeable occupations shall be with Contractor. The Contractor or any subcontractor that is determined by the Labor Commissioner to have knowingly violated Section 1777.5 shall forfeit as a civil penalty an amount not exceeding \$100 for each full calendar day of noncompliance, or such greater amount as provided by law.

3.7.11 Hours of Work. Contractor is advised that eight (8) hours labor constitutes a legal day's work. Pursuant to Section 1813 of the California Labor Code, Contractor shall forfeit a penalty of \$25.00 per worker for each day that each worker is permitted to work more than eight (8) hours in any one calendar day and forty (40) hours in any one calendar week, except when payment for overtime is made at not less than one and one-half (1-1/2) times the basic rate for that worker.

3.7.12 Payroll Records. Contractor and each subcontractor shall keep an accurate payroll record, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the public work. The payroll records shall be certified and shall be available for inspection at all reasonable hours at the principal office of Contractor in the manner provided in Labor Code section 1776. In the event of noncompliance with the requirements of this section, Contractor shall have 10 days in which to comply subsequent to receipt of written notice specifying in what respects such Contractor must comply with this section. Should noncompliance still be evident after such 10-day period, Contractor shall, as a penalty to City, forfeit not more than \$100.00 for each calendar day or portion thereof, for each worker, until strict compliance is effectuated. The amount of the forfeiture is to be determined by the Labor Commissioner. A contractor who is found to have violated the provisions of law regarding wages on Public Works with the intent to defraud shall be ineligible to bid on Public Works contracts for a period of one to three years as determined by the Labor Commissioner. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, such penalties shall be withheld from progress payments then due. The responsibility for compliance with this section is on Contractor. The requirement to submit certified payroll records directly to the Labor Commissioner under Labor Code section 1771.4 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Section 1771.4.

3.7.13 Contractor and Subcontractor Registration. Pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. No bid will be accepted nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work. Contractor is directed to review, fill out and execute the Public Works Contractor Registration Certification attached hereto as Exhibit "E" prior to contract execution. Notwithstanding the foregoing, the contractor registration requirements mandated by Labor Code Sections 1725.5 and 1771.1 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Sections 1725.5 and 1771.1.

3.7.14 Labor Compliance; Stop Orders. This Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. It shall be the Contractor's sole responsibility to evaluate and pay the cost of complying with all labor compliance requirements under this Contract and applicable law. Any stop orders issued by the Department of Industrial Relations against Contractor or any subcontractor that affect Contractor's performance of Work, including any delay, shall be Contractor's sole responsibility. Any delay arising out of or resulting from such stop orders shall be considered Contractor caused delay subject to any applicable liquidated damages and shall not be compensable by the City. Contractor shall defend, indemnify and hold the City, its officials, officers, employees and agents free and harmless from any claim or liability arising out of stop orders issued by the Department of Industrial Relations against Contractor or any subcontractor.

3.8 Performance of Work; Jobsite Obligations.

3.8.1 Water Quality Management and Compliance.

3.8.1.1 Water Quality Management and Compliance. Contractor shall keep itself and all subcontractors, staff, and employees fully informed of and in compliance with all local, state and federal laws, rules and regulations that may impact, or be implicated by the performance of the Work including, without limitation, all applicable provisions of the Federal Water Pollution Control Act (33 U.S.C. §§ 1300); the California Porter-Cologne Water Quality Control Act (Cal Water Code §§ 13000-14950); local ordinances regulating discharges of storm water; and any and all regulations, policies, or permits issued pursuant to any such authority regulating the discharge of pollutants, as that term is used in the Porter-Cologne Water Quality Control Act, to any ground or surface water in the State.

3.8.1.2 Compliance with the Statewide Construction General Permit. Contractor shall comply with all conditions of the most recent iteration of the National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction Activity, issued by the California State Water Resources Control Board ("Permit"). It shall be Contractor's sole responsibility to file a Notice of Intent and procure coverage under the Permit for all construction activity which results in the disturbance of more than one acre of total land area or which is part of a larger common area of development or sale. Prior to initiating work, Contractor shall be solely responsible for preparing and implementing a Storm Water Pollution Prevention Plan (SWPPP) as required by the Permit. Contractor shall be responsible for procuring, implementing and complying with the provisions of the Permit and the SWPPP, including the standard provisions, and monitoring and reporting requirements as required by the Permit. The Permit requires the SWPPP to be a "living document" that changes as necessary to meet the conditions and requirements of the job site as it progresses through different phases of construction and is subject to different weather conditions. It shall be Contractor's sole responsibility to update the SWPPP as necessary to address conditions at the project site.

3.8.1.3 Other Water Quality Rules Regulations and Policies. Contractor shall comply with the lawful requirements of any applicable municipality, drainage City, or local agency regarding discharges of storm water to separate storm drain systems or other watercourses under their jurisdiction, including applicable requirements in municipal storm water management programs.

3.8.1.4 Cost of Compliance. Storm, surface, nuisance, or other waters may be encountered at various times during construction of The Work. Therefore, the Contractor, by submitting a Bid, hereby acknowledges that it has investigated the risk arising from

such waters, has prepared its Bid accordingly, and assumes any and all risks and liabilities arising therefrom.

3.8.1.5 Liability for Non-Compliance. Failure to comply with the Permit is a violation of federal and state law. Pursuant to the indemnification provisions of this Contract, Contractor hereby agrees to defend, indemnify and hold harmless the City and its directors, officials, officers, employees, volunteers and agents for any alleged violations. In addition, City may seek damages from Contractor for any delay in completing the Work in accordance with the Contract, if such delay is caused by or related to Contractor's failure to comply with the Permit.

3.8.1.6 Reservation of Right to Defend. City reserves the right to defend any enforcement action brought against the City for Contractor's failure to comply with the Permit or any other relevant water quality law, regulation, or policy. Pursuant to the indemnification provisions of this Contract, Contractor hereby agrees to be bound by, and to reimburse the City for the costs (including the City's attorney's fees) associated with, any settlement reached between the City and the relevant enforcement entity.

3.8.1.7 Training. In addition to the standard of performance requirements set forth in paragraph 3.4, Contractor warrants that all employees and subcontractors shall have sufficient skill and experience to perform the Work assigned to them without impacting water quality in violation of the laws, regulations and policies described in paragraph 3.8.1. Consultant further warrants that it, its employees and subcontractors will receive adequate training, as determined by City, regarding the requirements of the laws, regulations and policies described in paragraph 3.8.1 as they may relate to the Work provided under this Agreement. Upon request, City will provide the Contractor with a list of training programs that meet the requirements of this paragraph.

3.8.2 Safety. Contractor shall execute and maintain its work so as to avoid injury or damage to any person or property. Contractor shall comply with the requirements of the specifications relating to safety measures applicable in particular operations or kinds of work. In carrying out its Work, Contractor shall at all times be in compliance with all applicable local, state and federal laws, rules and regulations, and shall exercise all necessary precautions for the safety of employees appropriate to the nature of the Work and the conditions under which the Work is to be performed. Safety precautions as applicable shall include, but shall not be limited to, adequate life protection and lifesaving equipment; adequate illumination for underground and night operations; instructions in accident prevention for all employees, such as machinery guards, safe walkways, scaffolds, ladders, bridges, gang planks, confined space procedures, trenching and shoring, fall protection and other safety devices, equipment and wearing apparel as are necessary or lawfully required to prevent accidents or injuries; and adequate facilities for the proper inspection and maintenance of all safety measures. Furthermore, Contractor shall prominently display the names and telephone numbers of at least two medical doctors practicing in the vicinity of the Project, as well as the telephone number of the local ambulance service, adjacent to all telephones at the Project site.

3.8.3 Laws and Regulations. Contractor shall keep itself fully informed of and in compliance with all local, state and federal laws, rules and regulations in any manner affecting the performance of the Contract or the Work, including all Cal/OSHA requirements, and shall give all notices required by law. Contractor shall be liable for all violations of such laws and regulations in connection with Work. If Contractor observes that the drawings or specifications are at variance with any law, rule or regulation, it shall promptly notify the City in writing. Any necessary changes shall be made by written change order. If Contractor performs any work knowing it to be contrary

to such laws, rules and regulations and without giving written notice to the City, Contractor shall be solely responsible for all costs arising therefrom. City is a public entity of the State of California subject to certain provisions of the Health & Safety Code, Government Code, Public Contract Code, and Labor Code of the State. It is stipulated and agreed that all provisions of the law applicable to the public contracts of a municipality are a part of this Contract to the same extent as though set forth herein and will be complied with. Contractor shall defend, indemnify and hold City, its officials, directors, officers, employees and agents free and harmless, pursuant to the indemnification provisions of this Contract, from any claim or liability arising out of any failure or alleged failure to comply with such laws, rules or regulations.

3.8.4 Permits and Licenses. Contractor shall be responsible for securing City permits and licenses necessary to perform the Work described herein, including, but not limited to, an City Business License. While Contractor will not be charged a fee for any City permits, Contractor shall pay the City's applicable business license fee. Any ineligible contractor or subcontractor pursuant to Labor Code Sections 1777.1 and 1777.7 may not perform work on this Project.

3.8.5 Trenching Work. If the Total Contract Price exceeds \$25,000 and if the Work governed by this Contract entails excavation of any trench or trenches five (5) feet or more in depth, Contractor shall comply with all applicable provisions of the California Labor Code, including Section 6705. To this end, Contractor shall submit for City's review and approval a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation of such trench or trenches. If such plan varies from the shoring system standards, the plan shall be prepared by a registered civil or structural engineer.

3.8.6 Hazardous Materials and Differing Conditions. As required by California Public Contract Code Section 7104, if this Contract involves digging trenches or other excavations that extend deeper than four (4) feet below the surface, Contractor shall promptly, and prior to disturbance of any conditions, notify City of: (1) any material discovered in excavation that Contractor believes to be a hazardous waste that is required to be removed to a Class I, Class II or Class III disposal site; (2) subsurface or latent physical conditions at the site differing from those indicated by City; and (3) unknown physical conditions of an unusual nature at the site, significantly different from those ordinarily encountered in such contract work. Upon notification, City shall promptly investigate the conditions to determine whether a change order is appropriate. In the event of a dispute, Contractor shall not be excused from any scheduled completion date and shall proceed with all Work to be performed under the Contract, but shall retain all rights provided by the Contract or by law for making protests and resolving the dispute.

3.8.7 Underground Utility Facilities. To the extent required by Section 4215 of the California Government Code, City shall compensate Contractor for the costs of: (1) locating and repairing damage to underground utility facilities not caused by the failure of Contractor to exercise reasonable care; (2) removing or relocating underground utility facilities not indicated in the construction drawings; and (3) equipment necessarily idled during such work. Contractor shall not be assessed liquidated damages for delay caused by failure of City to provide for removal or relocation of such utility facilities.

3.8.8 Air Quality. Contractor must fully comply with all applicable laws, rules and regulations in furnishing or using equipment and/or providing services, including, but not limited to, emissions limits and permitting requirements imposed by the California Air Resources Board (CARB). Although CARB limits and requirements are more broad, Contractor shall specifically be aware of their application to "portable equipment", which definition is considered by CARB to

include any item of equipment with a fuel-powered engine. Contractor shall indemnify City against any fines or penalties imposed by CARB, or any other governmental or regulatory agency for violations of applicable laws, rules and/or regulations by Contractor, its subcontractors, or others for whom Contractor is responsible under its indemnity obligations provided for in this Agreement.

3.8.9 State Recycling Mandates. Contractor shall comply with State Recycling Mandates. Any recyclable materials/debris collected by the contractor that can be feasibly diverted via reuse or recycling must be hauled by the appropriate handler for reuse or recycling.

3.9 Completion of Work. When Contractor determines that it has completed the Work required herein, Contractor shall so notify City in writing and shall furnish all labor and material releases required by this Contract. City shall thereupon inspect the Work. If the Work is not acceptable to the City, the City shall indicate to Contractor in writing the specific portions or items of Work which are unsatisfactory or incomplete. Once Contractor determines that it has completed the incomplete or unsatisfactory Work, Contractor may request a reinspection by the City. Once the Work is acceptable to City, City shall pay to Contractor the Total Contract Price remaining to be paid, less any amount which City may be authorized or directed by law to retain. Payment of retention proceeds due to Contractor shall be made in accordance with Section 7107 of the California Public Contract Code.

3.10 Claims; Government Code Claim Compliance.

3.10.1 Intent. Effective January 1, 1991, Section 20104 et seq., of the California Public Contract Code prescribes a process utilizing informal conferences, non-binding judicial supervised mediation, and judicial arbitration to resolve disputes on construction claims of \$375,000 or less. Effective January 1, 2017, Section 9204 of the Public Contract Code prescribes a process for negotiation and mediation to resolve disputes on construction claims. The intent of this Section is to implement Sections 20104 et seq. and Section 9204 of the California Public Contract Code. This Section shall be construed to be consistent with said statutes.

3.10.2 Claims. For purposes of this Section, "Claim" means a separate demand by the Contractor, after a change order duly requested in accordance with the terms of this Contract has been denied by the City, for (A) a time extension, (B) payment of money or damages arising from Work done by or on behalf of the Contractor pursuant to the Contract, or (C) an amount the payment of which is disputed by the City. Claims governed by this Section may not be filed unless and until the Contractor completes all procedures for giving notice of delay or change and for the requesting of a time extension or change order, including but not necessarily limited to the change order procedures contained herein, and Contractor's request for a change has been denied in whole or in part. Claims governed by this Section must be filed no later than the date of final payment. The claim shall be submitted in writing to the City and shall include on its first page the following in 16 point capital font: "THIS IS A CLAIM." Furthermore, the claim shall include the documents necessary to substantiate the claim. Nothing in this Section is intended to extend the time limit or supersede notice requirements otherwise provided by contract for the filing of claims, including all requirements pertaining to compensation or payment for extra Work, disputed Work, and/or changed conditions. Failure to follow such contractual requirements shall bar any claims or subsequent lawsuits for compensation or payment thereon.

3.10.3 Supporting Documentation. The Contractor shall submit all claims in the following format:

3.10.3.1 Summary of claim merit and price, reference Contract Document provisions pursuant to which the claim is made

- 3.10.3.2 List of documents relating to claim:
 - (A) Specifications
 - (B) Drawings
 - (C) Clarifications (Requests for Information)
 - (D) Schedules
 - (E) Other
- 3.10.3.3 Chronology of events and correspondence
- 3.10.3.4 Analysis of claim merit
- 3.10.3.5 Analysis of claim cost
- 3.10.3.6 Time impact analysis in CPM format

3.10.4 City's Response. Upon receipt of a claim pursuant to this Section, City shall conduct a reasonable review of the claim and, within a period not to exceed 45 days, shall provide the Contractor a written statement identifying what portion of the claim is disputed and what portion is undisputed. Any payment due on an undisputed portion of the claim will be processed and made within 60 days after the public entity issues its written statement.

3.10.4.1 If City needs approval from its governing body to provide the Contractor a written statement identifying the disputed portion and the undisputed portion of the claim, and the governing body does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a claim sent by registered mail or certified mail, return receipt requested, City shall have up to three days following the next duly publicly noticed meeting of the governing body after the 45-day period, or extension, expires to provide the Contractor a written statement identifying the disputed portion and the undisputed portion.

3.10.4.2 Within 30 days of receipt of a claim, City may request in writing additional documentation supporting the claim or relating to defenses or claims City may have against the Contractor. If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of City and the Contractor.

3.10.4.3 City's written response to the claim, as further documented, shall be submitted to the Contractor within 30 days (if the claim is less than \$50,000, within 15 days) after receipt of the further documentation, or within a period of time no greater than that taken by the Contractor in producing the additional information or requested documentation, whichever is greater.

3.10.5 Meet and Confer. If the Contractor disputes City's written response, or City fails to respond within the time prescribed, the Contractor may so notify City, in writing, either within 15 days of receipt of City's response or within 15 days of City's failure to respond within the time prescribed, respectively, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand, City shall schedule a meet and confer conference within 30 days for settlement of the dispute.

3.10.6 Mediation. Within 10 business days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, City shall provide the Contractor a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after City issues its written statement. Any disputed portion of the claim, as identified by the Contractor in writing, shall be submitted to nonbinding mediation, with City and the Contractor sharing the associated costs equally. City and Contractor shall mutually agree to a mediator within 10 business days after the disputed portion of the claim has been identified in writing, unless the parties agree to select a mediator at a later time.

3.10.6.1 If the Parties cannot agree upon a mediator, each Party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each Party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator.

3.10.6.2 For purposes of this section, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the Parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.

3.10.6.3 Unless otherwise agreed to by City and the Contractor in writing, the mediation conducted pursuant to this section shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.

3.10.6.4 The mediation shall be held no earlier than the date the Contractor completes the Work or the date that the Contractor last performs Work, whichever is earlier. All unresolved claims shall be considered jointly in a single mediation, unless a new unrelated claim arises after mediation is completed.

3.10.7 Procedures After Mediation. If following the mediation, the claim or any portion remains in dispute, the Contractor must file a claim pursuant to Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code. For purposes of those provisions, the running of the period of time within which a claim must be filed shall be tolled from the time the Contractor submits his or her written claim pursuant to subdivision (a) until the time the claim is denied, including any period of time utilized by the meet and confer conference or mediation.

3.10.8 Civil Actions. The following procedures are established for all civil actions filed to resolve claims subject to this Section:

3.10.8.1 Within 60 days, but no earlier than 30 days, following the filing or responsive pleadings, the court shall submit the matter to non-binding mediation unless waived by mutual stipulation of both parties or unless mediation was held prior to commencement of the action in accordance with Public Contract Code section 9204 and the terms of these procedures.. The mediation process shall provide for the selection within 15 days by both parties of a disinterested third person as mediator, shall be commenced within 30 days of the submittal, and shall be concluded within 15 days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court.

3.10.8.2 If the matter remains in dispute, the case shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, notwithstanding Section 1114.11 of that code. The Civil

Discovery Act of 1986 (Article 3 (commencing with Section 2016) of Chapter 3 of Title 3 of Part 4 of the Code of Civil Procedure) shall apply to any proceeding brought under this subdivision consistent with the rules pertaining to judicial arbitration.

3.10.8.3 In addition to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, (A) arbitrators shall, when possible, be experienced in construction law, and (B) any party appealing an arbitration award who does not obtain a more favorable judgment shall, in addition to payment of costs and fees under that chapter, also pay the attorney's fees on appeal of the other party.

3.10.9 Government Code Claims. In addition to any and all contract requirements pertaining to notices of and requests for compensation or payment for extra work, disputed work, claims and/or changed conditions, Contractor must comply with the claim procedures set forth in Government Code sections 900 et seq. prior to filing any lawsuit against the City. Such Government Code claims and any subsequent lawsuit based upon the Government Code claims shall be limited to those matters that remain unresolved after all procedures pertaining to extra work, disputed work, claims, and/or changed conditions have been followed by Contractor. If no such Government Code claim is submitted, or if any prerequisite contractual requirements are not otherwise satisfied as specified herein, Contractor shall be barred from bringing and maintaining a valid lawsuit against the City. A Government Code claim must be filed no earlier than the date the work is completed or the date the Contractor last performs work on the Project, whichever occurs first. A Government Code claim shall be inclusive of all unresolved claims unless a new unrelated claim arises after the Government Code claim is submitted.

3.10.10 Non-Waiver. City's failure to respond to a claim from the Contractor within the time periods described in this Section or to otherwise meet the time requirements of this Section shall result in the claim being deemed rejected in its entirety. City's failure to respond shall not waive City's rights to any subsequent procedures for the resolution of disputed claims.

3.11 Loss and Damage. Except as may otherwise be limited by law, Contractor shall be responsible for all loss and damage which may arise out of the nature of the Work agreed to herein, or from the action of the elements, or from any unforeseen difficulties which may arise or be encountered in the prosecution of the Work until the same is fully completed and accepted by City. In the event of damage proximately caused by an Act of God, as defined by Section 7105 of the Public Contract Code, the City may terminate this Contract pursuant to Section 3.17.3; provided, however, that the City needs to provide Contractor with only one (1) day advanced written notice.

3.12 Indemnification.

3.12.1 Scope of Indemnity. To the fullest extent permitted by law, Contractor shall defend, indemnify and hold the City, its officials, employees, agents and authorized volunteers free and harmless from any and all claims, demands, causes of action, suits, actions, proceedings, costs, expenses, liability, judgments, awards, decrees, settlements, loss, damage or injury of any kind, in law or equity, to property or persons, including wrongful death, (collectively, "Claims") in any manner arising out of, pertaining to, or incident to any alleged acts, errors or omissions, or willful misconduct of Contractor, its officials, officers, employees, subcontractors, consultants or agents in connection with the performance of the Contractor's services, the Project or this Agreement, including without limitation the payment of all consequential damages, expert witness fees and attorneys' fees and other related costs and expenses. Notwithstanding the foregoing, to the extent required by Civil Code section 2782, Contractor's indemnity obligation shall not apply to liability for damages for death or bodily injury to persons, injury to property, or any other loss, damage or expense arising from the sole or active

negligence or willful misconduct of the City or the City's agents, servants, or independent contractors who are directly responsible to the City, or for defects in design furnished by those persons.

3.12.2 Additional Indemnity Obligations. Contractor shall defend, with counsel of City's choosing and at Contractor's own cost, expense and risk, any and all Claims covered by this section that may be brought or instituted against City or its officials, employees, agents and authorized volunteers. In addition, Contractor shall pay and satisfy any judgment, award or decree that may be rendered against City or its officials, employees, agents and authorized volunteers as part of any such claim, suit, action or other proceeding. Contractor shall also reimburse City for the cost of any settlement paid by City or its officials, employees, agents and authorized volunteers as part of any such claim, suit, action or other proceeding. Such reimbursement shall include payment for City's attorney's fees and costs, including expert witness fees. Contractor shall reimburse City and its officials, employees, agents and authorized volunteers, for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided. Contractor's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by the City, its officials, employees, agents and authorized volunteers.

3.13 Insurance.

(a) Required Coverage At all times commencing no later than commencement of the Work and to remain in effect for the entire term of this Agreement including any extensions of time, Contractor shall, at its expense, obtain and maintain, and shall cause its Subcontractors to obtain and maintain, with insurers of recognized responsibility authorized to do business in the California as admitted carriers having a rating not lower than "A" as rated by A.M. Best Company, Inc. or other independent rating companies, the following insurance which shall include the minimum coverages and limits set forth below:

(i) Commercial General Liability Insurance Commercial general liability insurance on an "occurrence" basis arising out of claims for bodily injury (including death) and property damage, as will protect the Contractor, which may arise out of or result from the Contractor's operations under the Agreement and for which the Contractor legally liable, whether such operations are by the Contractor, by a Subcontractor, or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable. Such insurance shall protect the Contractor and Owner against loss from liability imposed for damages (1) on account of bodily or personal injuries, including death, disease and sickness, accidentally suffered or alleged to have been suffered by any person or persons that may be caused directly or indirectly by the performance of this Agreement, and (2) on account of injury to or destruction of property, including the resultant loss of use of the Project or other Owner facilities or equipment, resulting from acts of commission or omission by the Contractor, or otherwise resulting directly or indirectly from the Contractor's operations in the performance of this Agreement. This insurance shall be subject to the approval of Owner, and Owner's approval shall not be unreasonably withheld and shall be in amounts not less than Five Million Dollars (\$5,000,000) general aggregate, Two Million Dollars (\$2,000,000) personal and advertising injury aggregate, with a per occurrence limit of One Million Dollars (\$1,000,000) (total limits required may be satisfied with an excess or umbrella policy). The comprehensive or commercial general liability policy shall also include a severability of interest clause and cross liability if the policy has multiple insureds. The aggregate limit shall apply on a "per project" basis. The policy shall stipulate that the insurance afforded the additional insureds shall apply as primary insurance and that any other insurance carried by Owner or other Persons identified in this Agreement will be excess only and will not contribute with this insurance;

(ii) Automobile Liability. Automobile liability insurance, for Contractor's liability arising out of claims for bodily injury and property damage covering all owned (if any), non-owned, leased, hired or borrowed automobiles of Contractor, including loading and unloading, with a minimum limit of not less than \$1,000,000 per accident for combined bodily injury and property damage and containing appropriate no-fault insurance provisions or other endorsements in accordance with Applicable Law;

(iii) Worker's Compensation Insurance All engineers, experts, Consultants and Subcontractors the Contractor intends to employ shall have taken out workers' compensation insurance with an insurance carrier satisfactory to the Owner for all persons whom they may employ in carrying out the work contemplated under this Agreement in accordance with the Workers' Compensation Laws of the State of California. If the Contractor employs any engineer, expert, Consultant or Subcontractor which it did not intend to employ prior to commencement of services, it must furnish such proof of workers' compensation insurance to the Owner immediately upon employment. If the Contractor is self-insured, the Contractor shall furnish a Certificate of Permission to Self-Insure and a Certificate of Self-Insurance satisfactory to the Owner.

(iv) Employer's Liability Insurance All engineers, experts, Consultants and Subcontractors the Contractor intends to employ shall have taken out employer's liability insurance with an insurance carrier reasonably satisfactory to the Owner. During the course of Contractor's services, if Contractor ever intends to employ additional or different Engineers, experts, Consultants or Subcontractors, before so employing them Contractor shall furnish such reasonably satisfactory proof of insurance to the Owner. If the Contractor is self-insured, the Contractor shall furnish a Certificate of Permission to Self-Insure and a Certificate of Self-Insurance reasonably satisfactory to the Owner.

(v) Errors and Omissions Insurance Errors and omissions insurance on a claims made basis with limits of at least One Million Dollars (\$1,000,000) with a deductible or self-insured retention in an amount not to exceed the sum of One Hundred Thousand Dollars (\$100,000), and Contractor will maintain such coverage for a period of five (5) years following the Final Completion Date.

(vi) Builder's All-Risk Following completion of Phase 1 and approval by Owner of the Phase 2 portion of the Scope of Work and prior to commencing Phase 2, Contractor agrees to obtain and maintain Builder's Risk/Course-of-Construction insurance, issued on a completed value basis on all insurable Work included under the Contract Documents. This insurance shall be subject to the approval of Owner, and Owner's approval shall not be unreasonably withheld. This insurance shall insure against all risks, including but not limited to the following perils: vandalism, theft, malicious mischief, fire, sprinkler leakage, civil authority, sonic boom, explosion, collapse, flood, wind, hail, lightning, smoke, riot or civil commotion, debris removal (including demolition) and reasonable compensation for the Owner's costs and expenses required as a result of such insured loss. This insurance shall provide coverage in an amount not less than the full cost to repair, replace, or reconstruct the Work. Such insurance shall include the Owner, the Owner's designated representative, and any other person or entity with an insurable interest in the Work as an additional named insured.

(vii) Other Insurance Contractor shall provide all other insurance required to be maintained under Applicable Laws, ordinances, rules, and regulations. Such insurance shall be subject to the approval of Owner, and Owner's approval shall not be unreasonably withheld.

(b) Consultants If not covered by Contractor's coverage, each of Contractor's Consultants shall carry coverage and limits proportionate to each such Consultant's scope of work, and Contractor shall include such provisions in its contracts with them. If any policy carried

by any of the Consultants offers 50% or less of the limits required of the Contractor hereunder for an analogous policy, the Contractor shall notify the Owner of the proposed coverage to be carried by such Consultant, and the Owner shall have the right in its reasonable discretion to approve or reject the proposed coverage in each such case.

(c) Occupancy Owner may partially or fully occupy and/or use the Project before acceptance of the entire Project by the Owner. All of Contractor's required insurance must allow such occupancy and/or use without prior consent from insurer.

(d) Additional Insured; Primary and Non-Contributory; Waiver of Subrogation The Contractor shall name the Owner and the Owner's designated representative as additional insureds on Contractor's commercial general liability (using ISO CG 20 10 and CG 20 37 or exact equivalents), automobile liability, and excess/umbrella policies. The additional insured endorsement(s) included on all such insurance policies shall state that coverage is afforded the additional insured with respect to claims arising out of operations performed by or on behalf of the insured. If the additional insureds have other insurance which is applicable to the loss, such other insurance shall be on an excess or contingent basis. The amount of the insurer's liability shall not be reduced by the existence of such other insurance. The coverage provided the additional insureds on Contractor's commercial general liability, automobile liability, and excess/umbrella policies shall apply on a primary and non-contributory basis. The Contractor's commercial general liability, automobile liability, excess/umbrella, and workers' compensation/employer's liability policies shall be endorsed to include a waiver of subrogation in favor of Owner and the Owner's designated representatives. Any excess/umbrella policies provided by Contractor shall include a follow form endorsement or schedule of underlying coverage showing that such policies sit in excess of and shall follow the form of the underlying policies set forth herein, which Contractor intends the excess/umbrella policy to supplement.

(e) Proof of Carriage of Insurance The Contractor shall not commence Work nor shall it allow any Subcontractor or Consultant to commence Work under this Agreement until all required insurance certificates, additional insured endorsements and declarations pages have been obtained for the period covered by this Agreement and delivered in duplicate to the Owner for approval, and such approval shall not be unreasonably withheld.

(f) Notice of Cancellation or Non-Renewal The Contractor shall provide or shall obligate its insurance carriers or brokers/representatives to provide for thirty (30) Days written notice to the Owner of cancellation.

(g) Project Schedule Changes At the time of making application for any extension of time pursuant to the Contract Documents, Contractor shall submit evidence that insurance policies will be in effect during the requested additional period of time.

(h) Compliance If the Contractor fails to maintain such insurance or fails to cure any defects in coverage required herein within five (5) Days of receiving written notice of the defect(s), the Owner may, but shall not be required to, take out such insurance to cover any damages accrued for which the Owner might be held liable on account of the Contractor's failure to pay such damages, and deduct and retain the amount of the premiums from any sums due the Contractor under this Agreement.

(i) No Limitation of Liability; Subcontractors and Consultant Obligations Nothing contained in this Agreement shall be construed as limiting, in any way, the extent to which the Contractor may be held responsible for the payment of damages resulting from the Contractor's operations. Each of Contractor's Consultants and Subcontractors shall comply with all insurance

obligations under this Section, and Contractor shall include such provisions in its contracts with them.

3.13.1 Time for Compliance. Contractor shall not commence Work under this Contract until it has provided evidence satisfactory to the City that it has secured all insurance required under this section. In addition, Contractor shall not allow any subcontractor to commence work on any subcontract until it has provided evidence satisfactory to the City that the subcontractor has secured all insurance required under this section. Failure to provide and maintain all required insurance shall be grounds for the City to terminate this Contract for cause.

3.13.2 Minimum Requirements. Contractor shall, at its expense, procure and maintain for the duration of the Contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Work hereunder by Contractor, its agents, representatives, employees or subcontractors. Contractor shall also require all of its subcontractors to procure and maintain the same insurance for the duration of the Contract. Such insurance shall meet at least the following minimum levels of coverage:

3.13.2.1 Minimum Scope of Insurance. Coverage shall be at least as broad as the latest version of the following: (1) *General Liability*: Insurance Services Office Commercial General Liability coverage (occurrence form CG 00 01) OR Insurance Services Office Owners and Contractors Protective Liability Coverage Form (CG 00 09 11 88) (coverage for operations of designated contractor); (2) *Automobile Liability*: Insurance Services Office Business Auto Coverage form number CA 00 01, code 1 (any auto); and (3) *Workers' Compensation and Employer's Liability*: Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance. Policies shall not contain exclusions contrary to this Contract.

3.13.2.2 Minimum Limits of Insurance. Contractor shall maintain limits no less than: (1) *General Liability*: \$5,000,000 per occurrence and \$5,000,000 aggregate for bodily injury, personal injury and property damage; (2) *Automobile Liability*: \$5,000,000 per accident for bodily injury and property damage; and (3) *Workers' Compensation and Employer's Liability*: Workers' compensation limits as required by the Labor Code of the State of California. Employer's Liability limits of \$1,000,000 each accident, policy limit bodily injury or disease, and each employee bodily injury or disease. Defense costs shall be available in addition to the limits. Notwithstanding the minimum limits specified herein, any available coverage shall be provided to the parties required to be named as additional insureds pursuant to this Contract.

3.13.3 Insurance Endorsements. The insurance policies shall contain the following provisions, or Contractor shall provide endorsements (amendments) on forms supplied or approved by the City to add the following provisions to the insurance policies:

3.13.3.1 General Liability. (1) Such policy shall give the City, its officials, employees, agents and authorized volunteers additional insured status using ISO endorsements CG20 10 10 01 plus CG20 37 10 01, or endorsements providing the exact same coverage, with respect to the Work or operations performed by or on behalf of Contractor, including materials, parts or equipment furnished in connection with such work; (2) all policies shall waive or shall permit Contractor to waive all rights of subrogation which may be obtained by the Contractor or any insurer by virtue of payment of any loss or any coverage provided to any person named as an additional insured pursuant to this Contract, and Contractor agrees to waive all such rights of subrogation; and (3) the insurance coverage shall be primary insurance as respects the City, its officials, employees, agents and authorized volunteers, or if excess, shall stand in an unbroken chain of coverage excess of Contractor's scheduled underlying coverage.

Any insurance or self-insurance maintained by the City, its officials, employees, agents and authorized volunteers shall be excess of Contractor's insurance and shall not be called upon to contribute with it.

3.13.3.2 Automobile Liability. (1) Such policy shall give the City, its officials, employees, agents and authorized volunteers additional insured status with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by Contractor or for which Contractor is responsible; (2) all policies shall waive or shall permit Contractor to waive all rights of subrogation which may be obtained by the Contractor or any insurer by virtue of payment of any loss or any coverage provided to any person named as an additional insured pursuant to this Contract, and Contractor agrees to waive all such rights of subrogation; and (3) the insurance coverage shall be primary insurance as respects the City, its officials, employees, agents and authorized volunteers, or if excess, shall stand in an unbroken chain of coverage excess of Contractor's scheduled underlying coverage. Any insurance or self-insurance maintained by the City, its officials, employees, agents and authorized volunteers shall be excess of Contractor's insurance and shall not be called upon to contribute with it in any way.

3.13.3.3 Workers' Compensation and Employer's Liability Coverage. The insurer shall agree to waive all rights of subrogation against the City, its officials, employees, agents and authorized volunteers for losses paid under the terms of the insurance policy which arise from work performed by Contractor.

3.13.3.4 All Coverages. Each insurance policy required by this Contract shall be endorsed to state that: (1) coverage shall not be suspended, voided, reduced or canceled except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the City; and (2) any failure to comply with reporting or other provisions of the policies, including breaches of warranties, shall not affect coverage provided to the City, its officials, employees, agents and authorized volunteers.

3.13.4 Separation of Insureds; No Special Limitations. All insurance required by this Section shall contain standard separation of insureds provisions. In addition, such insurance shall not contain any special limitations on the scope of protection afforded to the City, its officials, employees, agents and authorized volunteers.

3.13.5 Deductibles and Self-Insurance Retentions. Any deductibles or self-insured retentions must be declared to and approved by the City. Contractor shall guarantee that, at the option of the City, either: (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the City, its officials, employees, agents and authorized volunteers; or (2) the Contractor shall procure a bond or other financial guarantee acceptable to the City guaranteeing payment of losses and related investigation costs, claims and administrative and defense expenses.

3.13.6 Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating no less than A:VII, licensed to do business in California, and satisfactory to the City. Exception may be made for the State Compensation Insurance Fund when not specifically rated.

3.13.7 Verification of Coverage. Contractor shall furnish City with original certificates of insurance and endorsements effecting coverage required by this Contract on forms satisfactory to the City. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf, and shall be on forms supplied or approved by the City. All certificates and endorsements must be received and

approved by the City before work commences. The City reserves the right to require complete, certified copies of all required insurance policies, at any time.

3.13.8 Subcontractors. All subcontractors shall meet the requirements of this Section before commencing Work. Contractor shall furnish separate certificates and endorsements for each subcontractor. Subcontractor policies of General Liability insurance shall name the City, its officials, employees, agents and authorized volunteers as additional insureds using form ISO 20 38 04 13 or endorsements providing the exact same coverage. All coverages for subcontractors shall be subject to all of the requirements stated herein except as otherwise agreed to by the City in writing.

3.13.9 Reporting of Claims. Contractor shall report to the City, in addition to Contractor's insurer, any and all insurance claims submitted by Contractor in connection with the Work under this Contract.

3.14 Bond Requirements.

3.14.1 Payment Bond. If required by law or otherwise specifically requested by City in Exhibit "C" attached hereto and incorporated herein by reference, Contractor shall execute and provide to City concurrently with this Contract a Payment Bond in an amount required by the City and in a form provided or approved by the City. If such bond is required, no payment will be made to Contractor until the bond has been received and approved by the City.

3.14.2 Performance Bond. If specifically requested by City in Exhibit "C" attached hereto and incorporated herein by reference, Contractor shall execute and provide to City concurrently with this Contract a Performance Bond in an amount required by the City and in a form provided or approved by the City. If such bond is required, no payment will be made to Contractor until the bond has been received and approved by the City.

3.14.3 Bond Provisions. Should, in City's sole opinion, any bond become insufficient or any surety be found to be unsatisfactory, Contractor shall renew or replace the effected bond within (ten) 10 days of receiving notice from City. In the event the surety or Contractor intends to reduce or cancel any required bond, at least thirty (30) days prior written notice shall be given to the City, and Contractor shall post acceptable replacement bonds at least ten (10) days prior to expiration of the original bonds. No further payments shall be deemed due or will be made under this Contract until any replacement bonds required by this Section are accepted by the City. To the extent, if any, that the Total Contract Price is increased in accordance with the Contract, Contractor shall, upon request of the City, cause the amount of the bond to be increased accordingly and shall promptly deliver satisfactory evidence of such increase to the City. If Contractor fails to furnish any required bond, the City may terminate the Contract for cause.

3.14.4 Surety Qualifications. Only bonds executed by an admitted surety insurer, as defined in California Code of Civil Procedure Section 995.120, shall be accepted. If a California-admitted surety insurer issuing bonds does not meet these requirements, the insurer will be considered qualified if it is in conformance with Section 995.660 of the California Code of Civil Procedure, and proof of such is provided to the City.

3.15 Warranty. Contractor warrants all Work under the Contract (which for purposes of this Section shall be deemed to include unauthorized work which has not been removed and any non-conforming materials incorporated into the Work) to be of good quality and free from any defective or faulty material and workmanship. Contractor agrees that for a period of one year (or the period of time specified elsewhere in the Contract or in any guarantee or warranty provided

by any manufacturer or supplier of equipment or materials incorporated into the Work, whichever is later) after the date of final acceptance, Contractor shall within ten (10) days after being notified in writing by the City of any defect in the Work or non-conformance of the Work to the Contract, commence and prosecute with due diligence all Work necessary to fulfill the terms of the warranty at its sole cost and expense. Contractor shall act sooner as requested by the City in response to an emergency. In addition, Contractor shall, at its sole cost and expense, repair and replace any portions of the Work (or work of other contractors) damaged by its defective Work or which becomes damaged in the course of repairing or replacing defective Work. For any Work so corrected, Contractor's obligation hereunder to correct defective Work shall be reinstated for an additional one year period, commencing with the date of acceptance of such corrected Work. Contractor shall perform such tests as the City may require to verify that any corrective actions, including, without limitation, redesign, repairs, and replacements comply with the requirements of the Contract. All costs associated with such corrective actions and testing, including the removal, replacement, and reinstitution of equipment and materials necessary to gain access, shall be the sole responsibility of Contractor. All warranties and guarantees of subcontractors, suppliers and manufacturers with respect to any portion of the Work, whether express or implied, are deemed to be obtained by Contractor for the benefit of the City, regardless of whether or not such warranties and guarantees have been transferred or assigned to the City by separate agreement and Contractor agrees to enforce such warranties and guarantees, if necessary, on behalf of the City. In the event that Contractor fails to perform its obligations under this Section, or under any other warranty or guaranty under this Contract, to the reasonable satisfaction of the City, the City shall have the right to correct and replace any defective or non-conforming Work and any work damaged by such work or the replacement or correction thereof at Contractor's sole expense. Contractor shall be obligated to fully reimburse the City for any expenses incurred hereunder upon demand.

3.16 Employee/Labor Certifications.

3.16.1 Contractor's Labor Certification. By its signature hereunder, Contractor certifies that he is aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions of that Code, and agrees to comply with such provisions before commencing the performance of the Work. A certification form for this purpose, which is attached to this Contract as Exhibit "D" and incorporated herein by reference, shall be executed simultaneously with this Contract.

3.16.2 Equal Opportunity Employment. Contractor represents that it is an equal opportunity employer and that it shall not discriminate against any employee or applicant for employment because of race, religion, color, national origin, ancestry, sex, age or other interests protected by the State or Federal Constitutions. Such non-discrimination shall include, but not be limited to, all activities related to initial employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination.

3.16.3 Verification of Employment Eligibility. By executing this Contract, Contractor verifies that it fully complies with all requirements and restrictions of state and federal law respecting the employment of undocumented aliens, including, but not limited to, the Immigration Reform and Control Act of 1986, as may be amended from time to time, and shall require all subconsultants and sub-subconsultants to comply with the same.

3.17 General Provisions.

3.17.1 City's Representative. The City hereby designates the General Manager, or his or her designee, to act as its representative for the performance of this Contract ("City's Representative"). City's Representative shall have the power to act on behalf of the City for all purposes under this Contract. Contractor shall not accept direction or orders from any person other than the City's Representative or his or her designee.

3.17.2 Contractor's Representative. Before starting the Work, Contractor shall submit in writing the name, qualifications and experience of its proposed representative who shall be subject to the review and approval of the City ("Contractor's Representative"). Following approval by the City, Contractor's Representative shall have full authority to represent and act on behalf of Contractor for all purposes under this Contract. Contractor's Representative shall supervise and direct the Work, using his best skill and attention, and shall be responsible for all construction means, methods, techniques, sequences and procedures and for the satisfactory coordination of all portions of the Work under this Contract. Contractor's Representative shall devote full time to the Project and either he or his designee, who shall be acceptable to the City, shall be present at the Work site at all times that any Work is in progress and at any time that any employee or subcontractor of Contractor is present at the Work site. Arrangements for responsible supervision, acceptable to the City, shall be made for emergency Work which may be required. Should Contractor desire to change its Contractor's Representative, Contractor shall provide the information specified above and obtain the City's written approval.

3.17.3 Termination. This Contract may be terminated by City at any time, either with or without cause, by giving Contractor three (3) days advance written notice. In the event of termination by City for any reason other than the fault of Contractor, City shall pay Contractor for all Work performed up to that time as provided herein. In the event of breach of the Contract by Contractor, City may terminate the Contract immediately without notice, may reduce payment to Contractor in the amount necessary to offset City's resulting damages, and may pursue any other available recourse against Contractor. Contractor may not terminate this Contract except for cause. In the event this Contract is terminated in whole or in part as provided, City may procure, upon such terms and in such manner as it may determine appropriate, services similar to those terminated. Further, if this Contract is terminated as provided, City may require Contractor to provide all finished or unfinished documents, data, diagrams, drawings, materials or other matter prepared or built by Contractor in connection with its performance of this Contract.

3.17.4 Contract Interpretation. Should any question arise regarding the meaning or import of any of the provisions of this Contract or written or oral instructions from City, the matter shall be referred to City's Representative, whose decision shall be binding upon Contractor.

3.17.5 Anti-Trust Claims. This provision shall be operative if this Contract is applicable to California Public Contract Code Section 7103.5. In entering into this Contract to supply goods, services or materials, Contractor hereby offers and agrees to assign to the City all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Section 15) or under the Cartwright Act (Chapter 2, commencing with Section 16700, of Part 2 of Division 7 of the Business and Professions Code) arising from purchases of goods, services, or materials pursuant to the Contract. This assignment shall be made and become effective at the time the City tender final payment to Contractor, without further acknowledgment by the Parties.

3.17.6 Notices. All notices hereunder and communications regarding interpretation of the terms of the Contract or changes thereto shall be provided by the mailing

thereof by registered or certified mail, return receipt requested, postage prepaid and addressed as follows:

CONTRACTOR:

XXX XXXXXXXXXXXX
XXXX XXXXX XXXXX
XXXXXXXXXX, California XXXXX
XXX-XXX-XXXX

Attn:

CITY:

City of Ceres
2220 Magnolia Street
Ceres, California 95307
Attn: City Manager

Any notice so given shall be considered received by the other Party three (3) days after deposit in the U.S. Mail as stated above and addressed to the Party at the above address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

3.17.7 Time of Essence. Time is of the essence in the performance of this Contract.

3.17.8 Assignment Forbidden. Contractor shall not, either voluntarily or by action of law, assign or transfer this Contract or any obligation, right, title or interest assumed by Contractor herein without the prior written consent of City. If Contractor attempts an assignment or transfer of this Contract or any obligation, right, title or interest herein, City may, at its option, terminate and revoke the Contract and shall thereupon be relieved from any and all obligations to Contractor or its assignee or transferee.

3.17.9 No Third Party Beneficiaries. There are no intended third party beneficiaries of any right or obligation assumed by the Parties.

3.17.10 Laws, Venue, and Attorneys' Fees. This Agreement shall be interpreted in accordance with the laws of the State of California. If any action is brought to interpret or enforce any term of this Agreement, the action shall be brought in a state or federal court situated in the County of Stanislaus, State of California.

3.17.11 Counterparts. This Contract may be executed in counterparts, each of which shall constitute an original.

3.17.12 Successors. The Parties do for themselves, their heirs, executors, administrators, successors, and assigns agree to the full performance of all of the provisions contained in this Contract.

3.17.13 [Reserved]

3.17.14 Solicitation. Contractor maintains and warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Contractor, to solicit or secure this Contract. Further, Contractor warrants that it has not paid nor has it agreed to pay any company or person, other than a bona fide employee working solely

for Contractor, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Contract. For breach or violation of this warranty, City shall have the right to terminate this Contract without liability.

3.17.15 Conflict of Interest. Contractor maintains and warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Contractor, to solicit or secure this Agreement. Further, Contractor warrants that it has not paid nor has it agreed to pay any company or person, other than a bona fide employee working solely for Contractor, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, City shall have the right to rescind this Agreement without liability. For the term of this Contract, no director, official, officer or employee of City, during the term of his or her service with City, shall have any direct interest in this Contract, or obtain any present or anticipated material benefit arising therefrom. In addition, Contractor agrees to file, or to cause its employees or subcontractors to file, a Statement of Economic Interest with the City's Filing Officer as required under state law in the performance of the Work.

3.17.16 Certification of License.

3.17.16.1 Contractor certifies that as of the date of execution of this Contract, Contractor has a current contractor's license of the classification indicated below under Contractor's signature.

3.17.16.2 Contractors are required by law to be licensed and regulated by the Contractors' State License Board which has jurisdiction to investigate complaints against contractors if a complaint regarding a patent act or omission is filed within four (4) years of the date of the alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within ten (10) years of the date of the alleged violation. Any questions concerning a contractor may be referred to the Registrar, Contractors' State License Board, P.O. Box 26000, Sacramento, California 95826.

3.17.17 Authority to Enter Contract. Each Party warrants that the individuals who have signed this Contract have the legal power, right and authority to make this Contract and bind each respective Party.

3.17.18 Entire Contract; Modification. This Contract contains the entire agreement of the Parties with respect to the subject matter hereof, and supersedes all prior negotiations, understandings or agreements. This Contract may only be modified by a writing signed by both Parties.

3.17.19 Non-Waiver. None of the provisions of this Agreement shall be considered waived by either party, unless such waiver is specifically specified in writing.

3.17.20 City's Right to Employ Other Contractors. City reserves right to employ other contractors in connection with this Project or other projects.

[SIGNATURES ON NEXT PAGE]

**SIGNATURE PAGE FOR CONSTRUCTION CONTRACT
BETWEEN THE CITY OF CERES
AND XXXXXXXXXXXXXXXX, INC.**

IN WITNESS WHEREOF, the Parties have entered into this Agreement as of the Xth day of XXXXX, 20XX.

CITY OF CERES

XXXXXXXXXXXXXXXXX, Inc.

By: _____
Douglas D. Dunford
City Manager

By: _____

Its: _____

Printed Name: _____

ATTEST:

By: _____
Fallon Martin, City Clerk

EXHIBIT “A”
BID SCHEDULE

ITEM NO.	ITEM	UNIT OF MEASURE	ESTIMATED QUANTITY	UNIT PRICE (IN FIGURES)	ITEM TOTAL (IN FIGURES)
1	Construction of all work associated with the Rockefeller Water Building Improvements Project inclusive of tenant improvements and sitework	LS	1		

EXHIBIT “B”
PLANS AND SPECIFICATIONS

GENERAL

SCOPE OF WORK

The Work to be performed is included in Exhibit B – Drawings and Technical Specifications. Such other items or details, not mentioned above (Exhibit A), that are required by the drawings, and technical specifications, or the following special conditions (Exhibit C) shall be performed, placed, constructed or installed.

PERFORMANCE

The Contractor shall furnish all labor, materials, tools, equipment, incidentals, and do all work described in the Plans and these Special Provisions.

SCHEDULE OF VALUES

The Contractor shall be required to furnish a detailed schedule of values in such detail and form as the City shall request, showing the quantities, unit prices, overhead, profit, and all other expenses involved in order to provide a basis for determining the amount of progress payments. The schedule of values shall be submitted and approved by the City prior to the first payment request.

COORDINATION/COOPERATION

The Contractor shall notify the Engineer at (209) 538-5792 at least three (3) working days in advance of the tentative starting date.

The Contractor shall be responsible for contacting and coordinating with all utility companies, including the City, with regards to the location of existing underground facilities in the construction area. The Contractor shall call Underground Service Alert at 811, at least 2 working days before commencement of underground work for location of underground facilities.

Utility facilities damaged, temporarily disconnected, or relocated as a result of construction shall be repaired/reconnected as directed by the governing utility at the Contractor's expense.

Full compensation for conforming to the requirements of this section shall be considered as included in the price paid for the various contract items of work involved and no additional compensation will be made.

INSPECTION OF SITE

The Contractor shall inspect the work site and note all existing conditions before submitting a bid for this project. A site tour is scheduled immediately following the pre-bid meeting if requested.

DUST CONTROL

It shall be the responsibility of the Contractor to minimize dust during earth moving operations. A water truck shall be made available if necessary for dust control.

Full compensation for conforming to the requirements of this section shall be considered as included in the price paid for the various contract items of work involved and no additional compensation will be made.

PERMITS, BONDS, LICENSES AND INSURANCE

The building permit has been obtained by the City of Ceres. The Contractor shall procure all additional permits, bonds, licenses and insurance, pay all charges and fees, and give all notices necessary and incidental to the prosecution of the work.

PUBLIC CONVENIENCE AND SAFETY

The Contractor shall be responsible for all the provisions of this item, including issuance of all notices necessary for prosecution of the work.

Construction Area Signs -- Construction area signs and traffic cones shall be furnished, installed, maintained, and removed when no longer required in accordance with the provisions in Section 12, "Temporary Traffic Control," of the State Specifications, and these Special Provisions. Specifically included in this item are all detour signage.

The Contractor shall notify the appropriate regional notification center for operators of subsurface installations at least two (2) working days, but not more than 14 calendar days, prior to commencing any excavation for construction area sign posts. The regional notification centers include, but not limited to the following:

<u>Notification Center</u>	<u>Telephone</u>
Underground Service Alert (USA) (Northern California)	811

All excavations required to install construction area signs shall be performed by hand methods without the use of power equipment, except that power equipment may be used if it is determined that there were no utility facilities in the area of the proposed post holes.

Sign substrates for stationary mounted construction area signs may be fabricated from fiberglass reinforced plastic as specified under "Prequalified and Tested Signing and Delineation Materials" elsewhere in these Special Provisions.

Type IV reflective sheeting for sign panels for portable construction area signs shall conform to the requirements specified under "Prequalified and Testing Signing and Delineation Materials" elsewhere in these Special Provisions.

The term "construction area signs" shall also include temporary object markers required for the direction of public traffic through or around the work during construction. Object markers listed or designated on the plans as construction area signs shall be considered to be signs and shall be furnished, erected, maintained and removed by the Contractor in the same manner specified for construction area signs and the following:

Object markers shall be stationary mounted on wood or metal posts in accordance with the details shown on the plans and the requirements in Section 82, "Markers and Delineators," of the Standard Specifications.

Marker panels for Type N, Type P and Type R object markers shall conform to the requirements for sign panels for stationary mounted signs.

Target plates for Type K and Type L object markers and posts, reflectors and hardware shall conform to the requirements in said Section 82, but need not be new.

When a street section is to be closed, it shall be solidly barricaded, and signs shall be posted at the closure points indicating "Street Closed."

Full cost of providing and removing construction area signs shall be borne exclusively by the Contractor and shall be considered as included in the contract lump sum price for Item 10-1.07, "Public Convenience & Safety."

Maintaining Traffic -- Attention is directed to Section 7-1.03, "Public Convenience," Section 7-1.04, "Public Safety," and Section 12, "Temporary Traffic Control," of the State Specifications. Nothing in these Special Provisions shall be construed as relieving the Contractor from its responsibility as provided in Section 7-1.04 of the State Specifications.

All traffic cones used for night lane closures shall have reflective cone sleeves as specified in the specifications. One (1) 12-foot wide traffic lane must be open at all times.

The second and third paragraphs of Section 12-3.10, "Traffic Cones," of the State Standard Specifications are amended to read:

The type of reflective cone sleeve used shall be at the option of the Contractor. Only one type of reflective cone sleeve shall be used on the project.

Lane closures shall conform to the provisions in the section of these special provisions entitled "Traffic Control System for Lane Closure."

Personal vehicles of the Contractor's employees shall not be parked on the traveled way or shoulders, including any section closed to public traffic.

The Contractor shall notify local authorities of its intent to begin work at least five (5) days before work is begun. The Contractor shall cooperate with local authorities relative to handling traffic through the area and shall make its own arrangements relative to keeping the working area clear of parked vehicles.

The Contractor shall provide access to all businesses and residences within the construction zone at all times throughout the project. When the work requires the closing of a business driveway or other entrance, the Contractor shall post signs directing the public to the most convenient access to the business.

The Contractor shall provide access to all private driveways when construction is not actively in progress. Access to driveways fronting the construction area shall not be hindered or blocked for time periods greater than 4 hours without notifying the property owner or tenant in writing 24 hours prior to blockage.

The Contractor shall provide safe public access around the work site in accordance with the American Disabilities Act requirements during the work.

Whenever vehicles or equipment are parked on the shoulder within six feet of a traffic lane, the shoulder area shall be closed with fluorescent traffic cones or portable delineators placed on a taper in advance of the parked vehicles or equipment and along the edge of the pavement at 25-foot intervals to a point not less than 25 feet past the last vehicle or piece of equipment. A minimum of nine (9) cones or portable delineators shall be used for the taper. A C23 (Road

Work Ahead) or C24 (Shoulder Work Ahead) sign shall be mounted on a telescoping flag tree with flags. The flag tree shall be placed where directed by the Engineer.

When the Contractor's operations create a condition hazardous to traffic or to the public, he shall furnish, erect and maintain, at his expense and without cost to the City, such fences, barricades, lights, signs and other devices as are necessary to prevent accidents or damage or injury to the public. The Contractor shall also furnish such flagmen, provided with the necessary equipment kept clean and in good condition by the Contractor at his expense, as may be necessary to give adequate warning to traffic or to the public that the roadway is under construction or of any dangerous conditions to be encountered. The flagmen shall perform their duties and their work of furnishing and placing such signs, lights, flags and other warning and safety devices as set forth in the current "Work Area Traffic Control Handbook" as published by the Building News, Inc., Los Angeles, California.

Minor deviations from the requirements of this section concerning hours of work which do not significantly change the cost of the work may be permitted upon the written request of the Contractor if, in the opinion of the Engineer, public traffic will be better served and the work expedited. Such deviations shall not be adopted until the Engineer has indicated its written approval. All other modifications will be made by contract change order.

Full cost of conforming to this section shall be considered as included in the contract lump sum price for "Public Convenience and Safety."

Traffic Control System for Lane Closure -- A traffic control system shall be provided by the Contractor and shall be in accordance with the provisions of Section 12, "Temporary Traffic Control," of the State Specifications, the provisions under "Maintaining Traffic" elsewhere in these Special Provisions.

The provisions in this section shall not relieve the Contractor from its responsibility to provide such additional devices, or take such measures as may be necessary, to comply with the provisions in Section 7-1.04, "Public Safety," of the State Standard Specifications.

Prior to any lane closures, it shall be the responsibility of the Contractor to provide 72-hour notice to the City and obtain City approval of the lane closure. Failure to notify the City in a timely manner is cause for the City to prevent the lane closure.

Whenever a lane closure is made, the Contractor shall close the lane by placing fluorescent traffic cones, portable cones, portable delineators, or other devices approved by the Engineer, along a taper and along the edge of the closed lane adjacent to public traffic. One telescoping flag tree with flags shall be placed at the beginning and at the end of the taper.

If any component in the traffic control system is displaced or ceases to operate or function as specified, from any cause, during the progress of the work, the Contractor shall immediately repair said component to its original condition or replace said component, and shall restore the component to its original location. Full cost of providing flaggers shall be borne exclusively by the Contractor.

The Contractor shall submit a traffic control plan and approved by the City Engineer prior to commencing any work.

Protection of the Work -- To minimize traffic congestion during the resurfacing operation, the work shall be done in stages. Residents with driveways within the closed section shall be notified at least 24 hours in advance of closure via door hangers and signs within the limits of the project.

Barricades and signs and their cost of replacement, the cost of flagmen necessary for the protection of the work and the public and costs of notification of affected residents will be considered as included in the contract price paid for bid items shown in the proposal, and no separate payments shall be made.

WATER POLLUTION CONTROL

Summary

It shall be the responsibility of the Contractor to comply with all of the requirements of the latest NPDES General Permit for "Storm Water Discharges Associated with Construction and Land Disturbance Activities" (Order No. 2022-0057-DWQ, NPDES No. CAS000002) hereinafter called the "Permit" and standard industry practice.

This includes, but is not limited to, preparing plans and application, maps as well as all necessary reporting on the SWQCB's Storm Water Multiple Application and Report Tracking System (SMARTS System). The Contractor, working with their certified Qualified Storm Water Pollution Prevention Plan (SWPPP) Developer (QSD), will determine what would be the best course of action to comply with the latest State NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities Order No. 2009-0009- DWQ. If the Contractor's QSD determines a SWPPP is the best course of action, it shall be the responsibility of the Contractor and their QSD to submit to Construction Management a completed SWPPP for review. Upon acceptance of the SWPPP document by Construction Management, the QSD shall prepare a Notice of Intention (NOI) application in the SWQCB's SMARTS System and upload all necessary documents and maps to be approved by the Legally Responsible Person (LRP). Until a written approval of the SWPPP has been obtained from the SWQCB, no construction activity shall commence on the project site. Upon obtaining written approval of the SWPPP, it shall be the responsibility of the Contractor to implement the SWPPP. Throughout the course of the project, the Contractor's Qualified SWPPP Practitioner (QSP) shall conduct periodic inspections, testing, any reporting on the SMARTS System as well as coordinate with the QSD to update the SWPPP as necessary. At the conclusion of construction, it shall be the responsibility of the Contractor and his or her QSD/QSP to ensure Annual Report(s) have been prepared on the SMARTS System as well as prepare the Notice of Termination (NOT) for City's approval. The Contractor shall keep a copy of the approved SWPPP, and amendments thereto, at the job site and in the general business office of the Contractor. In addition, the Contractor shall make available to Construction Management copies of all amendments to the SWPPP as prepared by the Contractor. The SWPPP shall be made available upon request of a representative of the Fresno Metropolitan Flood Control District, Regional Water Quality Control Board, State Water Resources Control Board or U. S. Environmental Protection Agency. Requests by the public shall be directed to the Engineer.

If the Contractor and/or his/her QSD determines that a SWPPP is not necessary, then it shall be the responsibility of the Contractor to provide a list of Best Management Practices (BMP) that are to be implemented during the Work to Construction Management. The Contractor shall implement the BMP in a timely manner and maintain throughout the duration of the project. The Contractor shall keep a copy of the BMP list and any modification to the list at the job site and in the general business office of the Contractor. In addition, the Contractor shall make available to the City copies of all modifications to the BMP list. The BMP list shall be made available upon

request of a representative of the Fresno Metropolitan Flood Control District, Regional Water Quality Control Board, State Water Resources Control Board or U. S. Environmental Protection Agency. Requests by the public shall be directed to Construction Management.

Notice of violation and/or fines for any non-compliance will be the responsibility of the Contractor.

Manage work activities to reduce the discharge of pollutants to surface waters, groundwater, or municipal separate storm sewer systems including work items shown in the Bid Item List for:

1. Prepare Storm Water Pollution Prevention Plan. SWPPP preparation includes obtaining SWPPP approval, amending the SWPPP, preparing a CSMP and a SAP, and monitoring and inspecting WPC practices at the job site.
2. Storm Water Annual Report. Storm Water Annual Report preparation includes certifications, monitoring and inspection results, and obtaining Storm Water Annual Report acceptance.
3. Storm Water Sampling and Analysis Day. Storm Water Sampling and Analysis Day includes reporting of storm water quality per qualifying rain event. If specified for the risk level, the work includes preparation, collection, analysis, and reporting of storm water samples for turbidity, pH, and other constituents.
4. Rain Event Action Plan. If specified for the project risk level, REAP preparation includes preparing and submitting REAP forms and monitoring weather forecasts.

Do not start work until:

1. SWPPP is approved by the City.
2. SWPPP is uploaded onto the SMART System.
3. WDID is issued.
4. SWPPP review requirements have been fulfilled. If the RWQCB requires time for SWPPP review, allow 30 days for the RWQCB to review the SWPPP as specified under "Submittals" of these special provisions.

This project is anticipated to be Risk Level 1.

Definitions and Abbreviations

active and inactive areas: (1) Active areas have soil disturbing work activities occurring at least once within 14 days, and (2) Inactive areas are areas that have not been disturbed for at least 15 days.

BMPs: Best Management Practices are water pollution control practices.

construction phase: Construction phases are (1) Highway Construction including work activities for building roads and structures, (2) Plant Establishment including maintenance on vegetation installed for final stabilization, and (3) Suspension where work activities are suspended and areas are inactive.

CSMP: Construction Site Monitoring Program.

NAL: Numeric Action Level.

NEL: Numeric Effluent Limit.

NPDES: National Pollutant Discharge Elimination System.

NOI: Notice of Intent.

Normal working hours: The hours you normally work on this project.

Preparation Manual: The Department's "Storm Water Pollution Prevention Plan and Water Pollution Control Program Preparation Manual."

QSD: Qualified SWPPP Developer.

QSP: Qualified SWPPP Practitioner.

Qualified rain event: A qualified rain event is a storm that produces at least 0.5 inch of precipitation with a 48 hour or greater period between storms.

REAP: Rain Event Action Plan.

RWQCB: Regional Water Quality Control Board.

SAP: Sampling and Analysis Plan.

SSC: Suspended Sediment Concentration.

SWRCB: State Water Resources Control Board. **SWPPP:** Storm Water Pollution Prevention Plan. **WDID:** Waste Discharge Identification Number. **WPC:** Water Pollution Control.

WPC Manager: Water Pollution Control Manager. The WPC Manager implements water pollution control work described in the SWPPP and oversees revisions and amendments to the SWPPP.

Submittals

Within 20 days after contract approval, start the following process for SWPPP approval:

1. Submit 3 copies of the SWPPP and allow 20 days for the Engineer's review. If revisions are required, the Engineer provides comments and specifies the date that the review stopped.
2. Change and resubmit the SWPPP within 15 days of receipt of the Engineer's comments. The Engineer's review resumes when the complete SWPPP is resubmitted.
3. When the Engineer approves the SWPPP, submit an electronic and 4 printed copies of the approved SWPPP.
4. If the RWQCB reviews the approved SWPPP, the Engineer submits one copy of the approved SWPPP to the RWQCB for their review and comment. RWQCBs requiring time to review SWPPPs include:
5. If the Engineer requests changes to the SWPPP based on RWQCB comments, amend the SWPPP within 10 days.

Submit:

1. Storm water training records including training dates and subjects for employees and subcontractors. Include dates and subjects for ongoing training, including tailgate meetings.
2. Employee training records.
 - 2.1. Within 5 days of SWPPP approval for existing employees
 - 2.2. Within 5 days of training for new employees
 - 2.3. At least 5 days before subcontractors start work for subcontractor's employees

Prepare a Storm Water Annual Report for the reporting period from July 1st to June 30th. For the prior reporting period, submit the report no later than July 15th if construction occurs from July 1st through June 30th or within 15 days after contract acceptance if construction ends before June 30th. Submit the Storm Water Annual Report as follows:

1. Submit 2 copies of the Storm Water Annual Report and allow 10 days for the Engineer's review. If revisions are required, the Engineer provides comments and specifies the date that the review stopped.

2. Change and resubmit the Storm Water Annual Report within 5 days of receipt of the Engineer's comments. The Engineer's review resumes when the complete Storm Water Annual Report is resubmitted.
3. When the Engineer accepts the Storm Water Annual Report, insert the WPC Manager's signed certification and the Engineer's signed certification.

Submit one electronic copy and 2 printed copies of the accepted Storm Water Annual Report. Submit as required:

1. NAL Exceedance Reports
2. NEL Exceedance Reports
3. Visual Monitoring Reports
4. Inspection Reports
5. BMP Status Report

At least 5 days before operating any construction support facility, submit:

1. A plan showing the location and quantity of WPC practices associated with the construction support facility
2. A copy of the NOI approved by the RWQCB and the SWPPP approved by the RWQCB if you will be operating a batch plant or a crushing plant under the General Industrial Permit

Quality Control and Assurance Training

Provide storm water training for:

1. Project managers
2. Supervisory personnel
3. Employees involved with WPC work

Train all employees, including subcontractor's employees, in the following subjects:

1. WPC rules and regulations
2. Implementation and maintenance for:
 - 2.1. Temporary Soil Stabilization
 - 2.2. Temporary Sediment Control
 - 2.3. Tracking Control
 - 2.4. Wind Erosion Control
 - 2.5. Material pollution prevention and control
 - 2.6. Waste management
 - 2.7. Non-storm water management
 - 2.8. Identifying and handling hazardous substances
 - 2.9. Potential dangers to humans and the environment from spills and leaks or exposure to toxic or hazardous substances

Employees must receive initial WPC training before working on the job site. Conduct weekly training meetings covering:

1. WPC BMP deficiencies and corrective actions
2. BMPs that are required for work activities during the week
3. Spill prevention and control
4. Material delivery, storage, use, and disposal

5. Waste management
6. Non-storm water management procedures

Training for personnel to collect water quality samples must include:

1. SAP review
2. Health and safety review
3. Sampling simulations

A Storm Water Information Handout has been prepared for this contract and is available as described in "Supplemental Project Information" of these special provisions.

If you operate construction support facilities, protect storm water systems or receiving waters from the discharge of potential pollutants by using WPC practices.

Construction support facilities include:

1. Staging areas
2. Storage yards for equipment and materials
3. Mobile operations
4. Batch plants for PCC and HMA
5. Crushing plants for rock and aggregate
6. Other facilities installed for your convenience such as haul roads

If you operate a batch plant to manufacture PCC, HMA, or other material; or a crushing plant to produce rock or aggregate; obtain coverage under the General Industrial General Permit. You must be covered under the General Industrial Permit for batch plants and crushing plants located:

1. Outside of the job site
2. Within the job site that serve one or more contracts

Discharges from manufacturing facilities such as batch plants must comply with the general waste discharge requirements for Order No. 2014-0057-DWQ as amended by Order 2015-0122-DWQ, NPDES General Permit No. CAS000001, issued by the SWRCB for "Discharge of Stormwater Associated with Industrial Activities Excluding Construction Activities." For the General Industrial Permit, go to:

<http://www.waterboards.ca.gov/>

You may obtain copies of the Preparation Manual from the Publication Distribution Unit. The mailing address for the Publication Distribution Unit is:

State of California
Department of Transportation
Publication Distribution Unit
1900 Royal Oaks Drive
Sacramento, California 95815
Telephone: (916) 445-3520

The Preparation Manual and other WPC references are available at the Department's "Construction Storm Water and Water Pollution Control" Web site. For the Web site, go to:

<https://dot.ca.gov/programs/construction/storm-water-and-water-pollution-control>

Water Pollution Control Manager

Assign one WPC Manager to implement the SWPPP. The WPC Manager must comply with the Permit qualifications for a QSP and a QSD. You may assign a different QSD to prepare the SWPPP.

The QSD must have the following qualifications:

1. Department approved storm water management training described in the Department's "Construction Storm Water and Water Pollution Control" web site
2. Registration or certification described in the Permit

The QSP must meet the qualifications of the QSD or have the following certifications:

1. Department approved storm water management training described in the Department's "Construction Storm Water and Water Pollution Control" web site
2. Certification described in the Permit

At the job site, the WPC Manager must:

1. Be responsible for WPC work
2. Be the primary contact for WPC work
3. Oversee the maintenance of WPC practices
4. Oversee and enforce hazardous waste management practices
5. Have the authority to mobilize crews to make immediate repairs to WPC practices
6. Ensure that all employees have current water pollution control training
7. Implement the approved SWPPP and amend the SWPPP when required

WPC Manager must oversee:

1. Inspections of WPC practices identified in the SWPPP
2. Inspections and reports for visual monitoring
3. Preparation and implementation of REAPs
4. Sampling and analysis
5. Preparation and submittal of:
 - 5.1. NAL exceedance reports
 - 5.2. NEL exceedance reports
 - 5.3. SWPPP annual certification
 - 5.4. Annual reports
 - 5.5. BMP status reports

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

General

SWPPP work includes preparing a SWPPP including a CSMP, obtaining SWPPP approval, amending the SWPPP, inspecting and reporting on WPC practices at the job site. The SWPPP must comply with the Preparation Manual and the Permit. The SWPPP must be submitted in place

of the water pollution control program under Section 13-2, "Water Pollution Control Program," of the Standard Specifications.

Additional WPC work will be paid for as extra work under Section 4-1.05, "Changes and Extra Work," of the Standard Specifications.

The SWPPP must include sections as specified for the project risk level as follows:

1. For risk level 1:
 - 1.1. Schedule
 - 1.2. CSMP
2. For risk level 2:
 - 2.1. Schedule
 - 2.2. CSMP
 - 2.3. Adherence to Effluent Standards for NALs
 - 2.4. REAP
3. For risk level 3:
 - 3.1. Schedule
 - 3.2. CSMP
 - 3.3. Adherence to Effluent Standards for NALs and NELs
 - 3.4. REAP

The SWPPP must include WPC practices for:

1. Storm water and non-stormwater from areas outside of the job site related to project work activities such as:
 - 1.1. Staging areas
 - 1.2. Storage yards
 - 1.3. Access roads
2. Activities or mobile operations related to contractor obtained NPDES permits
3. Construction support facilities

The SWPPP must include a copy of permits obtained by the Department such as Fish & Game permits, US Army Corps of Engineers permits, RWQCB 401 Certifications, and RWQCB Waste Discharge Requirements for Aerially Deposited Lead Reuse.

Amend the SWPPP annually and resubmit it by July 15th. Amend the SWPPP if:

1. Changes in work activities could affect the discharge of pollutants
2. WPC practices are added by change order work
3. WPC practices are added at your discretion
4. Changes in the amount of disturbed soil are substantial
5. Objectives for reducing or eliminating pollutants in storm water discharges have not been achieved
6. There is a Permit violation

Whenever you amend the SWPPP, follow the same process specified for SWPPP approval. Retain a printed copy of the approved SWPPP at the job site.

SWPPP Schedule

The SWPPP schedule must:

1. Describe when work activities will be performed that could cause the discharge of pollutants into storm water
2. Describe WPC practices associated with each construction phase
3. Identify soil stabilization and sediment control practices for disturbed soil areas

Construction Site Monitoring Program (CSMP)

General

The QSD must prepare a CSMP as part of the SWPPP. The CSMP must be developed before starting work and be revised to reflect current construction activities as necessary.

The CSMP must include sections for the project risk level as follows:

1. For risk level 1:
 - 1.1. Visual Monitoring
 - 1.2. SAP for Non-Visible Pollutants
2. For risk level 2:
 - 2.1. Visual Monitoring
 - 2.2. SAP for Non-Visible Pollutants
 - 2.3. SAP for sediment and turbidity
 - 2.4. SAP for pH
3. For risk level 3:
 - 3.1. Visual Monitoring
 - 3.2. SAP for Non-Visible Pollutants
 - 3.3. SAP for sediment and turbidity
 - 3.4. SAP for pH
 - 3.5. SAP for receiving waters
 - 3.6. SAP for temporary active treatment systems

Visual Monitoring

The WPC Manager must oversee the performance of visual inspections for qualifying rain events. For each qualifying rain event, perform visual inspections and record observations during normal working hours as follows:

1. Record the time, date, and rain gauge reading
2. Observe:
 - 2.1. Within 2 days before the storm:
 - 2.1.1 Drainage areas for spills, leaks, or uncontrolled pollutants
 - 2.1.2 Proper implementation of WPC practices
 - 2.1.3 Storm water storage areas for leaks and adequate freeboard
 - 2.2. Every 24 hours during the storm:
 - 2.2.1 WPC practices for effective operation
 - 2.2.2 WPC practices needing maintenance and repair
 - 2.3. Within 2 days after the storm event:
 - 2.3.1. Discharge locations
 - 2.3.2. WPC practices to evaluate the design, implementation, and effectiveness
 - 2.3.3. To identify where additional WPC practices may be needed.

Perform non-stormwater discharge visual inspections as follows:

1. At least once during each of the following periods:
 - 1.1. January through March
 - 1.2. April through June
 - 1.3. July through September
 - 1.4. October through December
2. Observe flowing and contained storm water for the presence of floating and suspended materials, sheen on the surface, discoloration, turbidity, odors, and sources of observed pollutants
3. Observe the job site for the presence of authorized and unauthorized non-stormwater discharges and their sources

The WPC Manager must prepare visual inspection reports that include the following:

1. Name of personnel performing the inspection, inspection date, and date inspection report completed
2. Storm and weather conditions
3. Locations and observations
4. Corrective actions taken

Maintain visual inspections reports at the job site as part of the SWPPP.

Sampling and Analysis Plan (SAP)

General

Include a SAP in the CSMP to monitor the effectiveness of WPC practices. The SAP must comply with the Preparation Manual.

Assign trained personnel to collect water quality samples. Document their training in the SAP. Describe the following water quality sampling procedures in the SAP:

1. Sampling equipment
2. Sample preparation
3. Collection
4. Field measurement methods
5. Analytical methods
6. Quality assurance and quality control
7. Sample preservation and labeling
8. Collection documentation
9. Sample shipping
10. Chain of custody
11. Data management and reporting
12. Precautions from the construction site health and safety plan
13. Laboratory selection and certifications

Whenever assigned field personnel take samples, comply with the equipment manufacturer's recommendation for collection, analysis methods, and equipment calibration.

Samples taken for laboratory analysis must follow water quality sampling procedures and be analyzed by a State-certified laboratory under 40 CFR Part 136, "Guidelines Establishing Test Procedures for the Analysis of Pollutants."

The SAP must identify the State-certified laboratory, sample containers, preservation requirements, holding times, and analysis method. For a list of State-certified laboratories, go to:

https://www.waterboards.ca.gov/drinking_water/certlic/labs/

Include procedure for sample collection during precipitation.

Retain water quality sampling documentation and analytical results with the SWPPP at the job site. Show pollutant sampling locations on SWPPP drawings.

If discharges or sampling locations change because of changed work activities or knowledge of site conditions, amend the SAP.

If the project is risk level 2 or risk level 3, include procedures for collecting and analyzing at least 3 samples for each day of each qualifying rain event. Describe the collection of effluent samples at all locations where the storm water is discharged off-site.

Analytical Results and Evaluation

Submit an electronic copy (in file format .xls, .txt, .csv, .dbs, or .mdb) and a printed copy of water quality analytical results, and quality assurance and quality control within 48 hours of field analysis sampling, and within 30 days for laboratory analysis. Also provide an evaluation of whether the downstream samples show levels of the tested parameter that are higher than the control sample.

Electronic water quality analysis results must have the following information:

1. Sample identification number
2. Contract number
3. Constituent
4. Reported value
5. Analytical method
6. Method detection limit
7. Reported limit

SAP for Non-Visible Pollutants

The SAP must include a description of the sampling and analysis strategy for monitoring non- visible pollutants.

The SAP must identify potential non-visible pollutants present at the job site associated with any of the following:

1. Construction materials and waste
2. Existing contamination due to historical site usage
3. Application of soil amendments, including soil stabilization materials, with the potential to change pH or contribute toxic pollutants to storm water

SWPPP drawings must show the locations planned for storage and use of potential non-visible pollutants.

The SAP must include sampling procedures for the following conditions when observed during a storm water visual inspection. For each of the following, collect at least one sample for each qualifying storm event:

1. Materials or waste containing potential non-visible pollutants that are not stored under watertight conditions
2. Materials or waste containing potential non-visible pollutants that are stored under watertight conditions, but a breach, leakage, malfunction, or spill is observed; the leak or spill has not been cleaned up before precipitation; and material or waste could discharge non-visible pollutants to surface waters or drainage system
3. Chemical applications, including fertilizer, pesticide, herbicide, methyl methacrylate concrete sealant, or non-pigmented curing compound used during precipitation or within 24 hours preceding precipitation, and could discharge pollutants to surface waters or drainage system
4. Applied soil amendments, including soil stabilization materials that could change pH levels or contribute toxic pollutants to storm water runoff and discharge pollutants to surface waters or drainage system, unless available independent test data indicates acceptable concentrations of non-visible pollutants in the soil amendment
5. Storm water runoff from an area contaminated by historical usage of the site that could discharge pollutants to surface waters or drainage systems

The SAP must provide sampling procedures and schedule for:

1. Sample collection during the first 2 hours of each rain event that generate runoff
2. Sample collection during normal working hours
3. Each non-visible pollutant source
4. Uncontaminated control sample

The SAP must identify locations for sampling downstream and control samples, and reasons for selecting those locations. Select control sample locations where the sample will not come in contact with materials, waste, or areas associated with potential non-visible pollutants or disturbed soil areas.

SAP for Sediment and Turbidity

If the project is risk level 2 or risk level 3, sample and analyze for turbidity:

Parameter	Test Method	Detection Limit (Min)	Unit
Turbidity	Field test with calibrated portable instrument	1	NTU

If the project is risk level 3 and the turbidity NEL has been exceeded, sample and analyze for SSC:

Parameter	Test Method	Detection Limit (Min)	Unit

SSC	ASTM Method D3977-97	5	Mg/L
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SAP for pH

If the project is risk level 2 or risk level 3, sample and analyze for pH:

Parameter	Test Method	Detection Limit (Min)	Unit
pH	Field test with calibrated portable instrument	0.2	pH units

SAP for Receiving Waters

If the project is risk level 3, describe procedures for obtaining samples from representative and accessible locations:

1. Upstream of the discharge point
2. Downstream of the discharge point

Show receiving water sampling locations on SWPPP drawings.

If there are several discharge points, describe procedures for obtaining samples from a single upstream and a single downstream location.

Rain Event Action Plan (REAP)

REAP work includes preparing and submitting REAP forms and monitoring weather forecasts. The WPC Manager must submit a REAP to protect the job site at least 48 hours before a predicted rain event.

Prepare a REAP when the National Weather Service is predicting at least a 50 percent probability of precipitation within 72 hours.

For the REAP, use approved forms and include:

1. Site location
2. Risk level
3. Contact information including 24-hour emergency phone numbers for:
 - 3.1. WPC Manager
 - 3.2. Erosion and sediment control providers or subcontractors
 - 3.3. Storm water sampling providers or subcontractors
4. Storm Information
5. Construction phase information for:
 - 5.1. Highway Construction including active and inactive areas for work activities for building roads and structures
 - 5.2. Plant Establishment including maintenance on vegetation installed for final stabilization where areas are inactive
 - 5.3. Suspension where work activities are suspended and areas are inactive
6. Construction phase information including:

- 6.1. Construction activities
- 6.2. Subcontractors and trades on the job site
- 6.3. Pre-storm activities including:
 - 6.3.1. Responsibilities of the WPC Manager
 - 6.3.2. Responsibilities of the crew and crew size
 - 6.3.3. Stabilization for active and inactive disturbed soil areas
 - 6.3.4. Stockpile management
 - 6.3.5. Corrective actions taken for deficiencies identified during pre-storm visual inspection
- 6.4. Activities to be performed during storm events including:
 - 6.4.1. Responsibilities of the WPC Manager
 - 6.4.2. Responsibilities of the crew and crew size
 - 6.4.3. BMP maintenance and repair
- 6.5. Description of flood contingency measures

You must have the REAP onsite at least 24 hours before a predicted rain event. A printed copy of each REAP must be at the job site as part of the SWPPP

Implement the REAP including mobilizing crews to complete activities no later than 24 hours before precipitation occurs.

IMPLEMENTATION REQUIREMENTS

SWPPP Implementation

Obtain, install, and maintain a rain gauge at the job site. Observe and record daily precipitation.

Monitor the National Weather Service Forecast Office on a daily basis. For forecasts, go to:

<https://www.weather.gov/hnx/>

Whenever you or the Engineer identifies a deficiency in the implementation of the approved SWPPP:

1. Correct the deficiency immediately, unless the Engineer agrees to a later date for making the correction
2. Correct the deficiency before precipitation occurs

If you fail to correct the deficiency by the agreed date or before the onset of precipitation, the Department may correct the deficiency and deduct the cost of correcting the deficiency from payment.

Continue SWPPP implementation during any temporary suspension of work activities.

Install WPC practices within 15 days or before predicted precipitation, whichever occurs first.

Numeric Action Levels (NALs)

If the project is risk level 2 or risk level 3, then it is subject to NALs:

Parameter	Test Method	Detection Limit (Min)	Unit	Numeric Action Limit
pH	Field test calibrated with portable instrument	0.2	pH units	Lower NAL = 6.5 Upper NAL = 8.5
Turbidity	Field test calibrated with portable instrument	1	NTU	250 NTU

Numeric Effluent Limits (NELs)

If the project is risk level 3, then it is subject to NELs:

Parameter	Test Method	Detection Limit (Min)	Unit	Numeric Effluent Limit
pH	Field test calibrated with portable instrument	0.2	pH units	Lower NEL = 6.0 Upper NEL = 9.0
Turbidity	Field test calibrated with portable instrument	1	NTU	500 NTU

The storm event daily average for storms up to the 5-year, 24-hour storm, must not exceed the NEL for turbidity.

The daily average sampling results must not exceed the NEL for pH.

Storm Water Sampling and Analysis Day

Storm Water Sampling and Analysis Day work includes preparation, collection, analysis, and reporting of storm water samples for turbidity, pH, and other constituents. If the project is risk level 2 or risk level 3, and there is a qualified rain event that produces runoff, comply with the project's SAP for preparation, collection, analysis, and reporting of storm water samples. Collect:

1. Samples for each non-visible pollutant source and a corresponding uncontaminated control sample
2. Samples for turbidity, pH, and other constituents as specified
3. At least 3 samples for each day of each qualifying rain event
4. Samples for all locations where the storm water is discharged off-site

Perform sample collection during:

1. First 2 hours of each qualified rain event that produces runoff
2. Normal working hours

If the project is risk level 3, obtain receiving water samples.

You are not required to physically collect samples during dangerous weather conditions such as flooding or electrical storms.

If downstream samples show increased levels, assess WPC practices, site conditions, and surrounding influences to determine the probable cause for the increase.

Inspection

The WPC Manager must oversee inspections for WPC practices identified in the SWPPP:

1. Before a forecasted storm
2. After precipitation that causes site runoff
3. At 24-hour intervals during extended precipitation
4. On a predetermined schedule, a minimum of once a week

The WPC Manager must oversee daily inspections of:

1. Storage areas for hazardous materials and waste
2. Hazardous waste disposal and transporting activities
3. Hazardous material delivery and storage activities
4. WPC practices specified under "Construction Site Management" of these special provisions

The WPC Manager must use the Storm Water Site Inspection Report provided in the Preparation Manual.

The WPC Manager must prepare BMP status reports that include the following:

1. Location and quantity of installed WPC practices
2. Location and quantity of disturbed soil for the active or inactive areas

Within 24 hours of finishing the weekly inspection, the WPC Manager must submit:

1. Copy of the completed site inspection report
2. Copy of the BMP status report

REPORTING REQUIREMENTS

Storm Water Annual Report

Storm Water Annual Report work includes certifications, monitoring and inspection results, and obtaining Storm Water Annual Report acceptance. The WPC Manager must prepare a Storm Water Annual Report. The report must:

1. Use an approved report format
2. Include project information including description and location
3. Include storm water monitoring information including:
 - 3.1. Summary and evaluation of sampling and analysis results including laboratory reports
 - 3.2. Analytical methods, reporting units, detections limits for analytical parameters
 - 3.3. Summary of corrective actions
 - 3.4. Identification of corrective actions or compliance activities that were not implemented
 - 3.5. Summary of violations
 - 3.6. Names of individuals performing storm water inspections and sampling

- 3.7. Logistical information for inspections and sampling including location, date, time, and precipitation
- 3.8. Visual observations and sample collection records
4. Include documentation on training for:
 - 4.1. Individuals responsible for NPDES permit compliance
 - 4.2. Individuals responsible for BMP installation, inspection, maintenance, and repair
 - 4.3. Individuals responsible for preparing, revising, and amending the SWPPP

NAL Exceedance Report

If the project is risk level 2 or risk level 3 and an effluent sample exceeds a NAL, notify the Engineer and submit a NAL Exceedance Report no later than 48 hours after the conclusion of the storm event. The report must:

1. Include the following field sampling results and inspections:
 - 1.1. Analytical methods, reporting units, and detection limits
 - 1.2. Date, location, time of sampling, visual observation and measurements
 - 1.3. Quantity of precipitation of the storm event
2. Description of BMPs and corrective actions taken to manage NAL exceedance

NEL Violation Report

If the project is risk level 3 and an NEL is exceeded, notify the Engineer and submit a NEL Violation Report within 6 hours. The report must:

1. Include the following field sampling results and inspections:
 - 1.1. Analytical methods, reporting units, and detection limits
 - 1.2. Date, location, time of sampling, visual observations and measurements
 - 1.3. Quantity of precipitation of the storm event
2. Description of BMPs and corrective actions taken to manage NEL exceedance

If the project is risk level 2 or risk level 3, submit all sampling results to the Engineer no later than 48 hours after the conclusion of a storm event.

STREET SWEEPING

This work includes street sweeping.

The SWPPP must describe and include the use of street sweeping as a water pollution control practice for sediment control and tracking control.

Submittals

At least 5 business days before starting clearing and grubbing, earthwork, or other activities with the potential for tracking sediment or debris, submit:

1. Number of sweepers described in the SWPPP
2. Type of sweeper technology

Quality Control and Assurance

Retain and submit records of street sweeping including:

1. Quantity of sweeping waste disposal

2. Sweeping times and locations

CONSTRUCTION

Street Sweepers

Sweepers must use one of these technologies:

1. Mechanical sweeper followed by a vacuum-assisted sweeper
2. Vacuum-assisted dry (waterless) sweeper
3. Regenerative-air sweeper

Operation

Street sweeping must be done at:

1. Paved roads at job site entrance and exit locations
2. Paved areas within the job site that flow to storm drains or water bodies

Street sweeping must be done:

1. During clearing and grubbing activities
2. During earthwork activities
3. During trenching activities
4. During roadway structural section activities
5. When vehicles are entering and leaving the job site
6. After soil disturbing activities
7. After observing offsite tracking of material

Monitor paved areas and roadway within the jobsite. Street sweeping must be done:

1. Within 1 hour, if sediment or debris is observed during activities that require sweeping
2. Within 24 hours, if sediment or debris is observed during activities that do not require sweeping

At least 1 sweeper must be on the job site at all times when sweeping work is required. The sweeper must be in good working order.

Perform street sweeping to minimize dust. If dust generation is excessive or sediment pickup is ineffective, use water or a vacuum.

You may stockpile collected material on the jobsite according to the approved SWPPP. Dispose of collected material at least once per week.

Material collected during street sweeping must be removed and disposed of under Section 7-1.13, "Disposal of Material Outside the Street Right of Way," of the Standard Specifications.

Your WPCM must inspect paved roads at job site access points:

1. Daily if earthwork and other sediment or debris generating activities occur daily
2. Weekly if earthwork and other sediment or debris generating activities do not occur daily
3. When the National Weather Service predicts precipitation with a probability of at least 30 percent

CLEARING AND GRUBBING

Clearing and grubbing shall conform to the provisions in Section 16, "Clearing and Grubbing," of the State Specifications and these Special Provisions.

Vegetation shall be cleared and grubbed only within the limits of construction shown in the plans. All existing vegetation, outside the areas to be cleared and grubbed, shall be protected from injury or damage resulting from the work of the Contractor.

Nothing herein shall be construed as relieving the Contractor of his responsibility for final clean up as provided in Section 4-1.13, "Cleanup", of the State Standard Specifications.

SURVEYING SERVICES

The Contractor will arrange for performance of survey work and construction layout and will be responsible for the accuracy of surveying adequate for construction. The selection of a Surveyor by the Contractor will be subject to approval by the Engineer. The Contractor shall preserve construction survey stakes and marks for the duration of their usefulness. If any construction survey stakes are lost or disturbed and need to be replaced, such replacement shall be by the Surveyor at the expense of the Contractor. The Contractor will dig all holes necessary for line and grade stakes. Full cost of providing surveys shall be borne exclusively by the Contractor.

MONUMENTATION

As of the date of the start of Notice to Proceed (NTP), the contractor shall comply with preservation of all survey monuments as shown on record maps and on the project plan of the job site.

As required in the Business and Professional Code Section §8771, when monuments exist that control the location of subdivisions, tracts, boundaries, roads, streets, or highways, or provide horizontal or vertical survey control, the monuments shall be located and referenced by or under the direction of a licensed land surveyor or registered civil engineer prior to the time when any streets, highways, other rights-of-way, or easements are improved, constructed, reconstructed, maintained, resurfaced, or relocated, and a corner record or record of survey of the references shall be filed with the county surveyor prior to any construction.

The decision to file either the required corner record or a record of survey pursuant to subdivision shall be at the election of the licensed land surveyor or registered civil engineer submitting the document.

If a survey monument is destroyed after the NTP, the Contractor shall be responsible for the replacement of the monument.

A survey monument will be considered destroyed that has been:

- Moved more than 0.02 ft in any direction from the ties provided by and certified by a Licensed Land Surveyor
- Broken.
- Disturbed to a point that the survey monument's position is no longer fixed or stable.
- Removed from the ground for any reason.
- Vertically adjusted without the written authorization of the City Engineer.

Adjustment of survey monuments shall be completed under the direction of a Land Surveyor or a Registered Engineer licensed to practice in the State of California. The City Engineer or the City Surveyor shall be provided with the final positional data (both horizontal and/or vertical), along with certification by the Land Surveyor licensed by the State of California supervising the work that the position of adjusted monument meets the specification that the horizontal position is maintained within 0.01 ft of the original position of the monument and/or that the vertical position shall be within 0.006 ft relative to the measured difference between the original and the final adjusted vertical position of the monument. A corner record or record of survey shall be filed with the county surveyor to satisfy Business and Professional Code Section §8771.

DESTROYED SURVEY MONUMENT

Any survey monument that is destroyed after the date of the start of work, and the responsible party is unclear or not determinable, the monument shall be replaced by the City of Ceres, unless otherwise approved by the City Engineer, and there shall be a \$2,000.00 deduction from the cost of the contract in favor of the City of Ceres.

AS-BUILT DRAWINGS

Record Drawings shall be submitted before the notice of completion is filed and must include the following:

- Contractor's statement (with original signature on each sheet) shall verify all construction specifications and product qualities have been met or exceeded.
- "AS-BUILT DRAWINGS" or "RECORD DRAWINGS" shall be clearly labeled on each sheet.
- The location and elevation of the benchmark referenced will be shown on the drawing.
- Corrected placement, grade, elevation and alignment of roads, water system, sewer and storm system, lighting system and appurtenances, pipe sizes, material changes, shall all be shown on as-built drawing.
- All horizontal distances shall be shown to the nearest tenth of a foot (0.1'). All elevations shall be shown to the nearest five hundredths of a foot (0.05').

REMOVE CONCRETE

The contractor shall remove portions of the concrete as shown on the plans and called for in these specifications. Existing concrete shall be sawcut to provide a smooth transition.

Surplus material shall become the property of the Contractor and shall be disposed of at the

INSTALL CONCRETE

The Contractor shall install concrete in accordance with the details shown on the Plans, and these Special Provisions. This item shall include subgrade preparation, aggregate base material, compaction, polyolefin vapor barrier (if necessary) and all conditions described herein and as detailed on the plans.

The contractor shall install 18-inch #4 dowels a maximum of 24-inches on center at joints with existing concrete. Dowels shall be embedded a minimum of 6-inches into existing concrete. The concrete shall have a minimum thickness of 6-inch, 4,000 psi minimum, slump of 4-inch +/- 1-inch,

match the existing adjacent concrete finish and in accordance with the Plans, and these Special Provisions.

The Contractor shall moisture condition subgrade to at least 3 the optimum moisture content to a depth of 12" and compact existing sub-grade to 95%, followed by 4" thick of Caltrans Class 2 aggregate base compacted to at least 95% relative compaction, as determined by ASTM D1557.

TRAFFIC STRIPES AND PAVEMENT MARKINGS

Thermoplastic traffic stripes (traffic lines) and pavement markings shall be applied in conformance with the provisions in Section 84, "Markings," of the State Standard Specifications and these special provisions.

Thermoplastic material shall be free of lead and chromium, and shall conform to the requirements in State Specification PTH-02ALKYD.

Retroreflectivity of the thermoplastic traffic stripes and pavement markings shall conform to the requirements in ASTM Designation: D 6359-99. White thermoplastic traffic stripes and pavement markings shall have a minimum initial retroreflectivity of 250 mcd m⁻² lx⁻¹. Yellow thermoplastic traffic stripes and pavement markings shall have a minimum initial retroreflectivity of 150 mcd m⁻² lx⁻¹. Green thermoplastic pavement markings shall have a minimum initial retroreflectivity of 75 mcd m⁻² lx⁻¹.

Where striping joins existing striping, as shown on the plans, the Contractor shall begin and end the transition from the existing striping pattern into or from the new striping pattern a sufficient distance to ensure continuity of the striping pattern.

Thermoplastic material for traffic stripes shall be applied at a minimum rate of 0.2 lb/ft. The minimum application rate is based on a solid stripe of 4 inches in width.

Thermoplastic traffic stripes shall be applied at the minimum thickness and application rate as specified below. The minimum application rate is based on a solid stripe of 4 inches in width.

Minimum Stripe Thickness (inch)	Minimum Application Rate (lb/ft)
0.079	0.27
0.098	0.34

Thermoplastic traffic stripes and pavement markings shall be free of runs, bubbles, craters, drag marks, stretch marks, and debris.

RESTORATION

The Contractor shall restore all areas adjacent to the construction area and areas affected during construction to their preconstruction condition. Specifically included in this item are all concrete and asphalt pavement, signs, concrete curb and gutter, curb drains, driveway and alley approach, sidewalk, pavement markings, landscaping and irrigation, fencing and all items damaged during construction.

The Contractor shall also modify any water sprinkler service that has to be moved back of the new sidewalk so that it remains functional after modification. Contractor shall make the modifications using the same type of materials as the existing system, or materials as approved by the Engineer. Contractor shall remove sidewalk formwork, cleanup and backfill with soil and re-sod or re-seed to match existing landscaping.

BUILDING SPECIFICATIONS

SECTION 033543

CONCRETE FINISHING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Concrete Finishing for buildings

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Material Certificates: For each of the following, signed by manufacturers:
 - 1. Repair materials.
 - 2. Liquid floor treatments.

1.5 FIELD CONDITIONS

- A. Traffic Control: Maintain access for vehicular and pedestrian traffic as required for other construction activities.

PART 2 - PRODUCTS

2.1 LIQUID FLOOR TREATMENTS

- A. Penetrating Liquid Floor Treatments for Polished Concrete Finish: Clear, waterborne solution of inorganic silicate or silicate materials and proprietary components; odorless; that penetrates, hardens, and is suitable for polished concrete surfaces.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Euclid Chemical Company (The); an RPM company.
 - b. Laticrete International, Inc.
 - c. PROSOCO, Inc.
2. Substitutions – Per Division 01.

PART 3 - EXECUTION

3.1 FINISHING FLOORS AND SLABS

- A. Comply with ACI 302.1R recommendations for screeding, restraighening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.
- B. Trowel Finish:
 1. After applying float finish, apply first troweling and consolidate concrete by hand or power-driven trowel.
 2. Continue troweling passes and restraighen until surface is free of trowel marks and uniform in texture and appearance.
 3. Grind smooth any surface defects that would telegraph through applied coatings or floor coverings.
 4. Do not add water to concrete surface.
 5. Do not apply hard-troweled finish to concrete, which has a total air content greater than 3 percent.
 6. Apply a trowel finish to surfaces to be covered with resilient flooring, carpet, ceramic or quarry tile.
- C. Trowel and Fine-Broom Finish: Apply a first trowel finish to surfaces where indicated on Drawings. While concrete is still plastic, slightly scarify surface with a fine broom perpendicular to main traffic route.
 1. Coordinate required final finish with Architect before application.
 2. Comply with flatness and levelness tolerances for trowel-finished floor surfaces.
- D. Slip-Resistive Finish: Before final floating, apply slip-resistive aluminum granule finish to surfaces as indicated on Drawings
 1. Apply in accordance with manufacturer's written instructions and as follows:
 - a. Uniformly spread 25 lb/100 sq. ft. of dampened slip-resistive aluminum granules over surface in one or two applications.
 - b. After broadcasting and tamping, apply float finish.
 - c. After curing, lightly work surface with a steel wire brush or an abrasive stone and water to expose slip-resistive aluminum granules.

3.2 INSTALLATION OF MISCELLANEOUS CONCRETE ITEMS

A. Filling In:

1. Fill in holes and openings left in concrete structures after Work of other trades is in place unless otherwise indicated.
2. Mix, place, and cure concrete, as specified, to blend with in-place construction.
3. Provide other miscellaneous concrete filling indicated or required to complete the Work.

B. Curbs: Provide monolithic finish to interior curbs by stripping forms while concrete is still green and by steel-troweling surfaces to a hard, dense finish with corners, intersections, and terminations slightly rounded.

C. Equipment Bases and Foundations:

1. Coordinate sizes and locations of concrete bases with actual equipment provided.
2. Prior to pouring concrete, place and secure anchorage devices.
 - a. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
 - b. Cast anchor-bolt insert into bases.
 - c. Install anchor bolts to elevations required for proper attachment to supported equipment.

END OF SECTION 033543

SECTION 06410

ARCHITECTURAL WOOD CASEWORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Plastic Laminate Casework
 - 2. Hardware typically furnished by the casework manufacturer.
 - 3. Shelving.
 - 4. Structural supports incorporated into wood casework.

1.3 SUBMITTALS

- A. Shop Drawings:
 - 1. Submit shop drawings in conformance with the requirements of *Architectural Woodwork Standards*.
 - 2. Include dimensioned plan, sections, elevations, and details, including interface with adjacent work
 - 3. See Division 01: General Conditions for additional submittal requirements
- B. Samples:
 - 1. Submit a sample in the specified finish of each hardware item that will be visible at exposed surfaces when the job is complete.
 - 2. Submit plastic laminate samples.

1.4 QUALITY ASSURANCE

- A. Work shall be in accordance with the Grade or Grades specified of the *Architectural Woodwork Standards*.
- B. Qualification:
 - 1. Firm (woodwork manufacturer) with no less than 5 years of production experience similar to a specific project, whose qualifications indicate the ability to comply with the requirements of this Section.
 - 2. The woodwork manufacturer must have at least one project in the past 5 years where the value of the woodwork was within 20 percent of the cost of woodwork for this Project.

- C. Single Source Responsibility: A single manufacturer shall provide and install the work of described in this Section.
- D. Pre-Installation Conference:
 - 1. Convene 2 weeks prior to beginning work of this Section.
 - 2. Attendance: Architect, Owner, Contractor, installer, and related trades.
 - 3. Review, discuss and resolve:
 - a. Critical dimensions.
 - b. Product delivery and storage.
 - c. Staging and sequencing.
 - d. Protection of completed work.

1.5 DELIVERY STORAGE AND HANDLING

- A. Deliver materials only when the project is ready for installation and the general contractor has provided a clean storage area.
 - 1. Delivery of architectural millwork shall be made only when the area of operation is enclosed, all plaster and concrete work is dry and the area broom clean.
 - 2. Maintain indoor temperature and humidity within the range recommended by the *Architectural Woodwork Standards* for the location of the project.

1.6 SCHEDULING

- A. Coordinate fabrication, delivery, and installation with the general contractor and other applicable trades.

PART 2 - PRODUCTS

2.1 COMPONENTS

- A. Lumber: In accordance with the *Architectural Woodwork Standards* Grade specified for the product being fabricated. Moisture Content: 6% to 12% for boards up to 2 inch nominal thickness, and shall not exceed 19% for thicker pieces.
- B. Core: MDF meeting the requirements of *Architectural Woodwork Standards*.
 - 1. Made with no added Urea Formaldehyde.
 - 2. Water resistant core, where required: Particle board meeting the requirements of ANSI A208.1 Grade M3 MR-50 or MDF meeting the requirements of ANSI A 208.2 Grade 155 MR-50.
- C. Veneer core plywood: A non-telegraphing hardwood manufactured with exterior glue.
- D. Countertops: Plastic Laminate
 - 1. Substitutions: Per Division 01.

- E. Edgeband: PVC, matching the color and pattern of the exposed laminate.
- F. Adhesives: Type I, fully waterproof casework with sinks, Type II, water resistant at other locations.
- G. Hardware:
 - 1. Finish: Satin stainless steel
 - 2. Pulls:
 - 3. Drawer Guides: Full extension
 - a. Meeting the requirements of the AWS for the type and size of drawer.
 - b. File Drawers: Full extension. Minimum 100-pound capacity except 150 pound capacity for the 6 deep drawers on north elevation.
 - 4. Hinges: Concealed European style Grade II hinges minimum 120° opening
 - 5. Door Catches:
 - 6. Shelf Supports: Bored hole system with metal supports.
 - 7. Locks
 - a. Door locks:
 - b. Drawer locks:
 - c. Keying: Keyed alike or as specified by owner
 - 1. Provide 3 keys per lock.
 - 2. Provide 2 master keys.
 - 8. Elbow Catches

2.2 FABRICATION

- A. Grade: AWS Custom Grade.
- B. Exposed Exterior Surfaces: Plastic Laminate: Color to be selected from manufacturer's standard range.
- C. Exposed interior surfaces: High pressure laminate matching exposed surfaces.
- D. Semi-exposed surfaces: Low-pressure melamine overlay
- E. Cabinet construction type: Frameless.
- F. Door Interface Style: Flush overlay
- G. Edgeband (at laminate locations): PVC, matching the color and pattern of the exposed laminate.
 - 1. Edgeband at doors, drawer fronts, and false fronts: 3mm PVC
- H. Drawers:
 - 1. Sides: Particle board with melamine surfacing.

2. Bottoms: MDF with melamine faces. Bottoms shall be fully housed into drawer sides, backs, and sub-fronts, and securely glued.
 3. Joinery: Nailed and glued lock joints.
- I. Countertops:
1. Plastic Laminate: Color to be selected from manufacturer's standard range

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify the adequacy and proper location of any required backing or support framing.
- B. Verify that mechanical, electrical, plumbing, and other building components affecting work in this Section are in place and ready.

3.2 INSTALLATION

- A. Prior to installation, condition cabinets to average humidity that will prevail after installation.
- B. Install all work in conformance with the *Architectural Woodwork Standards*, latest edition.
 1. Installation shall conform to the *AWS* Grade of the items being installed.
- C. All work shall be secured in place, square, plumb, and level.
- D. All work abutting other building components shall be properly scribed.
- E. Mechanical fasteners used at exposed and semi-exposed surfaces, excluding installation attachment screws and those securing cabinets end to end, shall be countersunk.
- F. Equipment cutouts shown on plans shall be cut by the installer.
- G. Adhere countertops, splashes, and skirts with beads of adhesive.
- H. Fill joints between cabinets, tops, splashes, and adjacent construction with joint sealer; finish flush.

3.3 ADJUSTING & TOUCH UP

- A. Before completion of the installation, the installer shall adjust all moving and operating parts to function smoothly and correctly.
- B. All nicks, chips, and scratches in the finish shall be filled and retouched. Damaged items that cannot be repaired shall be replaced.

3.4 CLEANUP

- A. Upon completion of installation, the installer shall clean all installed items of pencil and ink marks and broom clean the area of operation, depositing debris in containers provided by the general contractor.

END OF SECTION 064100

SECTION 081113

HOLLOW METAL DOORS AND FRAMES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Standard and custom hollow metal doors and frames.
2. Steel sidelight, borrowed lite and transom frames.
3. Louvers installed in hollow metal doors.
4. Light frames and glazing installed in hollow metal doors.

B. Related Sections:

1. Division 01 Section "General Conditions".
2. Division 04 Section "Unit Masonry" for embedding anchors for hollow metal work into masonry construction.
3. Division 08 Section "Flush Wood Doors".
4. Division 08 Section "Glazing" for glass view panels in hollow metal doors.
5. Division 08 Section "Door Hardware".
6. Division 09 Sections "Exterior Painting" and "Interior Painting" for field painting hollow metal doors and frames.

C. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.

1. ANSI/SDI A250.8 - Recommended Specifications for Standard Steel Doors and Frames.
2. ANSI/SDI A250.4 - Test Procedure and Acceptance Criteria for Physical Endurance for Steel Doors, Frames, Frames Anchors and Hardware Reinforcing.
3. ANSI/SDI A250.6 - Recommended Practice for Hardware Reinforcing on Standard Steel Doors and Frames.
4. ANSI/SDI A250.10 - Test Procedure and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames.
5. ANSI/SDI A250.11 - Recommended Erection Instructions for Steel Frames.
6. ASTM A1008 - Standard Specification for Steel Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability.
7. ASTM A653 - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.

8. ASTM A924 - Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process.
9. 10. SDI-113 Standard Practice for Determining the Steady-State Thermal Transmittance of Steel Door & Frame Assemblies.
10. ASTM C 1363 - Standard Test Method for Thermal Performance of Building Assemblies by Means of a Hot Box Apparatus.
11. ASTM C1199 - Standard Test Method for Measuring the Steady-State Thermal Transmittance of Fenestration Systems Using Hot Box Methods
12. ASTM E1423 - Practice for Determining Steady State Thermal Transmittance of Fenestration Systems.
13. ANSI/BHMA A156.115 - Hardware Preparation in Steel Doors and Frames.
14. ANSI/SDI 122 - Installation and Troubleshooting Guide for Standard Steel Doors and Frames.
15. ANSI/NFPA 80 - Standard for Fire Doors and Fire Windows; National Fire Protection Association.
16. ANSI/NFPA 105: Standard for the Installation of Smoke Door Assemblies.
17. NFPA 252 - Standard Methods of Fire Tests of Door Assemblies; National Fire Protection Association.
18. UL 10C - Positive Pressure Fire Tests of Door Assemblies.
19. UL 1784 - Standard for Air Leakage Tests of Door Assemblies.

1.3 QUALITY ASSURANCE

- A. Source Limitations: Obtain hollow metal doors and frames through one source from a single manufacturer wherever possible.
- B. Quality Standard: In addition to requirements specified, furnish SDI-Certified manufacturer products that comply with ANSI/SDI A250.8, latest edition, "Recommended Specifications for Standard Steel Doors and Frames".
- C. Fire-Rated Door Assemblies: Assemblies complying with NFPA 80 that are listed and labeled by a qualified testing agency, for fire-protection ratings indicated, based on testing at positive pressure according to UL10C (neutral pressure at 40" above sill) or UL 10C.
 1. Oversize Fire-Rated Door Assemblies Construction: For units exceeding sizes of tested assemblies, attach construction label certifying doors are built to standard construction requirements for tested and labeled fire rated door assemblies except for size.
 2. Temperature-Rise Limit: Where indicated and at vertical exit enclosures (stairwell openings) and exit passageways, provide doors that have a maximum transmitted temperature end point of not more than 450 deg F (250 deg C) above ambient after 30 minutes of standard fire-test exposure.
 3. Smoke Control Door Assemblies: Comply with NFPA 105.
 - a. Smoke "S" Label: Doors to bear "S" label, and include smoke and draft control gasketing applied to frame and on meeting stiles of pair doors.
- D. Fire-Rated, Borrowed-Light Frame Assemblies: Assemblies complying with NFPA 80 that are listed and labeled, by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire-protection ratings indicated, based on testing according to NFPA 257. Provide labeled glazing material.

- E. Storm Shelter Openings: Provide complete door systems for hurricane or tornado storm shelters, and other areas of refuge, complying and tested according to ICC 500 (2014/2020), ICC/NSSA Standard for the Design and Construction of Storm Shelters.
 - 1. Each unit to bear third party permanent label indicating compliance with the referenced testing standards.
- F. Pre-Submittal Conference: Conduct conference in compliance with requirements in Division 01 Section "Project Meetings" with attendance by representatives of Supplier, Installer, and Contractor to review proper methods and procedures for installing hollow metal doors and frames and to verify installation of electrical knockout boxes and conduit at frames with electrified or access control hardware.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Deliver hollow metal work palletized, wrapped, or crated to provide protection during transit and Project site storage. Do not use non-vented plastic.
- B. Deliver welded frames with two removable spreader bars across bottom of frames, tack welded to jambs and mullions.
- C. Store hollow metal work under cover at Project site. Place in stacks of five units maximum in a vertical position with heads up, spaced by blocking, on minimum 4-inch high wood blocking. Do not store in a manner that traps excess humidity.
 - 1. Provide minimum 1/4-inch space between each stacked door to permit air circulation. Door and frames to be stacked in a vertical upright position.

1.5 PROJECT CONDITIONS

- A. Field Measurements: Verify actual dimensions of openings by field measurements before fabrication.

1.6 COORDINATION

- A. Coordinate installation of anchorages for hollow metal frames. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors. Deliver such items to Project site in time for installation.
- B. Building Information Modeling (BIM) Support: Utilize designated BIM software tools and obtain training needed to successfully participate in the Project BIM processes. All technical disciplines are responsible for the product data integration and data reliability of their Work into the coordinated BIM applications.

1.7 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace doors that fail in materials or workmanship within specified warranty period.

- B. Warranty includes installation and finishing that may be required due to repair or replacement of defective doors.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide steel doors and frames from a SDI Certified manufacturer:
 - 1. CECO Door Products (C).
 - 2. Curries Company (CU).
 - 3. Stiles Custom Metal, Inc.

2.2 MATERIALS

- A. Cold-Rolled Steel Sheet: ASTM A 1008/A 1008M, Commercial Steel (CS), Type B; suitable for exposed applications.
- B. Metallic-Coated Steel Sheet: ASTM A 653/A 653M, Commercial Steel (CS), Type B; with minimum G60 (Z180) or A60 (ZF180) metallic coating.
- C. Frame Anchors: ASTM A 653/A 653M, Commercial Steel (CS), Commercial Steel (CS), Type B; with minimum G60 (Z180) or A60 (ZF180) metallic coating.

2.3 HOLLOW METAL DOORS

- A. General: Provide 1-3/4 inch doors of design indicated, not less than thickness indicated; fabricated with smooth surfaces, without visible joints or seams on exposed faces unless otherwise indicated. Comply with ANSI/SDI A250.8 and ANSI/NAAMM HMMA 867.
- B. Exterior Doors: Face sheets fabricated of commercial quality hot-dipped zinc coated steel that complies with ASTM A 653/A 653M, Coating Designation A60. Provide doors complying with requirements indicated below by referencing ANSI/SDI A250.8 for level and model and ANSI/SDI A250.4 for physical performance level:
 - 1. Design: Flush panel.
 - 2. Core Construction: Manufacturer's standard polystyrene. Where indicated, provide doors fabricated as thermal-rated assemblies with a minimum R-value of 2.8 or better.
 - 3. Core Construction: Manufacturer's standard polyurethane. Where indicated, provide doors fabricated as thermal-rated assemblies with a minimum R-value of 3.2 or better.
 - 4. Core Construction: Manufacturer's thermally enhanced QMax core. Where indicated provide doors fabricated as thermal-rated assemblies with a minimum thermal rating of 0.35 BTU/hr-ft²-F.
 - 5. Level/Model: Level 3 and Physical Performance Level A (Extra Heavy Duty), Minimum 16 gauge (0.053-inch - 1.3-mm) thick steel, Model 2.
 - 6. Vertical Edges: Vertical edges to have the face sheets spot welded and filled full height with an epoxy filler. Welds are to be ground, filled and dressed smooth. Beveled Lock Edge, 1/8 inch in 2 inches (3 mm in 50 mm).

7. Top and Bottom Edges: Reinforce tops and bottoms of doors with a continuous steel channel not less than 16 gauge, extending the full width of the door and welded to the face sheet. Doors with an inverted top channel to include a steel closure channel, screw attached, with the web of the channel flush with the face sheets of the door. Plastic or composite channel fillers are not acceptable.
 8. Hinge Reinforcement: Minimum 7 gauge (3/16") plate 1-1/4" x 9" or minimum 14 gauge continuous channel with pierced holes, drilled and tapped.
 9. Hardware Reinforcements: Fabricate according to ANSI/SDI A250.6 with reinforcing plates from same material as door face sheets.
- C. Interior Doors: Face sheets fabricated of commercial quality cold rolled steel that complies with ASTM A 1008/A 1008M. Provide doors complying with requirements indicated below by referencing ANSI/SDI A250.8 for level and model and ANSI/SDI A250.4 for physical performance level:
1. Design: Flush panel.
 - a. Fire Door Core: As required to provide fire-protection and temperature-rise ratings indicated.
 2. Level/Model: Level 3 and Physical Performance Level A (Extra Heavy Duty), Minimum 16 gauge (0.053-inch - 1.3-mm) thick steel, Model 2.
 3. Vertical Edges: Vertical edges to have the face sheets spot welded and filled full height with an epoxy filler. Welds are to be ground, filled and dressed smooth. Beveled Lock Edge, 1/8 inch in 2 inches (3 mm in 50 mm).
 4. Top and Bottom Edges: Reinforce tops and bottoms of doors with a continuous steel channel not less than 16 gauge, extending the full width of the door and welded to the face sheet.
 5. Hinge Reinforcement: Minimum 7 gauge (3/16") plate 1-1/4" x 9" or minimum 14 gauge continuous channel with pierced holes, drilled and tapped.
 6. Hardware Reinforcements: Fabricate according to ANSI/SDI A250.6 with reinforcing plates from same material as door face sheets.
- D. Manufacturers Basis of Design:
1. Curries Company (CU) - Polystyrene Core - 707 Series.

2.4 HOLLOW METAL FRAMES

- A. General: Comply with ANSI/SDI A250.8 and with details indicated for type and profile.
- B. Exterior Frames: Fabricated of hot-dipped zinc coated steel that complies with ASTM A 653/A 653M, Coating Designation A60.
1. Fabricate frames with mitered or coped corners. Profile as indicated on drawings.
 2. Frames: Minimum 14 gauge (0.067-inch -1.7-mm) thick steel sheet.
 3. Manufacturers Basis of Design:
 - a. Curries Company (CU) - M Series.

- C. Interior Frames: Fabricated from cold-rolled steel sheet that complies with ASTM A 1008/A 1008M.
 - 1. Fabricate frames with mitered or coped corners. Profile as indicated on drawings.
 - 2. Frames: Minimum 16 gauge (0.053-inch -1.3-mm) thick steel sheet.
 - 3. Manufacturers Basis of Design:
 - a. Curries Company (CU) - M Series.
- D. Fire rated frames: Fabricate frames in accordance with NFPA 80, listed and labeled by a qualified testing agency, for fire-protection ratings indicated.
- E. Hardware Reinforcement: Fabricate according to ANSI/SDI A250.6 Table 4 with reinforcement plates from same material as frames.

2.5 FRAME ANCHORS

- A. Jamb Anchors:
 - 1. Masonry Type: Adjustable strap-and-stirrup or T-shaped anchors to suit frame size, formed from A60 metallic coated material, not less than 0.042 inch thick, with corrugated or perforated straps not less than 2 inches wide by 10 inches long; or wire anchors not less than 0.177 inch thick.
 - 2. Existing Masonry Type: Provide steel pipe spacers welded to plate reinforcing at jamb stops or hat shaped formed strap spacers welded to jamb near the stop. Drill jamb stop and strap spacers for flat head bolts to pass through frame and spacers.
 - 3. Stud Wall Type: Designed to engage stud and not less than 0.042 inch thick.
 - 4. Compression Type for Drywall Slip-on (Knock-Down) Frames: Adjustable compression anchors.
- B. Floor Anchors: Floor anchors to be provided at each jamb, formed from A60 metallic coated material, not less than 0.042 inches thick.
- C. Mortar Guards: Formed from same material as frames, not less than 0.016 inches thick.

2.6 LOUVERS

- A. Metal Louvers: Unless otherwise indicated provide louvers to meet the following requirements.
 - 1. Blade Type: Vision proof inverted V or inverted Y.
 - 2. Metal and Finish: Galvanized steel, 0.040 inch thick, factory primed for paint finish with baked enamel or powder coated finish. Match pre-finished door paint color where applicable.
- B. Louvers for Fire Rated Doors: Metal louvers with fusible link and closing device, listed and labeled for use in doors with fire protection rating of 1-1/2 hours and less.
 - 1. Manufacturers: Subject to compliance with requirements, provide louvers to meet rating indicated.

2. Metal and Finish: Galvanized steel, 0.040 inch thick, factory primed for paint finish with baked enamel or powder coated finish. Match pre-finished door paint color where applicable.

2.7 LIGHT OPENINGS AND GLAZING

- A. Stops and Moldings: Provide stops and moldings around glazed lites where indicated. Form corners of stops and moldings with butted or mitered hairline joints at fabricator's shop. Fixed and removable stops to allow multiple glazed lites each to be removed independently. Coordinate frame rabbet widths between fixed and removable stops with the type of glazing and installation indicated.
- B. Moldings for Glazed Lites in Doors and Loose Stops for Glazed Lites in Frames: Minimum 20 gauge thick, fabricated from same material as door face sheet in which they are installed.
- C. Fixed Frame Moldings: Formed integral with hollow metal frames, a minimum of 5/8 inch (16 mm) high unless otherwise indicated. Provide fixed frame moldings and stops on outside of exterior and on secure side of interior doors and frames.
- D. Preformed Metal Frames for Light Openings: Manufacturer's standard frame formed of 0.048-inch-thick, cold rolled steel sheet; with baked enamel or powder coated finish; and approved for use in doors of fire protection rating indicated. Match pre-finished door paint color where applicable.

2.8 ACCESSORIES

- A. Mullions and Transom Bars: Join to adjacent members by welding or rigid mechanical anchors.
- B. Grout Guards: Formed from same material as frames, not less than 0.016 inches thick.

2.9 FABRICATION

- A. Fabricate hollow metal work to be rigid and free of defects, warp, or buckle. Accurately form metal to required sizes and profiles, with minimum radius for thickness of metal. Where practical, fit and assemble units in manufacturer's plant. When shipping limitations so dictate, frames for large openings are to be fabricated in sections for splicing or splining in the field by others.
- B. Tolerances: Fabricate hollow metal work to tolerances indicated in ANSI/SDI A250.8.
- C. Hollow Metal Doors:
 1. Exterior Doors: Provide optional weep-hole openings in bottom of exterior doors to permit moisture to escape where specified.
 2. Glazed Lites: Factory cut openings in doors with applied trim or kits to fit. Factory install glazing where indicated.
 3. Astragals: Provide overlapping astragals as noted in door hardware sets in Division 08 Section "Door Hardware" on one leaf of pairs of doors where required by NFPA 80 for fire-performance rating or where indicated. Extend minimum 3/4 inch beyond edge of door on which astragal is mounted.

4. Continuous Hinge Reinforcement: Provide welded continuous 12 gauge strap for continuous hinges specified in hardware sets in Division 08 Section "Door Hardware".

D. Hollow Metal Frames:

1. Shipping Limitations: Where frames are fabricated in sections due to shipping or handling limitations, provide alignment plates or angles at each joint, fabricated of same thickness metal as frames.
2. Welded Frames: Weld flush face joints continuously; grind, fill, dress, and make smooth, flush, and invisible.
 - a. Welded frames are to be provided with two steel spreaders temporarily attached to the bottom of both jambs to serve as a brace during shipping and handling. Spreader bars are for bracing only and are not to be used to size the frame opening.
3. Sidelight and Transom Bar Frames: Provide closed tubular members with no visible face seams or joints, fabricated from same material as door frame. Fasten members at crossings and to jambs by butt welding.
4. High Frequency Hinge Reinforcement: Provide high frequency hinge reinforcements at door openings 48-inches and wider with mortise butt type hinges at top hinge locations.
5. Continuous Hinge Reinforcement: Provide welded continuous 12 gauge straps for continuous hinges specified in hardware sets in Division 08 Section "Door Hardware".
6. Provide countersunk, flat- or oval-head exposed screws and bolts for exposed fasteners unless otherwise indicated for removable stops, provide security screws at exterior locations.
7. Mortar Guards: Provide guard boxes at back of hardware mortises in frames at all hinges and strike preps regardless of grouting requirements.
8. Floor Anchors: Weld anchors to bottom of jambs and mullions with at least four spot welds per anchor.
9. Jamb Anchors: Provide number and spacing of anchors as follows:
 - a. Masonry Type: Locate anchors not more than 18 inches from top and bottom of frame. Space anchors not more than 32 inches on-center and as follows:
 - 1) Two anchors per jamb up to 60 inches high.
 - 2) Three anchors per jamb from 60 to 90 inches high.
 - 3) Four anchors per jamb from 90 to 120 inches high.
 - 4) Four anchors per jamb plus 1 additional anchor per jamb for each 24 inches or fraction thereof above 120 inches high.
 - b. Stud Wall Type: Locate anchors not more than 18 inches from top and bottom of frame. Space anchors not more than 32 inches o.c. and as follows:
 - 1) Three anchors per jamb up to 60 inches high.
 - 2) Four anchors per jamb from 60 to 90 inches high.
 - 3) Five anchors per jamb from 90 to 96 inches high.
 - 4) Five anchors per jamb plus 1 additional anchor per jamb for each 24 inches or fraction thereof above 96 inches high.
 - 5) Two anchors per head for frames above 42 inches wide and mounted in metal stud partitions.

10. Door Silencers: Except on weatherstripped or gasketed doors, drill stops to receive door silencers. Silencers to be supplied by frame manufacturer regardless if specified in Division 08 Section "Door Hardware".
 11. Bituminous Coating: Where frames are fully grouted with an approved Portland Cement based grout or mortar, coat inside of frame throat with a water based bituminous or asphaltic emulsion coating to a minimum thickness of 3 mils DFT, tested in accordance with UL 10C and applied to the frame under a 3rd party independent follow-up service procedure.
- E. Hardware Preparation: Factory prepare hollow metal work to receive template mortised hardware; include cutouts, reinforcement, mortising, drilling, and tapping according to the Door Hardware Schedule and templates furnished as specified in Division 08 Section "Door Hardware."
1. Locate hardware as indicated, or if not indicated, according to ANSI/SDI A250.8.
 2. Reinforce doors and frames to receive non-template, mortised and surface mounted door hardware.
 3. Comply with applicable requirements in ANSI/SDI A250.6 and ANSI/DHI A115 Series specifications for preparation of hollow metal work for hardware.
 4. Coordinate locations of conduit and wiring boxes for electrical connections with Division 26 Sections.

2.10 STEEL FINISHES

- A. Prime Finishes: Doors and frames to be cleaned, and chemically treated to insure maximum finish paint adhesion. Surfaces of the door and frame exposed to view to receive a factory applied coat of rust inhibiting shop primer.
1. Shop Primer: Manufacturer's standard, fast-curing, lead and chromate free primer complying with ANSI/SDI A250.10 acceptance criteria; recommended by primer manufacturer for substrate; and compatible with substrate and field-applied coatings.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. General Contractor to verify the accuracy of dimensions given to the steel door and frame manufacturer for existing openings or existing frames (strike height, hinge spacing, hinge back set, etc.).
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Remove welded in shipping spreaders installed at factory. Restore exposed finish by grinding, filling, and dressing, as required to make repaired area smooth, flush, and invisible on exposed faces.
- B. Prior to installation, adjust and securely brace welded hollow metal frames for square, level, twist, and plumb condition.
- C. Tolerances shall comply with SDI-117 "Manufacturing Tolerances Standard Steel Doors and Frames."
- D. Drill and tap doors and frames to receive non-template, mortised, and surface-mounted door hardware.
- E. Verify tolerances against manufacturers installations instructions for tornado and hurricane storm shelter openings.

3.3 INSTALLATION

- A. General: Install hollow metal work plumb, rigid, properly aligned, and securely fastened in place; comply with Drawings and manufacturer's written instructions.
- B. Hollow Metal Frames: Install hollow metal frames of size and profile indicated. Comply with ANSI/SDI A250.11 and NFPA 80 at fire rated openings.
 - 1. Set frames accurately in position, plumbed, leveled, aligned, and braced securely until permanent anchors are set. After wall construction is complete and frames properly set and secured, remove temporary braces, leaving surfaces smooth and undamaged. Shim as necessary to comply with installation tolerances.
 - 2. Floor Anchors: Provide floor anchors for each jamb and mullion that extends to floor, and secure with post-installed expansion anchors.
 - 3. Masonry Walls: Coordinate installation of frames to allow for solidly filling space between frames and masonry with mortar.
 - 4. Grout Requirements: Do not grout head of frames unless reinforcing has been installed in head of frame. Do not grout vertical or horizontal closed mullion members.
- C. Hollow Metal Doors: Fit hollow metal doors accurately in frames, within clearances specified below. Shim as necessary.
 - 1. Non-Fire-Rated Standard Steel Doors:
 - a. Jambs and Head: 1/8 inch plus or minus 1/16 inch.
 - b. Between Edges of Pairs of Doors: 1/8 inch plus or minus 1/16 inch.
 - c. Between Bottom of Door and Top of Threshold: Maximum 3/8 inch.
 - d. Between Bottom of Door and Top of Finish Floor (No Threshold): Maximum 3/4 inch.
 - 2. Fire-Rated Doors: Install doors with clearances according to NFPA 80.

- D. Field Glazing: Comply with installation requirements in Division 08 Section "Glazing" and with hollow metal manufacturer's written instructions.

3.4 ADJUSTING AND CLEANING

- A. Final Adjustments: Check and readjust operating hardware items immediately before final inspection. Leave work in complete and proper operating condition. Remove and replace defective work, including hollow metal work that is warped, bowed, or otherwise unacceptable.
- B. Remove grout and other bonding material from hollow metal work immediately after installation.
- C. Prime-Coat and Painted Finish Touchup: Immediately after erection, sand smooth rusted or damaged areas of prime coat, or painted finishes, and apply touchup of compatible air drying, rust-inhibitive primer, zinc rich primer (exterior and galvanized openings) or finish paint.

3.5 FIELD QUALITY CONTROL

- A. Field Inspection (Punch Report): Reference Division 01 Sections "Closeout Procedures". Produce project punch report for each installed door opening indicating compliance with approved submittals and verification hardware is properly installed, operating and adjusted. Include list of items to be completed and corrected, indicating the reasons or deficiencies causing the Work to be incomplete or rejected.
 - 1. Organization of List: Include separate Door Opening and Deficiencies and Corrective Action Lists organized by Mark, Opening Remarks and Comments, and related Opening Images and Video Recordings.

END OF SECTION 081113

SECTION 081416
FLUSH WOOD DOORS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Solid core doors with wood veneer faces.
2. Factory finishing wood doors.
3. Factory fitting wood doors to frames and factory machining for hardware.
4. Louvers installed in flush wood doors.
5. Light frames and glazing installed in wood doors.

B. Related Sections:

1. Division 08 Section "Hollow Metal Doors and Frames".
2. Division 08 Section "Door Hardware".

C. Standards and References: Comply with the version year adopted by the Authority Having Jurisdiction.

1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
2. ANSI A208.1 - Wood Particleboard.
3. Intertek Testing Service (ITS Warnock Hersey) - Certification Listings for Fire Doors.
4. NFPA 80 - Standard for Fire Doors and Fire Windows; National Fire Protection Association.
5. NFPA 252 - Standard Methods of Fire Tests of Door Assemblies; National Fire Protection Association.
6. UL 10C - Positive Pressure Fire Tests of Door Assemblies; UL 1784 - Standard for Air Leakage Tests of Door Assemblies.
7. Window and Door Manufacturers Association - WDMA I.S.1-A Architectural Wood Flush Doors.

1.3 SUBMITTALS

- A. Product Data: For each type of door indicated. Include details of core and edge construction, louvers, trim for openings, and WDMA I.S.1-A classifications. Include factory finishing specifications.

B. Shop Drawings shall include:

1. Indicate location, size, and hand of each door.
2. Indicate dimensions and locations of mortises and holes for hardware.
3. Indicate dimensions and locations of cutouts.
4. Indicate requirements for veneer matching.
5. Indicate location and extent of hardware blocking.
6. Indicate construction details not covered in Product Data.
7. Indicate doors to be factory finished and finish requirements.
8. Indicate fire protection ratings for fire rated doors.

C. Samples for Initial Selection: For factory finished doors.

1. Factory finishes applied to actual door face materials, approximately 8 by 10 inches, for each material and finish. For each wood species and transparent finish, provide set of three samples showing typical range of color and grain to be expected in the finished work.
2. Corner sections of doors, 8 by 10 inches, with door faces and edges representing actual materials to be used.
 - a. Provide samples for each species of veneer and core material.
 - b. Finish veneer faced door samples with same materials proposed for factory finished doors.
3. Frames for light openings, 6 inches long, for each material, type, and finish required.

D. Warranty: Provide sample of manufacturer's warranty.

1.4 QUALITY ASSURANCE

- A. Source Limitations: Obtain flush wood doors through one source from a single manufacturer wherever possible.
- B. Quality Standard: In addition to requirements specified, comply with WDMA I.S.1-A, latest edition, "Industry Standard for Architectural Wood Flush Doors".
- C. Fire Rated Wood Doors: Doors complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing at positive pressure according to NFPA 252 (neutral pressure at 40" above sill) or UL10C.
 1. Oversize Fire Rated Door Assemblies: For units exceeding sizes of tested assemblies provide manufacturer's construction label, indicating compliance to independent 3rd party certification agency's procedure, except for size.
 2. Temperature Rise Limit: Where required and at vertical exit enclosures (stairwell openings) and exit passageways, provide doors that have a maximum transmitted

temperature end point of not more than 450 deg F (250 deg C) above ambient after 30 minutes of standard fire test exposure.

3. Smoke Control Door Assemblies: Comply with NFPA 105.

- 1) Smoke "S" Label: Doors to bear "S" label, and include smoke and draft control gasketing applied to frame and on meeting stiles of pair doors.

- D. Pre-Submittal Conference: Conduct conference in compliance with requirements in Division 01 Section "Project Meetings" with attendance by representatives of Supplier, Installer, and Contractor to review proper methods and procedures for receiving, handling, and installing flush wood doors.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Comply with requirements of referenced standard and manufacturer's written instructions.
- B. Package pre-finished doors individually in plastic bags and wrap bundles of doors in plastic sheeting.
- C. Mark each door on top rail with opening number used on Shop Drawings.

1.6 PROJECT CONDITIONS

- A. Environmental Limitations: Do not deliver or install doors until spaces are enclosed and weather tight, wet work in spaces is complete and dry, and HVAC system is operating and maintaining ambient temperature and humidity conditions at occupancy levels during the remainder of the construction period.

1.7 WARRANTY

- A. Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace doors that fail in materials or workmanship within specified warranty period.

1. Failures include, but are not limited to, the following:

- a. Warping (bow, cup, or twist) more than 1/4 inch in a 42-by-84-inch section.
- b. Telegraphing of core construction in wood face veneers exceeding 0.01 inch in a 3-inch span.

2. Warranty includes installation and finishing that may be required due to repair or replacement of defective doors.

3. Warranty Period for Solid Core Interior Doors: Life of installation.

PART 2 - PRODUCTS

2.1 DOOR CONSTRUCTION – GENERAL

- A. WDMA I.S.1-A Performance Grade: Extra Heavy Duty; Aesthetic Grade: Premium.
- B. Fire Rated Doors: Provide construction and core as needed to provide fire ratings indicated.
 - 1. Category A Edge Construction: Provide fire rated door edge construction with intumescent seals concealed by outer stile (Category A) at 45, 60, and 90 minute rated doors. Comply with specified requirements for exposed edges.
 - 2. Pairs: Provide stiles with concealed intumescent seals. Comply with specified requirements for exposed edges.
 - a. Provide fire retardant stiles that are listed and labeled for applications indicated without formed steel edges and astragals.
 - b. Where required for concealed hardware, provide formed steel edges and astragals with intumescent seals. Finish steel edges and astragals with baked enamel.

2.2 CORE CONSTRUCTION

- A. Structural Composite Lumber Core Doors:
 - 1. Structural Composite Lumber: Engineered hardwood composite wood products tested in accordance with WDMA I.S.1A, Testing Cellulosic Composite Materials for Use in Fenestration Products containing no added Urea Formaldehyde.
 - 2. LEED: Meet requirements of IEQ4.4.

2.3 BLOCKING

- A. Fire Rated Doors:
 - 1. Provide blocking as indicated below:
 - a. HB1: 5 inch in doors indicated to have closers and overhead stops.

2.4 VENEERED DOORS FOR TRANSPARENT FINISH

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. ASSA ABLOY Wood Doors (GR): GPD Series.
 - 2. Eggers Industries (EG): Premium Series.

3. Marshfield-Algoma (MF): Signature Series.
4. VT Industries (VT): Artistry Series.

B. Interior Solid Core Doors:

1. Grade: Premium.
2. Faces: Veneer grades as noted below; veneer minimum 1/50-inch (0.5mm) thickness at moisture content of 12% or less.
 - a. Plain Sliced Select White Maple, A grade faces.
3. Match between Veneer Leaves: Book match.
4. Assembly of Veneer Leaves on Door Faces:
 - a. Running Match.
5. Pair and Set Match: Provide for doors hung in same opening or separated only by mullions.
6. Transom Match: Continuous match.
7. Vertical Edges: Matching same species as faces. Wood or composite material, one piece, laminated, or veneered. Minimum requirements per WDMA section P-1, Performance Standards for Architectural Wood Flush Doors.
8. Horizontal Edges: Solid wood or structural composite material meeting the minimum requirements per WDMA section P-1, Performance Standards for Architectural Wood Flush Doors
9. Construction: Five plies. Stiles and rails are bonded to core, then entire unit sanded before applying face veneers.
10. At doors over 40% of the face cut-out for lights and or louvers, furnish engineered composite lumber core.

2.5 LOUVERS

A. Metal Louvers: Door manufacturer's standard metal louvers unless otherwise indicated.

1. Blade Type: Vision proof inverted V or inverted Y.
2. Metal and Finish: Galvanized steel, 0.040 inch thick, factory primed for paint finish with baked enamel or powder coated finish.

2.6 LIGHT FRAMES AND GLAZING

- A. Metal Frames for Light Openings in Fire Rated Doors over 20-minute Rating: Manufacturer's standard frame formed of 0.048-inch-thick, cold rolled steel sheet; with baked enamel or powder coated finish; and approved for use in doors of fire protection rating indicated.
 - 1. Manufacturers:
 - a. Air Louver (LV).
 - b. All Metal Stamping (AP).
 - c. Anemostat (AN).
 - d. Pemko (PE).
- B. Glazing: Comply with installation requirements in Division 08 Section "Glazing" and with the flush wood door manufacturer's written instructions.

2.7 FABRICATION

- A. Factory fit doors to suit frame opening sizes indicated.
 - 1. Comply with requirements in NFPA 80 for fire rated doors.
 - 2. Undercut: As required per manufacturer's templates and sill condition.
- B. Factory machine doors for hardware that is not surface applied. Comply with final hardware schedules, door frame Shop Drawings, DHI A115-W series standards, and hardware templates.
 - 1. Coordinate with hardware mortises in metal frames to verify dimensions and alignment before factory machining.
 - 2. Metal Astragals: Factory machine astragals and formed steel edges for hardware for pairs of fire rated doors.
- C. Openings: Cut and trim openings through doors in factory.
 - 1. Light Openings: Trim openings with moldings of material and profile indicated.
 - 2. Glazing: Comply with applicable requirements in Division 08 Section "Glazing."
 - 3. Louvers: Factory install louvers in prepared openings.
- D. Electrical Raceways: Provide flush wood doors receiving electrified hardware with concealed wiring harness and standardized Molex™ plug connectors on both ends to accommodate up to twelve wires. Coordinate connectors on end of the wiring harness to plug directly into the electrified hardware and the through wire transfer hardware or wiring harness specified in hardware sets in Division 08 "Door Hardware". Wire nut connections are not acceptable.

2.8 FACTORY FINISHING

- A. General: Comply with referenced quality standard for factory finishing. Complete fabrication, including fitting doors for openings and machining for hardware that is not surface applied, before finishing.

1. Finish faces, all four edges, edges of cutouts, and mortises. Stains and fillers may be omitted on top and bottom edges, edges of cutouts, and mortises.
- B. Transparent Finish: Provide a clear protective coating over the wood veneer allowing the natural color and grain of the selected wood species to provide the appearance specified. Stain is applied to the wood surface underneath the transparent finish to add color and design flexibility.
 1. Finish: Meet or exceed WDMA I.S. 1A TR8 UV Cured Acrylated Polyester finish performance requirements.
 2. Staining:
 - a. Custom stain to match architect's sample.
 3. Sheen: Satin.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine doors and installed door frames before hanging doors.
 1. Verify that frames comply with indicated requirements for type, size, location, and swing characteristics and have been installed with level heads and plumb jambs.
 2. Reject doors with defects.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Hardware: For installation, see Division 8 Section "Door Hardware."
- B. Installation Instructions: Install doors and frames to comply with manufacturer's written instructions and the referenced quality standard, and as indicated.
 1. Install fire rated doors in corresponding fire rated frames according to NFPA 80.
- C. Factory Fitted Doors: Align in frames for uniform clearance at each edge.
- D. Factory Finished Doors: Restore finish before installation if fitting or machining is required at Project site.
- E. Field modifications to doors shall not be permitted, except those specifically allowed by manufacturer or fire rating requirements.

3.3 ADJUSTING

- A. Operation: Re-hang or replace doors that do not swing or operate freely.

- B. Finished Doors: Replace doors that do not comply with requirements. Doors may be repaired or refinished if work complies with requirements and shows no evidence of repair or refinishing.

END OF SECTION 081416

SECTION 092900
GYPSUM BOARD

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Interior gypsum board.
2. Gypsum board for ceilings and soffits.
3. Tile backing panels.
4. Texture finishes.

B. Related Requirements:

1. Section 061600 "Sheathing" for gypsum sheathing for exterior walls.
2. Section 079219 "Acoustical Joint Sealants" for acoustical joint sealants installed in gypsum board assemblies.
3. Section 092116.23 "Gypsum Board Shaft Wall Assemblies" for metal shaft-wall framing, gypsum shaft liners, and other components of shaft-wall assemblies.
4. Section 092216 "Non-Structural Metal Framing" for non-structural steel framing and suspension systems that support gypsum board panels.
5. Section 092613 "Gypsum Veneer Plastering" for gypsum base for veneer plaster and for other components of gypsum-veneer-plaster finishes.
6. Section 093013 "Ceramic Tiling" for cementitious backer units installed as substrates for ceramic tile.

1.2 ACTION SUBMITTALS

A. Product Data: For the following:

1. Gypsum wallboard.
2. Gypsum board, Type X.
3. Gypsum ceiling board.
4. Glass-mat, water-resistant backing board.
5. Cementitious backer units.
6. Water-resistant gypsum backing board.
7. Interior trim.
8. Exterior trim.
9. Aluminum trim.
10. Joint treatment materials.
11. Laminating adhesive.
12. Sound-attenuation blankets.
13. Acoustical sealant.
14. Textured finishes.

- B. Sustainable Design Submittals:
- C. Samples: For the following products:
 - 1. Trim Accessories: Full-size Sample in 12-inch- (300-mm-) long length for each trim accessory indicated.
 - 2. Textured Finishes: Manufacturer's standard size for each textured finish indicated and on same backing indicated for Work.
- D. Samples for Initial Selection: For each type of textured finish indicated.
- E. Samples for Verification: For the following products:
 - 1. Trim Accessories: Full-size Sample in 12-inch- (300-mm-) long length for each trim accessory indicated.
 - 2. Textured Finishes: Manufacturer's standard size for each textured finish indicated and on same backing indicated for Work.

1.3 QUALITY ASSURANCE

- A. Mockups: Build mockups of at least 100 sq. ft. (9 sq. m) in surface area to demonstrate aesthetic effects and to set quality standards for materials and execution.
 - 1. Build mockups for the following:
 - a. Each level of gypsum board finish indicated for use in exposed locations.
 - b. Each texture finish indicated.
 - 2. Apply or install final decoration indicated, including painting and wallcoverings, on exposed surfaces for review of mockups.
 - 3. Simulate finished lighting conditions for review of mockups.
 - 4. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.4 DELIVERY, STORAGE AND HANDLING

- A. Store materials inside under cover and keep them dry and protected against weather, condensation, direct sunlight, construction traffic, and other potential causes of damage. Stack panels flat and supported on risers on a flat platform to prevent sagging.

1.5 FIELD CONDITIONS

- A. Environmental Limitations: Comply with ASTM C840 requirements or gypsum board manufacturer's written instructions, whichever are more stringent.
- B. Do not install paper-faced gypsum panels until installation areas are enclosed and conditioned.
- C. Do not install panels that are wet, moisture damaged, and mold damaged.

1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Fire-Resistance-Rated Assemblies: For fire-resistance-rated assemblies, provide materials and construction identical to those tested in assembly indicated according to ASTM E119 by an independent testing agency.
- B. STC-Rated Assemblies: For STC-rated assemblies, provide materials and construction identical to those tested in assembly indicated according to ASTM E90 and classified according to ASTM E413 by an independent testing agency.

2.2 GYPSUM BOARD, GENERAL

- A. Size: Provide maximum lengths and widths available that will minimize joints in each area and that correspond with support system indicated.

2.3 INTERIOR GYPSUM BOARD

- A. Gypsum Wallboard: ASTM C1396/C1396M.
 1. Thickness: 5/8 inch (12.7 mm).
 2. Long Edges: Tapered
- B. Gypsum Ceiling Board: ASTM C1396/C1396M.
 1. Thickness: 5/8 inch
 2. Long Edges: Tapered.
- C. Mold-Resistant Gypsum Board: ASTM C1396/C1396M. With moisture- and mold-resistant core and paper surfaces.
 1. Core: 5/8 inch
 2. Long Edges: Tapered.
 3. Mold Resistance: ASTM D3273, score of 10 as rated according to ASTM D3274.

2.4 TILE BACKING PANELS

- A. Cementitious Backer Units: ANSI A118.9 and ASTM C1288 or ASTM C1325, with manufacturer's standard edges.
 1. Thickness: 5/8 inch
 2. Mold Resistance: ASTM D3273, score of 10 as rated according to ASTM D3274.

2.5 TRIM ACCESSORIES

A. Interior Trim: ASTM C1047.

1. Material: Galvanized or aluminum-coated steel sheet, rolled zinc, plastic, or paper-faced galvanized-steel sheet
2. Shapes:
 - a. Cornerbead.
 - b. Expansion (control) joint.

B. Exterior Trim: ASTM C1047.

1. Material: Hot-dip galvanized-steel sheet, plastic, or rolled zinc
2. Shapes:
 - a. Cornerbead.
 - b. LC-Bead: J-shaped; exposed long flange receives joint compound.
 - c. Expansion (Control) Joint: One-piece, rolled zinc with V-shaped slot and removable strip covering slot opening.

2.6 JOINT TREATMENT MATERIALS

A. General: Comply with ASTM C475/C475M.

B. Joint Tape:

1. Interior Gypsum Board: Paper.
2. Glass-Mat Gypsum Sheathing Board: 10-by-10 glass mesh.
3. Tile Backing Panels: As recommended by panel manufacturer.

C. Joint Compound for Interior Gypsum Board: For each coat, use formulation that is compatible with other compounds applied on previous or for successive coats.

1. Prefilling: At open joints[, rounded or beveled panel edges,] and damaged surface areas, use setting-type taping compound.
2. Embedding and First Coat: For embedding tape and first coat on joints, fasteners, and trim flanges, use setting-type taping compound.
 - a. Use setting-type compound for installing paper-faced metal trim accessories.
3. Fill Coat: For second coat, use setting-type, sandable topping compound.
4. Finish Coat: For third coat, use setting-type, sandable topping.

D. Joint Compound for Exterior Applications:

1. Exterior Gypsum Soffit Board: Use setting-type taping compound and setting-type, sandable topping compound.
2. Glass-Mat Gypsum Sheathing Board: As recommended by sheathing board manufacturer.

E. Joint Compound for Tile Backing Panels:

1. Glass-Mat, Water-Resistant Backing Panel: As recommended by backing panel manufacturer.
2. Cementitious Backer Units: As recommended by backer unit manufacturer.
3. Water-Resistant Gypsum Backing Board: Use setting-type taping compound and setting-type, sandable topping compound.

2.7 AUXILIARY MATERIALS

- A. Provide auxiliary materials that comply with referenced installation standards and manufacturer's written instructions.
- B. Laminating Adhesive: Adhesive or joint compound recommended for directly adhering gypsum panels to continuous substrate.
- C. Steel Drill Screws: ASTM C1002 unless otherwise indicated.
 1. Use screws complying with ASTM C954 for fastening panels to steel members from 0.033 to 0.112 inch (0.84 to 2.84 mm) thick.
 2. For fastening cementitious backer units, use screws of type and size recommended by panel manufacturer.
- D. Sound-Attenuation Blankets: ASTM C665, Type I (blankets without membrane facing) produced by combining thermosetting resins with mineral fibers manufactured from glass, slag wool, or rock wool.
 1. Fire-Resistance-Rated Assemblies: Comply with mineral-fiber requirements of assembly.
- E. Acoustical Sealant: As specified in Section 079219 "Acoustical Joint Sealants."
- F. Thermal Insulation: As specified in Section 072100 "Thermal Insulation."
- G. Vapor Retarder: As specified in Section 072600 "Vapor Retarders."

2.8 TEXTURE FINISHES

- A. Non-Aggregate Finish: Premixed, vinyl texture finish for spray application.
 1. Texture: Orange peel

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and substrates including welded hollow-metal frames and support framing, with Installer present, for compliance with requirements and other conditions affecting performance of the Work.
- B. Examine panels before installation. Reject panels that are wet, moisture damaged, and mold damaged.

- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION AND FINISHING OF PANELS, GENERAL

- A. Comply with ASTM C840.
- B. Install ceiling panels across framing to minimize the number of abutting end joints and to avoid abutting end joints in central area of each ceiling. Stagger abutting end joints of adjacent panels not less than one framing member.
- C. Install panels with face side out. Butt panels together for a light contact at edges and ends with not more than 1/16 inch (1.5 mm) of open space between panels. Do not force into place.
- D. Locate edge and end joints over supports, except in ceiling applications where intermediate supports or gypsum board back-blocking is provided behind end joints. Do not place tapered edges against cut edges or ends. Stagger vertical joints on opposite sides of partitions. Do not make joints other than control joints at corners of framed openings.
- E. Form control and expansion joints with space between edges of adjoining gypsum panels.
- F. Cover both faces of support framing with gypsum panels in concealed spaces (above ceilings, etc.), except in chases braced internally.
 - 1. Unless concealed application is indicated or required for sound, fire, air, or smoke ratings, coverage may be accomplished with scraps of not less than 8 sq. ft. (0.7 sq. m) in area.
 - 2. Fit gypsum panels around ducts, pipes, and conduits.
 - 3. Where partitions intersect structural members projecting below underside of floor/roof slabs and decks, cut gypsum panels to fit profile formed by structural members; allow 1/4- to 3/8-inch- (6.4- to 9.5-mm-) wide joints to install sealant.
- G. Isolate perimeter of gypsum board applied to non-load-bearing partitions at structural abutments. Provide 1/4- to 1/2-inch- (6.4- to 12.7-mm-) wide spaces at these locations and trim edges with edge trim where edges of panels are exposed. Seal joints between edges and abutting structural surfaces with acoustical sealant.
- H. Attachment to Steel Framing: Attach panels so leading edge or end of each panel is attached to open (unsupported) edges of stud flanges first.
- I. Wood Framing: Install gypsum panels over wood framing, with floating internal corner construction. Do not attach gypsum panels across the flat grain of wide-dimension lumber, including floor joists and headers. Float gypsum panels over these members or provide control joints to counteract wood shrinkage.
- J. STC-Rated Assemblies: Seal construction at perimeters, behind control joints, and at openings and penetrations with a continuous bead of acoustical sealant. Install acoustical sealant at both faces of partitions at perimeters and through penetrations. Comply with ASTM C919 and with manufacturer's written instructions for locating edge trim and closing off sound-flanking paths around or through assemblies, including sealing partitions above acoustical ceilings.

- K. Install sound attenuation blankets before installing gypsum panels unless blankets are readily installed after panels have been installed on one side.

3.3 INSTALLATION OF INTERIOR GYPSUM BOARD

A. Install interior gypsum board in the following locations:

1. Wallboard Type: Vertical surfaces unless otherwise indicated.
2. Type X: Where required for fire-resistance-rated assembly
3. Mold-Resistant Type: As indicated on Drawings

B. Single-Layer Application:

1. On ceilings, apply gypsum panels before wall/partition board application to greatest extent possible and at right angles to framing unless otherwise indicated.
2. On partitions/walls, apply gypsum panels horizontally (perpendicular to framing unless otherwise indicated or required by fire-resistance-rated assembly, and minimize end joints.
 - a. Stagger abutting end joints not less than one framing member in alternate courses of panels.
 - b. At stairwells and other high walls, install panels horizontally unless otherwise indicated or required by fire-resistance-rated assembly.
3. On Z-shaped furring members, apply gypsum panels vertically (parallel to framing) with no end joints. Locate edge joints over furring members.
4. Fastening Methods: Apply gypsum panels to supports with steel drill screws.

C. Multilayer Application:

1. On ceilings, apply gypsum board indicated for base layers before applying face layers on walls/partitions; apply face layers in same sequence. Apply base layers at right angles to framing members and offset face-layer joints one framing member, 16 inches (400 mm) minimum, from parallel base-layer joints, unless otherwise indicated or required by fire-resistance-rated assembly.
2. On partitions/walls, apply gypsum board indicated for base layers and face layers vertically (parallel to framing) with joints of base layers located over stud or furring member and face-layer joints offset at least one stud or furring member with base-layer joints unless otherwise indicated or required by fire-resistance-rated assembly. Stagger joints on opposite sides of partitions.
3. On Z-shaped furring members, apply base layer vertically (parallel to framing) and face layer either vertically (parallel to framing) or horizontally (perpendicular to framing) with vertical joints offset at least one furring member. Locate edge joints of base layer over furring members.
4. Fastening Methods: Fasten base layers and face layers separately to supports with screws.

- D. Laminating to Substrate: Where gypsum panels are indicated as directly adhered to a substrate (other than studs, joists, furring members, or base layer of gypsum board), comply with gypsum board manufacturer's written instructions and temporarily brace or fasten gypsum panels until fastening adhesive has set.

3.4 INSTALLATION OF EXTERIOR GYPSUM PANELS FOR CEILINGS AND SOFFITS

- A. Apply panels perpendicular to supports, with end joints staggered and located over supports.
 - 1. Install with 1/4-inch (6.4-mm) open space where panels abut other construction or structural penetrations.
 - 2. Fasten with corrosion-resistant screws.

3.5 INSTALLATION OF TILE BACKING PANELS

- A. Cementitious Backer Units: ANSI A108.11, at locations indicated to receive tile.
- B. Water-Resistant Backing Board: Install where indicated with 1/4-inch (6.4-mm) gap where panels abut other construction or penetrations.
- C. Where tile backing panels abut other types of panels in same plane, shim surfaces to produce a uniform plane across panel surfaces.

3.6 INSTALLATION OF TRIM ACCESSORIES

- A. General: For trim with back flanges intended for fasteners, attach to framing with same fasteners used for panels. Otherwise, attach trim according to manufacturer's written instructions.
- B. Control Joints: Install control joints according to ASTM C840 and in specific locations approved by Architect for visual effect.
- C. Interior Trim: Install in the following locations:
 - 1. Cornerbead: Use at outside corners.
- D. Exterior Trim: Install in the following locations:
 - 1. Cornerbead: Use at outside corners.

3.7 FINISHING GYPSUM BOARD

- A. General: Treat gypsum board joints, interior angles, edge trim, control joints, penetrations, fastener heads, surface defects, and elsewhere as required to prepare gypsum board surfaces for decoration. Promptly remove residual joint compound from adjacent surfaces.
- B. Prefill open joints, and damaged surface areas.
- C. Apply joint tape over gypsum board joints, except for trim products specifically indicated as not intended to receive tape.
- D. Gypsum Board Finish Levels: Finish panels to levels indicated below and according to ASTM C840:

1. Level 1: Ceiling plenum areas, concealed areas, and where indicated.
 2. Level 4: At panel surfaces that will be exposed to view unless otherwise indicated
 - a. Primer and its application to surfaces are specified in Section 099123 "Interior Painting."
- E. Glass-Mat Gypsum Sheathing Board: Finish according to manufacturer's written instructions for use as exposed soffit board.
- F. Glass-Mat Faced Panels: Finish according to manufacturer's written instructions.
- G. Cementitious Backer Units: Finish according to manufacturer's written instructions.

3.8 INSTALLATION OF TEXTURE FINISHES

- A. Surface Preparation and Primer: Prepare and apply primer to gypsum panels and other surfaces receiving texture finishes. Apply primer to surfaces that are clean, dry, and smooth.
- B. Texture Finish Application: Mix and apply finish using powered spray equipment, to produce a uniform texture matching approved mockup and free of starved spots or other evidence of thin application or of application patterns.
- C. Prevent texture finishes from coming into contact with surfaces not indicated to receive texture finish by covering them with masking agents, polyethylene film, or other means. If, despite these precautions, texture finishes contact these surfaces, immediately remove droppings and overspray to prevent damage according to texture-finish manufacturer's written instructions.

3.9 PROTECTION

- A. Protect adjacent surfaces from drywall compound and promptly remove from floors and other non-drywall surfaces. Repair surfaces stained, marred, or otherwise damaged during drywall application.
- B. Protect installed products from damage from weather, condensation, direct sunlight, construction, and other causes during remainder of the construction period.
- C. Remove and replace panels that are wet, moisture damaged, and mold damaged.
1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
 2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

END OF SECTION 092900

SECTION 093013

TILING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Ceramic Tile
 - 2. Crack isolation membranes.
- B. Related Requirements:
 - 1. Section 092900 "Gypsum Board" for backer units.

1.2 DEFINITIONS

- A. General: Definitions in the ANSI A108 series of tile installation standards and in ANSI A137.1 apply to Work of this Section unless otherwise specified.
- B. Face Size: Actual tile size, excluding spacer lugs.
- C. Module Size: Actual tile size plus joint width indicated.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
 - 1. Review requirements in ANSI A108.01 for substrates and for preparation by other trades.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Sustainable Design Submittals:
- C. Shop Drawings: Show locations of each type of tile and tile pattern. Show widths, details, and locations of expansion, contraction, control, and isolation joints in tile substrates and finished tile surfaces.
- D. Samples for Initial Selection: For tile, grout, and accessories involving color selection.
- E. Samples for Verification:
 - 1. Full-size units of each type and composition of tile and for each color and finish required.
 - 2. Full-size units of each type of trim and accessory for each color and finish required.

3. Stone thresholds in 6-inch lengths.
4. Metal edge strips in 6-inch lengths.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Master Grade Certificates: For each shipment, type, and composition of tile, signed by tile manufacturer and Installer.
- C. Product Certificates: For each type of product.
- D. Product Test Reports: For tile-setting and -grouting products.

1.6 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match and are from same production runs as products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 1. Tile and Trim Units: Furnish quantity of full-size units equal to 3 percent of amount installed for each type, composition, color, pattern, and size indicated.
 2. Grout: Furnish quantity of grout equal to 3 percent of amount installed for each type, composition, and color indicated.

1.7 QUALITY ASSURANCE

- A. Installer Qualifications:
 1. Installer is a Five-Star member of the National Tile Contractors Association, Trowel of Excellence member of the Tile Contractors' Association of America, or approved equivalent certification.
- B. Mockups: Build mockups to verify selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
 1. Build mockup of floor tile installation.
 2. Build mockup of wall tile installation.
 3. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store packaged materials in original containers with seals unbroken and labels intact until time of use. Comply with requirements in ANSI A137.1 for labeling tile packages.
- B. Store tile and cementitious materials on elevated platforms, under cover, and in a dry location.

- C. Store aggregates where grading and other required characteristics can be maintained, and contamination can be avoided.
- D. Store liquid materials in unopened containers and protected from freezing.

1.9 FIELD CONDITIONS

- A. Environmental Limitations: Do not install tile until construction in spaces is complete and ambient temperature and humidity conditions are maintained at the levels indicated in referenced standards and manufacturer's written instructions.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Source Limitations for Tile: Obtain tile of each type and color or finish from single source or producer.
 - 1. Obtain tile of each type and color or finish from same production run and of consistent quality in appearance and physical properties for each contiguous area.
- B. Source Limitations for Setting and Grouting Materials: Obtain ingredients of a uniform quality for each mortar, adhesive, and grout component from single manufacturer and each aggregate from single source or producer.
 - 1. Obtain setting and grouting materials, except for unmodified Portland cement and aggregate, from single manufacturer.
 - 2. Obtain waterproof membrane and crack isolation membrane, except for sheet products, from manufacturer of setting and grouting materials.
- C. Source Limitations for Other Products: Obtain each of the following products specified in this Section from a single manufacturer:
 - 1. Stone thresholds.
 - 2. Waterproof membrane.
 - 3. Crack isolation membrane.
 - 4. Cementitious backer units.

2.2 PRODUCTS, GENERAL

- A. ANSI Ceramic Tile Standard: Provide tile that complies with ANSI A137.1 for types, compositions, and other characteristics indicated.
 - 1. Provide tile complying with Standard grade requirements unless otherwise indicated.
- B. ANSI Standards for Tile Installation Materials: Provide materials complying with ANSI A108.02, ANSI standards referenced in other Part 2 articles, ANSI standards referenced

by TCNA installation methods specified in tile installation schedules, and other requirements specified.

- C. Factory Blending: For tile exhibiting color variations within ranges, blend tile in factory and package so tile units taken from one package show same range in colors as those taken from other packages and match approved Samples.
- D. Mounting: For factory-mounted tile, provide back- or edge-mounted tile assemblies as standard with manufacturer unless otherwise indicated.
 - 1. Where tile is indicated for installation on exteriors or in wet areas, do not use back- or edge-mounted tile assemblies unless tile manufacturer specifies in writing that this type of mounting is suitable for installation indicated and has a record of successful in-service performance.

2.3 TILE PRODUCTS

A. Ceramic Wall Tile Type WT-1:

- 1. Basis of Design Product: Dal Tile, Color Wheel Collection
- 2. Composition: Ceramic.
- 3. Face Size: 6" x 6"
- 4. Thickness: 3/8"
- 5. Glaze: Glazed
- 6. Tile Color and Pattern: Selected from manufacturer's standard range.
- 7. Grout Color: As selected by Architect from manufacturer's full range.
- 8. Trim Units: Coordinated with sizes and coursing of adjoining flat tile where applicable and matching characteristics of adjoining flat tile.
 - a. Base: Round Top Cove Base, module size same as adjoining flat tile.
 - b. External Corners: Surface bullnose, module size same as adjoining flat tile.
 - c. Internal Corners: Field-buffed square corners.

B. Ceramic Floor Tile Type FT-1:

- 1. Basis of Design Product: Dal Tile, Platinum, color: Grey
- 2. Composition: Ceramic.
- 3. Face Size: 12" x 24"
- 4. Thickness: 5/16"
- 5. Glaze: Matte
- 6. Grout Color: As selected by Architect from manufacturer's full range.
- 7. Trim Units: Coordinated with sizes and coursing of adjoining flat tile where applicable and matching characteristics of adjoining flat tile.

CRACK ISOLATION MEMBRANES

- C. General: Manufacturer's standard product that complies with ANSI A118.12 for standard performance and is recommended by the manufacturer for the application indicated. Include reinforcement and accessories recommended by manufacturer.

2.4 SETTING MATERIALS

- A. Standard Dry-Set Mortar (Thinset): ANSI A118.1.
 - 1. For wall applications, provide mortar that complies with requirements for nonsagging mortar in addition to the other requirements in ANSI A118.1.

2.5 GROUT MATERIALS

- A. Water-Cleanable Epoxy Grout: ANSI A118.3, with a VOC content of 65 g/L or less.
 - 1. Provide product capable of withstanding continuous and intermittent exposure to temperatures of up to 140 and 212 deg F, respectively, and certified by manufacturer for intended use.

2.6 MISCELLANEOUS MATERIALS

- A. Trowelable Underlayments and Patching Compounds: Latex-modified, portland cement-based formulation provided or approved by manufacturer of tile-setting materials for installations indicated.
- B. Metal Edge Strips: Angle or L-shaped, height to match tile and setting-bed thickness, metallic or combination of metal and PVC or neoprene base, designed specifically for flooring applications; stainless steel, ASTM A276/A276M or ASTM A666, 300 Series exposed-edge material.
- C. Tile Cleaner: A neutral cleaner capable of removing soil and residue without harming tile and grout surfaces, specifically approved for materials and installations indicated by tile and grout manufacturers.
- D. Floor Sealer: Manufacturer's standard product for sealing grout joints and that does not change color or appearance of grout.

2.7 MIXING MORTARS AND GROUT

- A. Mix mortars and grouts to comply with referenced standards and mortar and grout manufacturers' written instructions.
- B. Add materials, water, and additives in accurate proportions.
- C. Obtain and use type of mixing equipment, mixer speeds, mixing containers, mixing time, and other procedures to produce mortars and grouts of uniform quality with optimum performance characteristics for installations indicated.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions where tile will be installed, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
 - 1. Verify that substrates for setting tile are firm; dry; clean; free of coatings that are incompatible with tile-setting materials, including curing compounds and other substances that contain soap, wax, oil, or silicone; and comply with flatness tolerances required by ANSI A108.01 for installations indicated.
 - 2. Verify that concrete substrates for tile floors installed with adhesives, bonded mortar bed or thinset mortar comply with surface finish requirements in ANSI A108.01 for installations indicated.
 - a. Verify that surfaces that received a steel trowel finish have been mechanically scarified.
 - b. Verify that protrusions, bumps, and ridges have been removed by sanding or grinding.
 - 3. Verify that installation of grounds, anchors, recessed frames, electrical and mechanical units of work, and similar items located in or behind tile has been completed.
 - 4. Verify that joints and cracks in tile substrates are coordinated with tile joint locations; if not coordinated, adjust joint locations in consultation with Architect.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Fill cracks, holes, and depressions in concrete substrates for tile floors installed with adhesives or thinset mortar with trowelable leveling and patching compound specifically recommended by tile-setting material manufacturer.
- B. Where indicated, prepare substrates to receive waterproof membrane by applying a reinforced mortar bed that complies with ANSI A108.1A and is sloped 1/4 inch per foot (1:50) toward drains.
- C. Blending: For tile exhibiting color variations, verify that tile has been factory blended and packaged so tile units taken from one package show same range of colors as those taken from other packages and match approved Samples. If not factory blended, either return to manufacturer or blend tiles at Project site before installing.

3.3 INSTALLATION OF CERAMIC TILE

- A. Comply with TCNA's "Handbook for Ceramic, Glass, and Stone Tile Installation" for TCNA installation methods specified in tile installation schedules. Comply with parts of the ANSI A108 series "Specifications for Installation of Ceramic Tile" that are referenced in TCNA

installation methods, specified in tile installation schedules, and apply to types of setting and grouting materials used.

1. For the following installations, follow procedures in the ANSI A108 series of tile installation standards for providing 95 percent mortar coverage:
 - a. Exterior tile floors.
 - b. Tile floors in wet areas.
 - c. Tile floors in laundries.
 - d. Tile floors consisting of tiles 8 by 8 inches or larger.
 - e. Tile floors consisting of rib-backed tiles.
- B. Extend tile work into recesses and under or behind equipment and fixtures to form complete covering without interruptions unless otherwise indicated. Terminate work neatly at obstructions, edges, and corners without disrupting pattern or joint alignments.
- C. Accurately form intersections and returns. Perform cutting and drilling of tile without marring visible surfaces. Carefully grind cut edges of tile abutting trim, finish, or built-in items for straight aligned joints. Fit tile closely to electrical outlets, piping, fixtures, and other penetrations so plates, collars, or covers overlap tile.
- D. Provide manufacturer's standard trim shapes where necessary to eliminate exposed tile edges.
- E. Where accent tile differs in thickness from field tile, vary setting-bed thickness so that tiles are flush.
- F. Jointing Pattern: Lay tile in grid pattern unless otherwise indicated. Lay out tile work and center tile fields in both directions in each space or on each wall area. Lay out tile work to minimize the use of pieces that are less than half of a tile. Provide uniform joint widths unless otherwise indicated.
 1. For tile mounted in sheets, make joints between tile sheets same width as joints within tile sheets so joints between sheets are not apparent in finished work.
 2. Where adjoining tiles on floor, base, walls, or trim are specified or indicated to be same size, align joints.
 3. Where tiles are specified or indicated to be whole integer multiples of adjoining tiles on floor, base, walls, or trim, align joints unless otherwise indicated.
- G. Joint Widths: Unless otherwise indicated, install tile with the following joint widths:
 1. Ceramic Wall Tile: 1/16 inch
 2. Ceramic Floor Tile: 1/8 inch
- H. Expansion Joints: Provide expansion joints and other sealant-filled joints, including control, contraction, and isolation joints, where indicated. Form joints during installation of setting materials, mortar beds, and tile. Do not saw-cut joints after installing tiles.
 1. Where joints occur in concrete substrates, locate joints in tile surfaces directly above them.

2. Metal Edge Strips: Install where exposed edge of tile flooring meets carpet, wood, or other flooring that finishes flush with or below top of tile and no threshold is indicated.

- I. Floor Sealer: Apply floor sealer to cementitious grout joints in tile floors according to floor-sealer manufacturer's written instructions. As soon as floor sealer has penetrated grout joints, remove excess sealer and sealer from tile faces by wiping with soft cloth.

3.4 INSTALLATION OF TILE BACKING PANELS

- A. Install panels and treat joints according to ANSI A108.11 and manufacturer's written instructions for type of application indicated. Use modified dry-set mortar for bonding material unless otherwise directed in manufacturer's written instructions.

3.5 INSTALLATION OF CRACK ISOLATION MEMBRANES

- A. Install crack isolation membrane to comply with ANSI A108.17 and manufacturer's written instructions to produce membrane of uniform thickness that is bonded securely to substrate. Allow crack isolation membrane to cure before installing tile or setting materials over it.

3.6 ADJUSTING AND CLEANING

- A. Remove and replace tile that is damaged or that does not match adjoining tile. Provide new matching units, installed as specified and in a manner to eliminate evidence of replacement.
- B. Cleaning: On completion of placement and grouting, clean all ceramic tile surfaces so they are free of foreign matter.
 1. Remove grout residue from tile as soon as possible.
 2. Clean grout smears and haze from tile according to tile and grout manufacturer's written instructions but no sooner than 10 days after installation. Use only cleaners recommended by tile and grout manufacturers and only after determining that cleaners are safe to use by testing on samples of tile and other surfaces to be cleaned. Protect metal surfaces and plumbing fixtures from effects of cleaning. Flush surfaces with clean water before and after cleaning.

3.7 PROTECTION

- A. Protect installed tile work with kraft paper or other heavy covering during construction period to prevent staining, damage, and wear. If recommended by tile manufacturer, apply coat of neutral protective cleaner to completed tile walls and floors.
- B. Prohibit foot and wheel traffic from tiled floors for at least seven days after grouting is completed.
- C. Before final inspection, remove protective coverings and rinse neutral protective cleaner from tile surfaces.

END OF SECTION 093013

SECTION 095000

ACOUSTICAL CEILINGS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and general conditions of Contract, including General and Supplementary Conditions and Divisions-1 Specification sections apply to work of this section.

1.2 SUMMARY

A. Section Includes

1. Acoustical ceiling panels
2. Exposed grid suspension system
3. Wire hangers, fasteners, main runners, cross tees, and wall angle moldings
4. Perimeter Trim

1.3 REFERENCES

A. American Society for Testing and Materials (ASTM):

1. ASTM A 1008 Standard Specification for Steel, Sheet, Cold Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability
2. ASTM A 641 Standard Specification for Zinc-Coated (Galvanized) Carbon Steel Wire
3. ASTM A 653 Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process
4. ASTM C 423 Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method
5. ASTM C 635 Standard Specification for Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings
7. ASTM D 3273 Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber
8. ASTM E 84 Standard Test Method for Surface Burning Characteristics of Building Materials
9. ASTM E 580 Installation of Metal Suspension Systems in Areas Requiring Moderate Seismic Restraint
10. ASTM E 1111 Standard Test Method for Measuring the Interzone Attenuation of Ceilings Systems
11. ASTM E 1414 Standard Test Method for Airborne Sound Attenuation Between Rooms Sharing a Common Ceiling Plenum
12. ASTM E 1264 Classification for Acoustical Ceiling Products

I.

1.4 SYSTEM DESCRIPTION

Continuous/Wall-to-Wall

1.5 SUBMITTALS

A. Product Data: Submit manufacturer's technical data for each type of acoustical ceiling unit and suspension system required.

B. Samples: Minimum 6-inch x 6-inch samples of specified acoustical panel; 8-inch-long samples of exposed wall molding and suspension system, including main runner and 4-foot cross tees.

C. Shop Drawings: Layout and details of acoustical ceilings show locations of items that are to be coordinated with or supported by the ceilings.

D. Acoustical Certifications: Manufacturer's certifications that products comply with specified requirements, including laboratory reports showing compliance with specified tests and standards. For acoustical performance, each carton of material must carry an approved independent laboratory classification of NRC, CAC, and AC.

a. If the material supplied by the acoustical subcontractor does not have an Underwriter's Laboratory classification of acoustical performance on every carton, subcontractor shall be required to send material from every production run appearing on the job to an independent or NVLAP approved laboratory for testing, at the architect's or owner's discretion. All products not conforming to manufacturer's current published values must be removed, disposed of and replaced with complying product at the expense of the Contractor performing the work.

1.7 QUALITY ASSURANCE

A. Single-Source Responsibility: Provide acoustical panel units and grid components by a single manufacturer.

1. Fire Performance Characteristics: Identify acoustical ceiling components with appropriate markings of applicable testing and inspecting organization.

2. Surface Burning Characteristics: As follows, tested per ASTM E 84 and complying with ASTM E 1264 Classification.

1.8 DELIVERY, STORAGE AND HANDLING

- A. Deliver acoustical ceiling units to project site in original, unopened packages and store them in a fully enclosed space where they will be protected against damage from moisture, direct sunlight, surface contamination, and other causes.
- B. Before installing acoustical ceiling units, permit them to reach room temperature and a stabilized moisture content.
- C. Handle acoustical ceiling units carefully to avoid chipping edges or damaged units in any way.

1.11 WARRANTY

- A. Acoustical Panel: Submit a written warranty executed by the manufacturer, agreeing to repair or replace panels that fail within the warranty period. Failures include, but are not limited to the following:
 - 1. Acoustical Panels: Sagging and warping
 - 2. Grid System: Rusting and manufacturer's defects
- B. Warranty Period:
 - 1. Ceiling System: Thirty (30) years from date of substantial completion
- C. The Warranty shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and will be in addition to and run concurrent with other warranties made by the Contractor under the requirements of the Contract Documents.

1.12 MAINTENANCE

- A. Extra Materials: Deliver extra materials to Owner. Furnish extra materials described below that match products installed. Packaged with protective covering for storage and identified with appropriate labels.
 - 1. Acoustical Ceiling Units: Furnish quality of full-size units equal to 5.0 percent of amount installed.
 - 2. Exposed Suspension System Components: Furnish quantity of each exposed suspension component equal to 2.0 percent of amount installed.

PART 2 – PRODUCTS

2.1 MANUFACTURERS

A. Ceiling Panels:

1. Basis of Design: Armstrong World Industries, Inc. Ultima Low Embodied Carbon

B. Suspension Systems:

1. Basis of Design: Armstrong World Industries, Inc.

C. Substitutions: Per Division 01

2.2.1 ACOUSTICAL CEILING UNITS

A. Basis of Design: Acoustical Panels Type AP – Armstrong - Ultima 2 x 4

1. Surface Texture: Fine Texture
2. Composition: Mineral Fiber with Biochar
3. Color: White
4. Size: 24 in x 24 in, 24 in x 48 in
5. Edge Profile: Beveled Tegalur
6. Noise Reduction Coefficient (NRC) ASTM C 423 Classified w/ UL label on product carton 0.75
7. Ceiling Attenuation Class (CAC): ASTM C 1414; Classified with UL label on product carton 35
8. Articulation Class (AC): ASTM E 1111; Classified with UL label on product carton 170
9. Flame Spread: ASTM E 1264; Class A (HPVA)
10. Light Reflectance (LR) White Panel: ASTM E 1477; 0.88
11. Dimensional Stability: HumiGuard Plus
12. Recycle Content: Up to 54% total recycled content. (Total recycled content: pre-consumer, post-consumer and post-industrial)
13. Material Ingredient Transparency: Health Product Declaration (HPD); Declare Label
14. Life Cycle Assessment: Third Party Certified Environmental Product Declaration (EPD)
16. Acceptable Product:

2.3.1 METAL SUSPENSION SYSTEMS

A. Components:

Main beams and cross tees, base metal and end detail, fabricated from commercial quality hot dipped galvanized steel complying with ASTM A 653. Main beams and cross tees are double-web steel construction exposed flange design. Exposed surfaces chemically cleansed, capping prefinished galvanized steel in baked polyester paint. Main beams and cross tees shall have rotary stitching.

a. Structural Classification: ASTM C 635 Intermediate or Heavy Duty.

b. Color: White or match the actual color of the selected ceiling tile, unless noted otherwise.

c. Sustainability: Environmental Product Declaration (EPD), Health Product Declaration (HPD)

d. Acceptable Product:

- Basis of Design Prelude XL 15/16" Exposed Tee as manufactured by Armstrong World Industries.

B. Attachment Devices: Size for five times design load indicated in ASTM C 635, Table 1, Direct Hung unless otherwise indicated.

C. Wire for Hangers and Ties: ASTM A 641, Class 1 zinc coating, soft annealed, with a yield stress load of at least three times design load, but not less than 12 gauge.

D. Edge Moldings and Trim

E. Armstrong BERC-2 Clip

F. Accessories

PART 3 - EXECUTION

3.1 EXAMINATION

A. Do not proceed with installation until all wet work such as concrete, terrazzo, plastering and painting has been completed and thoroughly dried out, unless expressly permitted by manufacturer's printed recommendations. (Exception: HumiGuard Max Ceilings)

3.2 PREPARATION

A. Measure each ceiling area and establish layout of acoustical units to balance border widths at opposite edges of each ceiling. Avoid use of less than half width units at borders and comply with reflected ceiling plans. Coordinate panel layout with mechanical and electrical fixtures.

B. Coordination: Furnish layouts for preset inserts, clips, and other ceiling anchors whose installation is specified in other sections.

1. Furnish concrete inserts and similar devices to other trades for installation well in advance of time needed for coordination of other work.

3.3 INSTALLATION

A. Follow manufacturer installation instructions.

B. Install suspension system and panels in accordance with the manufacturer's instructions, and in compliance with ASTM C 636 and with the authorities having jurisdiction.

C. Suspend main beam from overhead construction with hanger wires spaced 4'-0" on center along the length of the main runner. Install hanger wires plumb and straight.

D. Install wall moldings at intersection of suspended ceiling and vertical surfaces. Miter corners where wall moldings intersect or install corner caps.

E. For reveal edge panels: Cut and reveal or rabbet edges of ceiling panels at border areas and vertical surfaces.

F. Install acoustical panels in coordination with suspended system, with edges resting on flanges of main runner and cross tees. Cut and fit panels neatly against abutting surfaces. Support edges by wall moldings.

3.4 ADJUSTING AND CLEANING

A. Replace damaged and broken panels.

B. Clean exposed surfaces of acoustical ceilings, including trim, edge moldings, and suspension members. Comply with manufacturer's instructions for cleaning and touch up of minor finish damage. Remove any ceiling products that cannot be successfully cleaned and or repaired. Replace with attic stock or new product to eliminate evidence of damage.

SECTION 096500

RESILIENT BASE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes:
 - 1. Resilient wall base.

1.3 REFERENCES

- A. ASTM International (ASTM) G1861 - *Standard Specification for Resilient Wall Base*.

1.4 SUBMITTALS

- A. Submittals for Review:
 - 1. Samples: 4-inch-long samples showing available colors.

1.5 MAINTENANCE

- A. Extra Materials: One unopened carton of each profile and color.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Basis of Design Product: Burke
- B. Acceptable Manufacturers:
 - 1. Allstate Rubber Corp.
 - 2. Armstrong World Industries
 - 3. Burke Flooring
 - 4. Johnsonite, Inc.
 - 5. Roppe Corp.
- C. Substitutions: Per Division 01.

2.2 MATERIALS

- A. Resilient Base:
 - 1. Type: ASTM F1861, thermoplastic rubber.
 - 2. Thickness: 0.125 inch.
 - 3. Profile: Straight.
 - 4. Height: 4 inches
 - 5. Length: Continuous rolls
 - 6. Color: To be selected from manufacturer's standard colors
 - 7. Finish: Matte
 - 8. End units and outside corners: Preformed; profile, size, and color to match base.

2.3 ACCESSORIES

- A. Adhesive:
 - 1. Water based, waterproof, recommended by base manufacturer.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Prepare surfaces to receive base:
 - 1. Remove materials that could interfere with adhesion.
 - 2. Fill low spots with patching compound; finish flush with adjacent surface.
 - 3. Remove high spots, ridges and nibs

3.2 INSTALLATION

- A. Apply adhesive continuously to back of base.
- B. Maintain top edge true to line and bottom edge in continuous contact with floor. Butt joints tight; butt base tight to adjacent construction.
- C. Do not install pieces less than 6 inches long.
- D. Miter and butt inside corners.
- E. At outside corners install preformed corner pieces.
- F. At exposed ends, install premolded units.
- G. Scribe to door frames and other interruptions.

END OF SECTION 096500

SECTION 096516

RESILIENT SHEET FLOORING

PART 1 GENERAL

1.01 THIS SECTION INCLUDES

- A. Flooring and accessories as shown on the drawings and schedules and as indicated by the requirements of this section.

1.02 RELATED DOCUMENTS

- A. Drawings and General Provisions of the Contract (including General and Supplementary Conditions and Division 1 sections) apply to the work of this section.

1.03 RELATED SECTIONS

- A. Other Division 9 sections for floor finishes related to this section but not the work of this section.
- B. Division 3 Concrete; not the work of this section.
- C. Division 6 Wood and Plastics; not the work of this section.
- D. Division 7 Thermal and Moisture Protection; not the work of this section.

1.04 QUALITY ASSURANCE AND REGULATORY REQUIREMENTS

- A. Select an installer who is competent in the installation of resilient sheet flooring using heat welded seams.
- B. Provide type of flooring, adhesives, and accessories supplied by one manufacturer.
- C. If required, provide flooring material to meet local fire test performance criteria as tested by a recognized independent testing laboratory.

1.05 SUBMITTALS

- A. Submit shop drawings, seaming plan, coving details, and manufacturer's technical data, installation and maintenance instructions (latest edition of "Mannington's Professional Installation Guide") for flooring and accessories.
- B. Submit the manufacturer's standard samples showing the required colors for flooring, welding rods, and applicable accessories.
- C. Submit a copy of the manufacturer's recommended maintenance procedures.
- D. If required, submit the manufacturer's certification that the flooring has been tested by an independent laboratory and complies with the required fire tests.

1.06 ENVIRONMENTAL CONDITIONS

- A. Deliver materials in good condition to the jobsite in the manufacturer's original unopened containers that bear the name and brand of the manufacturer, project identification, and shipping and handling instructions.
- B. Store materials in a clean, dry, enclosed space off the ground, and protected from the weather and from extremes of heat and cold. Protect adhesives from freezing. Store flooring, adhesives, and accessories in the spaces where they will be installed for at least 48 hours before beginning installation.
- C. Maintain a minimum temperature in the spaces to receive the flooring and accessories of 65°F (18°C) and a maximum temperature of 85°F (29°C) for at least 48 hours before, during, and for not less than 48 hours after installation. Thereafter, maintain a minimum temperature of 55°F (13°C) in areas where work is completed. Protect all materials from the direct flow of heat from hot-air registers, radiators, or other heating fixtures and appliances.
- D. Install flooring and accessories after the other finishing operations, including painting, have been completed. Close spaces to traffic during the installation of the flooring. Do not install flooring over concrete slabs until they are sufficiently dry to achieve a bond with the adhesive in accordance with the manufacturer's recommended bond and moisture tests.

PART 2 PRODUCTS

*

2.01 RESILIENT FLOORING MATERIALS – Basis of Design - Provide Mannington Mills, Inc. resilient vinyl sheet flooring BioSpec MD in [color selected from the range currently available]

A. Product Specifications:

- i. Construction - Homogeneous Sheet, Non-ortho phthalate construction
- ii. Classification - ASTM F1913 Sheet Vinyl Floor Covering without Backing
- iii. Total Thickness - 0.080" (2.03 mm)
- iv. Wear Layer - Quantum Guard Elite® for no-wax, no-polish maintenance
- v. Width - 6'6" (2 m)
- vi. Colors - 70
- vii. Pattern Repeat - Random repeat, reverse sheet for seaming

B. Environmental:

- i. Indoor Air Quality - FloorScore Certified; CDPH v1.1-2010
- ii. Product Declarations - EPD

C. Testing:

- i. HUD/FHA - Meets / Exceeds ADAG (American Disability Act Guidelines)
- ii. Flexibility (ASTM F137) - Passes - 1 1/2" Mandrel - No Crack/Break
- iii. Static Load (ASTM F970) - Passes - Residual Indent $\leq 0.005"$
- iv. Static Load (ASTM F970 mod.) - Passes - 2,000 PSI; Residual Indent $\leq 0.005"$
- v. Rolling Resistance/Caster Chair (ISO 4918) - 25,000 Cycles, No Significant Change
- vi. Short Term Residual Indentation (ASTM F1914/F1303) - Passes - Must be $< 0.007"$
- vii. Flooring Radiant Panel (ASTM E648) - Passes - Class 1; ≥ 0.45 watts/cm²
- viii. Smoke Density (ASTM E662) - Passes - ≤ 450
- ix. Slip Resistance (ASTM C1028, Dry) - Passes - ≥ 0.5 Leather; 0.6 Rubber
- x. Acoustic IIC (ASTM E492) - 50 - 6" Concrete with Drop Ceiling
- xi. Acoustic STC (ASTM E90) - 63 - 6" Concrete with Drop Ceiling
- xii. Resistance to Light (ASTM F1515) - Passes - < 8 Delta E Color Change
- xiii. Chemical Resistance (ASTM F925) - Passes - No More Than Slight Change
- xiv. Resistance to Heat (ASTM F1514) - Passes - < 8 Delta E Color Change
- xv. Resistance to Mold/Mildew (ASTM G2 1/E2180) - Passes - No More Than Slight Change

D. Warranty: Limited 12 Year Commercial Warranty & Quantum Guard Elite® Wear Warranty

E. Substitutions per division 01. Substitutions of equal products must be approved in accordance with state and local bid guidelines. Design intent (i.e., color and pattern) and design layout and configuration are inherent attributes of the specification, therefore all submitted products must comply with the aesthetic intent of the owner and/or the architect.

2.02 WALL BASE MATERIALS

- A. Integral flash cove base: Provide integral flash cove wall base by extending sheet flooring [4 in. (10.16 cm)] [6 in. (15.24 cm)] up the wall using adhesive, welding rod, and accessories recommended and approved by the flooring manufacturer.

2.03 ADHESIVES

- A. Provide Mannington [V-82 Acrylic Flooring Adhesive] [V-95 Two Component Polyurethane Adhesive] [V-88 High Moisture Flooring Adhesive] [XpressStep Spray Adhesive] [QuickStix Pre-Applied Adhesive] [MoistureLoc Adhesive] under the flooring.
- B. Provide [MCS-42 Seam Sealer] [Solid Color Vinyl Weld Rod] as produced by the manufacturer of the resilient flooring and intended for welding of seams. [Weld rod color shall be compatible with field color of flooring or as selected by Architect to contrast with field color of flooring. Color selected from the range currently available.]
- C. Use Mannington Quantum Guard Seam Coater pen on all seams to extend finish coat protection to seamed areas.
- D. Provide MT-800 Seam Sealer, if needed, to chemically weld product to surrounding Integra HP

broadloom carpet materials.

2.04 ACCESSORIES

- A. Resilient sheet goods must have the ability to be chemically welded to adjoining broadloom carpet materials.
- B. For patching, smoothing, and leveling monolithic subfloors (concrete, terrazzo, quarry tile, ceramic tile, and certain metals), provide Portland cement-based latex underlayment or patch and skim coat as recommended by the resilient flooring manufacturer.
- C. For sealing joints between the top of wall base or integral cove cap and irregular wall surfaces such as masonry, provide plastic filler applied according to the manufacturer's recommendations.
- D. [Provide top edge trim caps of [plastic] [anodized aluminum] [plastic zero reducer] for integral flash cove as approved by the Architect.
- E. [Provide a fillet support strip for integral cove base with a minimum radius of 1 in. (2.54 cm) of wood or plastic.]
- F. Provide transition / reducing strips tapered to meet abutting materials.
- G. Provide threshold of thickness and width as shown on the drawings.
- H. Provide resilient edge strips of width shown on the drawings, of equal gauge to the flooring, homogeneous vinyl or rubber composition, tapered or bullnose edge, with color to match or contrast with the flooring, or as selected by the Architect from standard colors available.
- I. Provide [metal] [rubber] [vinyl] edge strips of width shown on the drawings and of required thickness to protect exposed edges of the flooring. Provide units of maximum available length to minimize the number of joints. Use butt-type edge strips for concealed anchorage or overlap-type edge strips for exposed anchorage.

PART 3 EXECUTION

3.01 INSPECTION

- A. Examine subfloors prior to installation to determine that surfaces are smooth and free from cracks, holes, ridges, and other defects that might prevent adhesive bond or impair durability or appearance of the flooring material.
- B. Inspect subfloors prior to installation to determine that surfaces are free from curing, sealing, parting, and hardening compounds; residual adhesives; adhesive removers; and other foreign materials that might prevent adhesive bond. Visually inspect for evidence of moisture, alkaline salts, carbonation, dusting, mold, or mildew.
- C. Report conditions contrary to contract requirements that would prevent a proper installation. Do not proceed with the installation until unsatisfactory conditions have been corrected.
- D. Failure to call attention to defects or imperfections will be construed as acceptance and approval of the subfloor. Installation indicates acceptance of substrates with regard to conditions existing at the time of installation.

3.02 PREPARATION

- A. Smooth concrete surfaces, removing rough areas, projections, ridges, and bumps, and filling low spots, control or construction joints, and other defects with Portland cement-based latex underlayment or patch and skim coat as recommended by the flooring manufacturer.
- B. Remove paint, varnish, oils, release agents, sealers, and waxes. Remove residual adhesives by mechanical means. Remove curing and hardening compounds by mechanical means. Avoid organic solvents.
- C. Perform subfloor Relative Humidity and/or Calcium Chloride Tests (and Bond Tests) as described in "Mannington's Professional Installation Guide" and product specific installation instructions to determine if surfaces are dry; free of curing and hardening compounds, old adhesive, and other coatings; and ready to receive flooring as specified.
- D. Vacuum or broom-clean surfaces to be covered immediately before the application of flooring. Make subfloor free from dust, dirt, grease, and all foreign materials.

3.03 INSTALLATION OF FLOORING

- A. Install flooring in strict accordance with the manufacturer's written instructions.
- B. Install flooring wall to wall before the installation of floor-set cabinets, casework, furniture, equipment, movable partitions, etc. Extend flooring into toe spaces, door recesses, closets, and similar openings as shown on the drawings.
- C. If required, install flooring on pan-type floor access covers. Maintain continuity of color and pattern within pieces of flooring installed on these covers. Adhere flooring to the subfloor around covers and to covers.
- D. Scribe, cut, and fit to permanent fixtures, columns, walls, partitions, pipes, outlets, and built-in furniture and cabinets.
- E. Chemical welding carpet to sheet vinyl: Mannington's seam sealer MT-800 must be used to chemically weld Integra HP Backing to commercial sheet vinyl per manufacturer's instructions.
- F. Install flooring with adhesives, tools, and procedures in strict accordance with the manufacturer's written instructions. Observe the recommended adhesive trowel notching, open times, and working times.

3.04 INSTALLATION OF ACCESSORIES

- A. Apply top set wall base to walls, columns, casework, and other permanent fixtures in areas where top-set base is required. Install base in lengths as long as practical, with inside corners fabricated from base materials that are mitered or coped. Tightly bond base to vertical substrate with continuous contact at horizontal and vertical surfaces.
- B. Fill voids with plastic filler along the top edge of the resilient wall base or integral cove cap on masonry surfaces or other similar irregular substrates.
- C. Place resilient edge strips tightly butted to flooring, and secure with adhesive recommended by the edge strip manufacturer. Install edge strips at edges of flooring that would otherwise be exposed.
- D. Apply [butt-type] [overlap] edge strips where shown on the drawings, [before] [after] flooring installation. Secure units to the substrate, complying with the edge strip manufacturer's recommendations.

3.05 CLEANING AND PROTECTION

- A. Perform initial maintenance according to the latest edition of the manufacturer's maintenance and warranty literature.
- B. Protect installed flooring as recommended by the flooring manufacturer against damage from rolling loads, other trades, or the placement of fixtures and furnishings.

SECTION 096813
MODULAR CARPET TILE

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes: Carpet removal, new carpet and accessories for direct glue down, and installation.
- B. Alternates or Substitutions: Approval of alternate or substitute products will be considered only under the terms and conditions as outlined herein: Whenever a particular make of material or trade name is specified herein, it shall be regarded as being indicative of the standards required. Regardless of format of specifications, any product other than those named in Part 2 - Products, item number 2.01, must proceed as an alternate or substitute. A bidder who proposes to quote on the basis of an alternate or substitute material or system shall submit to the architect, at least 14 days prior to the scheduled bid date, the following information:
 - i. Written application for approval of alternate or substitute to include specifications of alternate or substitute carpet on company letterhead and signed by company officer.
 - ii. One 24" x 24" sample of the proposed alternate or substitute with recommended backing technology.
 - iii. A complete sample representation of colors available.
 - iv. Copies of warranties for proposed alternate or substitute.
 - v. List of a minimum of three (3) jobs, one of which must be in use for at least ten (10) years, where alternate or substitute is/was used under similar conditions. These jobs shall be located within one hundred (100) miles of the owner's office. Each job shall be available for inspection by the owner's representatives.
 - vi. Consideration will be given to only those alternates or substitutes that are approved prior to scheduled bid opening date.
 - vii. List of approved alternates or substitutes will be issued to all bidders prior to bid opening.
- C. General: The following publications of the issues listed below, but referred to hereinafter by basic designation, form a part of this specification to the extent as if bound herein: American Society for Testing and Materials (ASTM):
 - i. E648 – Test Method for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source.
 - ii. E662 – Test Method for Smoke Density
 - iii. AATCC 16E- Colorfastness to Light
 - iv. AATCC 129- Colorfastness to Ozone and Gas
 - v. AATCC 134- Static Generation of Fiber
 - vi. AATCC 175- Red 40 Stain Test
 - vii. DOC-FF-1-70- Pill Test
 - viii. Moisture Penetration by Impact

1.02 SUBMITTALS

- A. Layout Drawings: Show layout of each carpet type installation at 1/8" scale.
- B. Samples: For verification purposes, submit one 9" x 9" sample of each carpet required. Samples shall be accompanied by manufacturer's technical specification for each carpet required using terminology characteristics as listed in this specification. Also include a complete representation in sample form of all available colorations.
- C. Maintenance Data: Submit manufacturer's printed maintenance recommendations for the care, cleaning, and maintenance of the carpet, including detailed instructions pertaining to hot water extraction methods.

1.03 QUALITY ASSURANCE

- A. Flooring Contractor's Qualifications: Firm with not less than 5 consecutive years of experience in installation of commercial carpeting of type, quantity, and installation methods similar to the work detailed in this section.
- B. Manufacturer's Qualifications: Firm (carpet mill) with not less than 5 consecutive years of production experience with carpet similar to type specified in this section; whose published product literature clearly indicates general compliance of products with requirements of this section. Manufacturer must be ISO 14001 certified.
- C. Measurement Verification: Dimensions shown on drawings are approximate. It is the Flooring Contractor's responsibility to verify all dimensions and job site conditions. Order sufficient yardage to fully carpet areas as indicated and to fill overage requirements as specified. No substitutions shall be permitted to make up for any shortage of material in overage or in carpet to be installed.
- D. Flooring Contractor shall be totally responsible for the accuracy of measurements of total yardage, individual floor yardage, and dye lot yardage requirements; no additional compensation shall be allowed for shortage of materials.
- E. Dye Lots: All carpet of the same type in continuous areas shall be from the same dye lots. Carpets that are piece dyed and are limited to dye batch sizes must be approved by the owner. Transition from one dye lot to another shall be detailed on shop drawings and approved by owner.

1.04 PRODUCT DELIVERY, STORAGE, & HANDLING

- A. Deliver carpet materials in original mill protective wrapping with mill register numbers and tags attached. Maintain wrappers and protective covers in place until carpet is ready for installation. Store inside, in well-ventilated area, protected from weather, moisture, and soiling.
- B. Maintain temperature and humidity levels in all areas where carpet is to be stored as detailed in manufacturer's published installation instructions.
- C. Deliver all required overages and maintenance stock to owner's specified location prior to beginning installation.

1.05 JOB CONDITIONS

- A. Environmental Conditions: Maintain temperatures in space in accordance with carpet or adhesive manufacturer's recommendations, but in no case less than 65 degrees F and no more than 85 degrees F for 24 hours prior to, during, and for 72 hours after installation. Subfloor temperature should be a minimum 65 degrees F for 24 hours prior to and after installation.
- B. Precondition: All carpet shall be unboxed and spread in a room on site 24 hours prior to actual installation with the room preconditioned at a minimum of 65 degrees F and a maximum of 85 degrees F with humidity between 10% to 65%.
- C. Moisture: If required, perform a Calcium Chloride (ASTM F-1869) or Relative Humidity test (ASTM F-2170) on the concrete to detect the presence of moisture as directed by carpet manufacturer. Alkalinity tests must also be performed. Consult manufacturer's published installation instructions for maximum allowed moisture readings per backing type and adhesive. All tests should be documented and results saved.

1.06 EXTRA STOCK

- A. General: Furnish 5% additional yardage of each carpet type required; extra yardage is over and above any overage provided by manufacturer. Normal manufacturing overage not to exceed 10% for under 1000 yards, and not to exceed 5% for over 1000 yards. Deliver overage materials to the Owner uncut in clearly marked dust-proof packages **prior to commencement of work**; store where directed.

PART 2 - PRODUCTS

2.01 CARPET - Carpet Type CPT-1: Carpet shall meet the following minimum requirements:

- A. Specifications:
 - i. Construction - Tufted, Non-Ortho Phthalate
 - ii. Face Fiber – Type 6,6 Nylon with Permanent Stain and Bleach Protection
 - iii. Dye Method – Solution Dyed
 - iv. Gauge – 5/64
 - v. Stitches Per Inch - 10
 - vi. Pile Thickness -
 - vii. Face Weight – 21oz
 - viii. Density - 6690
 - ix. Size – 24 x24 tile
 - x. Primary Backing - 100% Woven Synthetic
 - xi. Secondary Backing - Infinity 2 Modular Reinforced Vinyl Composite Closed Cell Polymer
- B. Testing:
 - i. Dimensional Stability (Aachen Test) - Passes
 - ii. Electrostatic Propensity (AATCC 134) - Less than 3.0 kV
 - iii. Flooring Radiant Panel (ASTM E648) - Passes - Class 1; ≥ 0.45 watts/cm²
 - iv. Smoke Density (ASTM E662) - Passes - ≤ 450
 - v. Methenamine Pill Test (ASTM D2859) - Passes
 - vi. Hexapod (ASTM D5252) TARR - 3.5
- C. Environmental:
 - i. NSF/ANSI 140 Certification - Infinity® 2 Modular - Gold
 - ii. Recycled Content - Contains recycled content
 - iii. Indoor Air Quality - CRI Green Label Plus Certified
 - iv. Product Declarations - EPD, HPD
- D. Pattern and Color: Understanding the importance of pattern and color for aesthetics, as well as appearance retention and maintainability, owner reserves the right to reject any product or manufacturer based solely on pattern and color considerations.
- E. Warranties:
 - i. Definition of Lifetime: Lifetime is defined as the period from which materials are installed until the date in which the owner removes them from service.
 - ii. Manufacturer's Lifetime Warranty, non-prorated, against product failure covering all costs including freight, labor, and material for the following: edge ravel, backing delamination, superior tuft bind in high traffic environments, wet or dry, static protection, moisture barrier-pre-coat and backing, wear - no more than 10% face yarn loss, and adhesive failure.
- F. Cationic Stain Resistance: Stain resistant properties must be permanent and not removable by commercial cleanings or abrasive wear, i.e., XGuard stain resistant treatment. Under GSA requirements stain resistant carpets must score no less than 8.0 (10.0 is the best) on the AATCC Red 40 Stain Scale. Test sample must first be exposed to 100 revolutions on the Taber Abrader (1,000-gram weight per H-18 wheel) and then abraded area must be stain tested using AATCC test method 175. Topical stain resistant treatments will not be acceptable. Stain resistant properties must be inherent and warranted for fifteen (15) years.
- G. Bleach Resistance: Will resist color loss from diluted bleach applications for a period of fifteen (15) years from the date of original installation, as with ColorSafe bleach resistance treatment. Diluted bleach applications means spills or splashes on the carpet of diluted bleach solutions (10% or less) of the type normally used for cleaning or disinfecting purposes.

- H. Substitutions per Division 01. Substitutions of equal products must be approved in accordance with state and local bid guidelines. Design intent (i.e., color and pattern) and design layout and configuration are inherent attributes of the specification, therefore all submitted products must comply with the aesthetic intent of the owner and/or the architect.

2.02 ACCESSORIES

- A. Adhesives: Waterproof, non-flammable carpet adhesive recommended and approved by carpet manufacturer in writing for compatibility with carpet backing – Infinity 2 Adhesive; be non-flammable, and meet the criteria of the CRI Green Label Plus Certification Program, SCAQMD Rule 1168, and CHPS 1350. SDS required on product used. Adhesive must have Lifetime Bond Warranty from carpet manufacturer.
- C. Miscellaneous Materials: As recommended and approved in writing by manufacturer of carpet and selected by Flooring Contractor to meet project circumstance and requirements.

PART 3 - EXECUTION

3.01 CARPET REMOVAL

- A. Remove and dispose of all existing carpet and materials to make subfloor acceptable for installation if applicable.

3.02 INSPECTION

- A. General: Do not start work until work of other trades are substantially completed. Inspect surfaces to receive carpet and verify that all such work is complete to the point where this installation may properly commence. In the event of discrepancy, notify Construction Manager. Do not proceed with installation in areas of discrepancy until all such discrepancies have been fully resolved. Start of carpet installation indicates acceptance of subfloor conditions and full responsibility for completed work.

3.03 INSTALLATION, GENERAL

- A. General: Comply with manufacturer's instructions and recommendations for installation of this type of carpet.
- B. Prepare the subfloor to ensure a successful installation as directed in carpet manufacturer's published installation guidelines.
- C. Employ use of manufacturer's recommended adhesive that requires no subfloor moisture testing when installed with standard adhesive and the slab meets ASTM F-710 including proof of the presence of an intact moisture vapor retarder per ASTM E-1745 (Class B or Better) in direct contact with the concrete slab, no standing water, no free liquids present, no evidence of moisture staining, no hydrostatic pressure, and a pH level that does not exceed 12. For all other conditions or when the above requirements are not met, the limits are in-situ relative humidity (maximum RH 95% per ASTM F-2170) and/or moisture vapor emissions (maximum 10 lbs./1,000 SF/24 hrs. per ASTM F-1869).
- D. On-grade and below-grade concrete slabs must have an approved vapor retarder (ASTM E-1745) which is properly installed (ASTM E-1643).
- E. Carpeting shall be installed in the format recommended by manufacturer or at owner's approval. Cut carpet tile evenly and accurately to fit neatly at walls, columns, and projections. Extend carpet under open-bottomed and raised-bottom obstructions, and under removable flanges of obstructions.
- F. Installed carpet tiles shall be free from ripples, ravel, frays, and puckers. All loop pile carpets will demonstrate some fuzzy edges due to normal manufacturing conditions. Tractor tile joints and trim fuzzy edges or loop blossoms after installation.
- G. Expansion Joints: Do not bridge building expansion joints with continuous carpeting; provide for movement.

3.05 CLEANING AND PROTECTION

- A. Remove and dispose of debris and unusable scraps.
- B. Vacuum carpet using two motor, top loading, upright commercial machine with brush-only element, utilizing a high filtration dust bag. Remove spots in accordance with carpet manufacturer's guidelines and replace carpet where spots cannot be removed. Remove any protruding face yarn using sharp scissors. Be certain to trim any loose yarns or fibers at all seams.
- C. Following cleaning and vacuum carefully protect the carpeting from soiling and damage until final acceptance. Protection shall be accomplished by using approved protection paper. Edges shall be lapped 6 inches and secured with non-asphaltic tape. Covering shall be kept in repair and damaged portions replaced during the construction and move-in period.
- D. Maintenance Materials: Deliver usable scraps to Owner's designated storage space, properly packaged and identified. Dispose of smaller pieces as construction waste.

SECTION 099123
INTERIOR PAINTING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes surface preparation and the application of paint systems on the following interior substrates listed in 3.6 Interior Painting Schedule.
- B. Related Requirements:
 - 1. Section 051200 "Structural Steel Framing" for shop priming of metal substrates with primers specified in this Section.
 - 2. Section 099113 "Exterior Painting" for surface preparation and the application of paint systems on exterior substrates.
 - 3. Section 099300 "Staining and Transparent Finishing" for surface preparation and the application of wood stains and transparent finishes on interior wood substrates.
 - 4. Section 099600 "High-Performance Coatings" for high-performance and special-use coatings.

1.3 DEFINITIONS

- A. Gloss Level 1: Not more than 5 units at 60 degrees and 1 to 2 units at 85 degrees.
- B. Gloss Level 2: 5 to 9 units at 60 degrees and 10 to 15 units at 85 degrees.
- C. Gloss Level 3: 10 to 15 units at 60 degrees and 15 to 30 units at 85 degrees.
- D. Gloss Level 4: 20 to 35 units at 60 degrees and 35 to 50 units at 85 degrees.
- E. Gloss Level 5: 40 to 50 units at 60 degrees.
- F. Gloss Level 6: 70 to 80 units at 60 degrees.
- G. Gloss Level 7: More than 80 units at 60 degrees.
- H. Blocking: Two painted surfaces sticking together such as a painted door sticking to a painted jamb.

- I. Mildew Resistant: Certified products are specially formulated with microbicial additives that resist mold, mildew, and algae growth on the paint film and inhibit growth of bacterial odors.
- J. CHPS: Collaborative for High Performance Schools. A national movement to improve student performance and the entire educational experience by building the best possible schools. www.chps.net.
- K. EG: Ethylene Glycol. Ethylene glycol is listed as a hazardous air pollutant (HAP) by the U.S. EPA.
- L. PDCA: Painting & Decorating Contractors of America www.pdca.org.
- M. RAVOC: Reactivity adjusted VOC. "Reactivity" means the ability of a VOC to promote ozone formation
- N. SSPC: The Society for Protective Coatings publishes Scopes of SSPC Surface Preparation Standards and Specifications www.sspc.org.
- O. Dunn-Edwards Conformance Chart: [D-E CONFORMANCE TABLE](#)

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product. Include preparation requirements and application instructions.
- B. LEED v.4 Requirements: Interior paints and coatings must pass CDPH Standard Method V1.1 (also called section 01350) emissions testing; and they must comply with the VOC content limits of the California ARB 2007 Suggested Control Measure for Architectural Coatings.
- C. Samples for Initial Selection: For each type of topcoat product.
- D. Samples for Verification: For each type of paint system and in each color and gloss of topcoat.
 - 1. Submit Samples on rigid backing, no smaller than 7 inches X 10 inches (177 mm X 254 mm) or larger than 8.5 inches X 11 inches (216 mm X 280 mm).
 - 2. Label each Sample for project, architect, general contractor, painting contractor, paint color name and number, paint brand name, "P" number if applicable, and application area.
- E. Product List: For each product indicated, include the following:
 - 1. Cross-reference to paint system and locations of application areas. Use same designations indicated on Drawings and in schedules.
 - 2. VOC content.

1.5 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Paint: Provide not less than 1 gal. (3.8L) of each material and color applied.

1.6 QUALITY ASSURANCE

- A. Mockups: Apply mockups of each paint system indicated and each color and finish selected to verify preliminary selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
 1. Architect will select one surface to represent surfaces and conditions for application of each paint system specified in Part 3.
 - a. Vertical and Horizontal Surfaces: Provide samples of at least 100 sq. ft. (9 sq. m).
 - b. Other Items: Architect will designate items or areas required.
 2. Final approval of color selections will be based on mockups.
 - a. If preliminary color selections are not approved, apply additional mockups of additional colors selected by Architect at no added cost to Owner.
 3. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
 4. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F (7 deg C).
 1. Maintain containers in clean condition, free of foreign materials and residue.
 2. Remove rags and waste from storage areas daily.

1.8 FIELD CONDITIONS

- A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 90 degrees F (10 and 32 degrees C).
- B. Do not apply paints when relative humidity exceeds 85 percent; at temperatures less than 5 degrees F (3 degrees C) above the dew point; or to damp or wet surfaces.
- C. Painting contractor should follow proper painting practices and exercise judgment based on his or her experience and project specific conditions as to when to proceed.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Basis-of-Design Product: Provide products listed from the Dunn-Edwards Corporation.
- B. Substitutions: Per Division 01.

2.2 PAINT, GENERAL

- A. Material Compatibility:
 - 1. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
 - 2. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.
- B. VOC Content: Provide material that comply with VOC limits of authorities having jurisdiction.
- C. Colorants: The use of colorants containing hazardous chemicals, such as ethylene glycol, is prohibited and zero VOC colorants should be used whenever possible.
- D. Colors: As selected by the Architect.
 - 1. Indicate a percentage of surface area which will be painted with deep tones.

2.3 SOURCE QUALITY CONTROL

- A. Testing of Paint Materials: Owner reserves the right to invoke the following procedure:
 - 1. Owner may engage the services of a qualified testing agency to sample paint materials. Contractor will be notified in advance and may be present when samples are taken. If paint materials have already been delivered to Project site, samples may be taken at Project site. Samples will be identified, sealed, and certified by testing agency.
 - 2. Testing agency will perform tests for compliance with product requirements.
 - 3. Owner may direct Contractor to stop applying coatings if test results show materials being used do not comply with product requirements. Contractor shall remove noncomplying paint materials from Project site, pay for testing, and repaint surfaces painted with rejected materials. Contractor will comply with requirements to use compatible products and systems as described in Article 2.2. Contractor will be required to remove rejected materials from previously painted surfaces if, on repainting with complying materials, the two paints are incompatible.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
 - 1. Concrete: 12 percent.
 - 2. Masonry (Clay and CMU): 12 percent.
 - 3. Wood: 15 percent.
 - 4. Gypsum Board: 12 percent.
 - 5. Plaster: 12 percent.
- C. Gypsum Board Substrates: Verify that finishing compound is sanded smooth.
- D. Plaster Substrates: Verify that plaster is fully cured, including pH testing to determine that alkalinity is within limits established by the manufacturer.
- E. Spray-Textured Ceiling Substrates: Verify that surfaces are dry.
- F. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.
- G. Proceed with coating application only after unsatisfactory conditions have been corrected.
 - 1. Application of coating indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Comply with manufacturer's written instructions.
- B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
 - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
- C. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
 - 1. Remove incompatible primers and re-prime substrate with compatible primers or apply tie coat as required to produce paint systems indicated.

- D. Concrete Substrates: Remove release agents, curing compounds, efflorescence, and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces to be painted exceeds that permitted in manufacturer's written instructions, including pH testing to determine that alkalinity is within limits established by the manufacturer.
- E. Masonry Substrates: Remove efflorescence and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces or mortar joints exceed that permitted in manufacturer's written instructions.
- F. Steel Substrates: Remove rust, loose mill scale, and shop primer, if any. Clean using methods recommended in writing by paint manufacturer.
- G. Shop Primed Steel Substrates: Clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with the same material as used for shop priming to comply with SSPC-PA 1 for touching up shop primed surfaces.
- H. Galvanized Metal Substrates: Remove grease and oil residue from galvanized sheet metal fabricated from coil stock to produce clean, lightly etched surfaces that promote adhesion of subsequently applied paints.
- I. Aluminum Substrates: Remove loose surface oxidation.
- J. Wood Substrates:
 - 1. Scrape and clean knots and apply coat of knot sealer before applying primer.
 - 2. Sand surfaces that will be exposed to view and dust off.
 - 3. Prime edges, ends, faces, undersides, and backsides of wood.
 - 4. After priming, fill holes and imperfections in the finish surfaces with putty or plastic wood filler. Sand smooth when dried.
- K. Cotton or Canvas Insulation Covering Substrates: Remove dust, dirt, and other foreign material that might impair bond of paints to substrates.

3.3 APPLICATION

- A. Apply paints according to manufacturer's written instructions.
 - 1. Use applicators and techniques suited for paint and substrate indicated.
 - 2. Paint surfaces behind movable equipment and furniture same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed equipment or furniture with prime coat only.
 - 3. Paint front and backsides of access panels, removable or hinged covers, and similar hinged items to match exposed surfaces.
 - 4. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
 - 5. Primers specified in painting schedules may be omitted on items that are factory primed or factory finished if acceptable to topcoat manufacturers.
- B. Tint each undercoat to a lighter shade of the finish coat (not to exceed 2 ounces of colorant) to facilitate identification of each coat if multiple coats of same material are to be applied.

- C. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.
- D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.
- E. Block Fillers: Provide block fill as scheduled to conform to the following PDCA Standard P12-05:
 - 1. Level 3 - Premium Fill: One or multiple coats of high performance block filler manufactured to be applied at a high dry film build. Block filler shall be back-rolled to eliminate voids and reduce the majority of the masonry profile depth.
- F. Painting Fire Suppression, Plumbing, HVAC, Electrical, Communication, and Electronic Safety and Security Work:
 - 1. Paint the following work where exposed in equipment rooms:
 - a. Equipment, including panelboards and switch gear.
 - b. Uninsulated metal piping.
 - c. Uninsulated plastic piping.
 - d. Pipe hangers and supports.
 - e. Metal conduit.
 - f. Plastic conduit.
 - g. Tanks that do not have factory-applied final finishes.
 - h. Duct, equipment, and pipe insulation having cotton or canvas insulation covering or other paintable jacket material.
 - i. Other items as directed by the architect.
 - 2. Paint the following work where exposed in occupied spaces:
 - a. Equipment, including panelboards.
 - b. Uninsulated metal piping.
 - c. Uninsulated plastic piping.
 - d. Pipe hangers and supports.
 - e. Metal conduit.
 - f. Plastic conduit.
 - g. Duct, equipment, and pipe insulation having cotton or canvas insulation covering or other paintable jacket material.
 - h. Other items as directed by the Architect.
 - 3. Paint portions of internal surfaces of metal ducts, without liner, behind air inlets and outlets that are visible from occupied spaces.

3.4 FIELD QUALITY CONTROL

- A. Dry Film Thickness Testing: Owner may engage the services of a qualified testing and inspecting agency to inspect and test paint for dry film thickness.
 - 1. Contractor shall touch up and restore painted surfaces damaged by testing.
 - 2. If test results show that dry film thickness of applied paint does not comply with paint manufacturer's written recommendations, Contractor shall pay for testing and apply additional coats as needed to provide dry film thickness that complies with paint manufacturer's written recommendations.

3.5 CLEANING AND PROTECTION

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
- B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.6 INTERIOR PAINTING SCHEDULE

- A. Gypsum Board Substrates:
 - 1. Commercial Low Odor / Zero VOC Latex System:
 - a. Prime Coat: Primer sealer, latex, interior, Dunn-Edwards, Vinylastic Select VNSL00.
 - b. Intermediate Coat: Latex, interior, matching topcoat
 - c. Topcoat: Latex, interior, eggshell, Dunn-Edwards, Acri-Wall ACWL30, (Gloss Level 3).
- B. Concrete Substrates, Masonry, Clay, Nontraffic Surfaces:
 - 1. Commercial Low Odor / Zero VOC Latex System:
 - a. Prime Coat: Primer, alkali resistant, waterbased, interior/exterior, Dunn-Edwards, Eff-Stop Select ESSL00.
 - b. Intermediate Coat: Latex, interior, matching topcoat.
 - c. Topcoat: Latex, interior, eggshell, Dunn-Edwards, Acri-Wall ACWL30, (Gloss Level 3).

C. Ferrous Metal Substrates:

1. Commercial Low Odor / Zero VOC Latex over a Waterborne Alkyd Primer System:

- a. Prime Coat: Primer, alkyd, anti-corrosive, for metal, Dunn-Edwards, Bloc-Rust Premium BRPR00 Series or Enduraprime rust preventative primer ENPR00.
- b. Intermediate Coat: Latex, interior, matching topcoat.
- c. Topcoat: Latex, interior, eggshell, Dunn-Edwards, Acri-Wall ACWL30, (Gloss Level 3).

D. Non-Ferrous Metal Substrates:

1. Premium Low Odor / Zero VOC Latex System:

- a. Pre-Treatment: Waterbased, Krud Kutter, Metal Clean & Etch SCME-01
- b. Prime Coat: Primer, water based, Dunn-Edwards, Ultrashield Galvanized Metal Primer ULGM00.
- c. Intermediate Coat: Latex, interior, matching topcoat.
- d. Topcoat: Latex, interior, eggshell, Dunn-Edwards, Acri-Wall ACWL30, (Gloss Level 3).

E. Wood Substrates:

1. Commercial Low Odor / Zero VOC Latex System:

- a. Prime Coat: Primer, acrylic, for interior wood, Dunn-Edwards, Ultra-Grip Select UGSL00 or Dunn-Edwards, DecoPrime DCPR00.
- b. Intermediate Coat: Latex, interior, matching topcoat.
- c. Topcoat: Latex, interior, eggshell, Dunn-Edwards, Acri-Wall ACWL30, (Gloss Level 3).

END OF SECTION 099123

SECTION 101423 - PANEL SIGNAGE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Panel signs.
 - 2. Field-applied, vinyl-character signs.

1.3 DEFINITIONS

- A. Accessible: In accordance with the accessibility standard.

1.4 COORDINATION

- A. Furnish templates for placement of sign-anchorage devices embedded in permanent construction by other installers.
- B. Furnish templates for placement of electrical service embedded in permanent construction by other installers.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For panel signs.
 - 1. Include fabrication and installation details and attachments to other work.
 - 2. Show sign mounting heights, locations of supplementary supports to be provided by other installers, and accessories.
 - 3. Show message list, typestyles, graphic elements, including raised characters and Braille, and layout for each sign at least half size.
- C. Samples for Initial Selection: For each type of sign assembly, exposed component, and exposed finish.
 - 1. Include representative Samples of available typestyles and graphic symbols.

- D. Samples for Verification: For each type of sign assembly showing all components and with the required finish(es), in manufacturer's standard size.
- E. Product Schedule: For panel signs. Use same designations indicated on Drawings or specified.

1.6 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For signs to include in maintenance manuals.

1.7 FIELD CONDITIONS

- A. Field Measurements: Verify locations of anchorage devices and electrical service embedded in permanent construction by other installers by field measurements before fabrication, and indicate measurements on Shop Drawings.

1.8 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials, from the same product run, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Variable Component Materials: 12 replaceable text inserts and interchangeable characters (letters, numbers, and graphic elements) of each type.
 - 2. Tools: One set(s) of specialty tools for assembling signs and replacing variable sign components.

1.9 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace components of signs that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Deterioration of finishes beyond normal weathering.
 - b. Deterioration of embedded graphic image.
 - c. Separation or delamination of sheet materials and components.
 - 2. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

- A. Panel Sign: Sign with smooth, uniform surfaces; with message and characters having uniform faces, sharp corners, and precisely formed lines and profiles; and as follows:
 - 1. Laminated-Sheet Sign: Photopolymer face sheet with raised graphics laminated to phenolic backing sheet to produce composite sheet.
 - a. Composite-Sheet Thickness: Manufacturer's standard for size of sign

- b. Surface-Applied, Raised Graphics: Applied polymer characters and Braille.
- 2. Sign-Panel Perimeter: Finish edges smooth.
 - a. Edge Condition: Square cut.
 - b. Corner Condition in Elevation: Rounded to radius indicated.
- 3. Mounting: Surface mounted to wall.
- 4. Surface Finish and Applied Graphics:
 - a. Integral Metal Finish: As selected by Architect from full range of industry finishes.
 - b. Integral Aluminum Finish: Anodized color as selected by Architect from full range of industry colors and color densities.
 - c. Integral Stainless-Steel Finish: As selected by Architect from full range of industry finishes.
 - d. Integral Acrylic Sheet Color: As selected by Architect from full range of industry colors.
 - e. Baked-Enamel or Powder-Coat Finish and Graphics: Manufacturer's standard, in color as selected by Architect from manufacturer's full range
 - f. Painted Finish and Graphics: Manufacturer's standard, factory-applied exterior-grade sign paint, in color as selected by Architect from manufacturer's full range.
 - g. Photo-Image Graphics: Manufacturer's standard black-and-white, 600-dpi halftone or dot-screen image.
 - h. Overcoat: Manufacturer's standard baked-on clear coating.
- 5. Text and Typeface: typeface as selected by Architect from manufacturer's full range. Finish raised characters to contrast with background color, and finish Braille to match background color.
- 6. Flatness Tolerance: Sign shall remain flat or uniformly curved under installed conditions as indicated on Drawings and within a tolerance of plus or minus 1/16 inch measured diagonally from corner to corner.

2.2 PANEL-SIGN MATERIALS

- A. Acrylic Sheet: ASTM D4802, category as standard with manufacturer for each sign, Type UVF (UV filtering).
- B. Vinyl Film: UV-resistant vinyl film of nominal thickness indicated, with pressure-sensitive, permanent adhesive on back; die cut to form characters or images as indicated on Drawings and suitable for exterior applications.
- C. Paints and Coatings for Sheet Materials: Inks, dyes, and paints that are recommended by manufacturer for optimum adherence to surface and are UV and water resistant for colors and exposure indicated.

2.3 ACCESSORIES

- A. Fasteners and Anchors: Manufacturer's standard as required for secure anchorage of signs, noncorrosive and compatible with each material joined, and complying with the following unless otherwise indicated:
 - 1. Use concealed fasteners and anchors unless indicated to be exposed.
 - 2. For exterior exposure, furnish nonferrous-metal devices unless otherwise indicated.
 - 3. Exposed Metal-Fastener Components, General:
 - a. Fabricated from same basic metal and finish of fastened metal unless otherwise indicated.
 - b. Fastener Heads: For nonstructural connections, use flathead or oval countersunk screws and bolts with tamper-resistant slots unless otherwise indicated.
 - 4. Sign Mounting Fasteners:
 - a. Concealed Studs: Concealed (blind), threaded studs welded or brazed to back of sign material or screwed into back of sign assembly unless otherwise indicated.
 - b. Projecting Studs: Threaded studs with sleeve spacer, welded or brazed to back of sign material or screwed into back of sign assembly, unless otherwise indicated.
 - c. Through Fasteners: Exposed metal fasteners matching sign finish, with type of head indicated, and installed in predrilled holes.
- B. Adhesive: As recommended by sign manufacturer.
- C. Two-Face Tape: Manufacturer's standard high-bond, foam-core tape, 0.045 inch thick, with adhesive on both sides.
- D. Hook-and-Loop Tape: Manufacturer's standard two-part tape consisting of hooked part on sign back and looped side on mounting surface.
- E. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D1187/D1187M.

2.4 FABRICATION

- A. General: Provide manufacturer's standard sign assemblies according to requirements indicated.
 - 1. Preassemble signs in the shop to greatest extent possible. Disassemble signs and assemblies only as necessary for shipping and handling limitations. Clearly mark units for reassembly and installation; apply markings in locations concealed from view after final assembly.
 - 2. Mill joints to a tight, hairline fit. Form assemblies and joints exposed to weather to resist water penetration and retention.
 - 3. Comply with AWS for recommended practices in welding and brazing. Provide welds and brazes behind finished surfaces without distorting or discoloring exposed side. Clean exposed welded and brazed connections of flux, and dress exposed and contact surfaces.
 - 4. Conceal connections if possible; otherwise, locate connections where they are inconspicuous.

5. Internally brace signs for stability, to meet structural performance loading without oil-canning or other surface deformation, and for securing fasteners.
 6. Provide rabbets, lugs, and tabs necessary to assemble components and to attach to existing work. Drill and tap for required fasteners. Use concealed fasteners where possible; use exposed fasteners that match sign finish.
- B. Surface-Engraved Graphics: Machine engrave characters and other graphic devices into indicated sign surface to produce precisely formed copy, incised to uniform depth.
1. Engraved Metal: Fill engraved graphics with manufacturer's standard baked enamel.
 2. Engraved Opaque Acrylic Sheet: Fill engraved graphics with manufacturer's standard enamel.
 3. Face-Engraved Clear Acrylic Sheet: Fill engraved copy with manufacturer's standard enamel. Apply manufacturer's standard opaque background color coating to back face of acrylic sheet.
 4. Engraved Plastic Laminate: Engrave through exposed face ply of plastic-laminate sheet to expose contrasting core ply.
- C. Subsurface-Applied Graphics: Apply graphics to back face of clear face-sheet material to produce precisely formed image. Image shall be free of rough edges.
- D. Shop- and Subsurface-Applied Vinyl: Align vinyl film in final position and apply to surface. Firmly press film from the middle outward to obtain good bond without blisters or fishmouths.
- E. Brackets: Fabricate brackets, fittings, and hardware for bracket-mounted signs to suit sign construction and mounting conditions indicated. Modify manufacturer's standard brackets as required.
1. Aluminum Brackets: Factory finish brackets with baked-enamel or powder-coat finish to match sign-background color unless otherwise indicated.
 2. Stainless-Steel Brackets: Factory finish brackets to match sign background finish unless otherwise indicated.

2.5 GENERAL FINISH REQUIREMENTS

- A. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- B. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.
- C. Directional Finishes: Run grain with long dimension of each piece and perpendicular to long dimension of finished trim or border surface unless otherwise indicated.
- D. Organic, Anodic, and Chemically Produced Finishes: Apply to formed metal after fabrication but before applying contrasting polished finishes on raised features unless otherwise indicated.

2.6 ALLOWANCE

- A. Contractor to provide \$20,000 allowance for interior and exterior panel signage.
- B. Owner and Architect shall develop a signage plan and schedule for the contractor.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Verify that sign-support surfaces are within tolerances to accommodate signs without gaps or irregularities between backs of signs and support surfaces unless otherwise indicated.
- C. Verify that anchorage devices embedded in permanent construction are correctly sized and located to accommodate signs.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. General: Install signs using mounting methods indicated and according to manufacturer's written instructions.
 - 1. Install signs level, plumb, true to line, and at locations and heights indicated, with sign surfaces free of distortion and other defects in appearance.
 - 2. Install signs so they do not protrude or obstruct according to the accessibility standard.
 - 3. Before installation, verify that sign surfaces are clean and free of materials or debris that would impair installation.
 - 4. Corrosion Protection: Coat concealed surfaces of exterior aluminum in contact with grout, concrete, masonry, wood, or dissimilar metals, with a heavy coat of bituminous paint.
- B. Accessible Signage: Install in locations on walls as indicated on Drawings and according to the accessibility standard.
- C. Mounting Methods:
 - 1. Concealed Studs: Using a template, drill holes in substrate aligning with studs on back of sign. Remove loose debris from hole and substrate surface.
 - a. Masonry Substrates: Fill holes with adhesive. Leave recess space in hole for displaced adhesive. Place sign in position and push until flush to surface, embedding studs in holes. Temporarily support sign in position until adhesive fully sets.

- b. Thin or Hollow Surfaces: Place sign in position and flush to surface, install washers and nuts on studs projecting through opposite side of surface, and tighten.
 - 2. Projecting Studs: Using a template, drill holes in substrate aligning with studs on back of sign. Remove loose debris from hole and substrate surface.
 - a. Masonry Substrates: Fill holes with adhesive. Leave recess space in hole for displaced adhesive. Place spacers on studs, place sign in position, and push until spacers are pinched between sign and substrate, embedding the stud ends in holes. Temporarily support sign in position until adhesive fully sets.
 - b. Thin or Hollow Surfaces: Place spacers on studs, place sign in position with spacers pinched between sign and substrate, and install washers and nuts on stud ends projecting through opposite side of surface, and tighten.
 - 3. Through Fasteners: Drill holes in substrate using predrilled holes in sign as template. Countersink holes in sign if required. Place sign in position and flush to surface. Install through fasteners and tighten.
 - 4. Brackets: Remove loose debris from substrate surface and install backbar or bracket supports in position so that signage is correctly located and aligned.
 - 5. Adhesive: Clean bond-breaking materials from substrate surface and remove loose debris. Apply linear beads or spots of adhesive symmetrically to back of sign and of suitable quantity to support weight of sign after cure without slippage. Keep adhesive away from edges to prevent adhesive extrusion as sign is applied and to prevent visibility of cured adhesive at sign edges. Place sign in position, and push to engage adhesive. Temporarily support sign in position until adhesive fully sets.
 - 6. Two-Face Tape: Clean bond-breaking materials from substrate surface and remove loose debris. Apply tape strips symmetrically to back of sign and of suitable quantity to support weight of sign without slippage. Keep strips away from edges to prevent visibility at sign edges. Place sign in position, and push to engage tape adhesive.
 - 7. Hook-and-Loop Tape: Clean bond-breaking materials from substrate surface and remove loose debris. Apply sign component of two-part tape strips symmetrically to back of sign and of suitable quantity to support weight of sign without slippage; push to engage tape adhesive. Keep tape strips 0.250 inch away from edges to prevent visibility at sign edges when sign is initially installed or reinstalled. Apply substrate component of tape to substrate in locations aligning with tape on back of sign; push and rub well to fully engage tape adhesive to substrate.
 - 8. Magnetic Tape: Clean bond-breaking materials from substrate surface and remove loose debris. Apply tape strips symmetrically to back of sign and of suitable quantity to support weight of sign without slippage. Keep strips away from edges to prevent visibility at sign edges. Place sign in position.
 - 9. Shim-Plate Mounting: Provide 1/8-inch-thick, concealed aluminum shim plates with predrilled and countersunk holes, at locations indicated, and where other direct mounting methods are impractical. Attach plate with fasteners and anchors suitable for secure attachment to substrate. Attach signs to plate using method specified above.
- D. Field-Applied, Vinyl-Character Signs: Clean and dry substrate. Align sign characters in final position before removing release liner. Remove release liner in stages, and apply and firmly press characters into final position. Press from the middle outward to obtain good bond without blisters or fishmouths. Remove carrier film without disturbing applied vinyl film.

3.3 ADJUSTING AND CLEANING

- A. Remove and replace damaged or deformed signs and signs that do not comply with specified requirements. Replace signs with damaged or deteriorated finishes or components that cannot be successfully repaired by finish touchup or similar minor repair procedures.
- B. Remove temporary protective coverings and strippable films as signs are installed.
- C. On completion of installation, clean exposed surfaces of signs according to manufacturer's written instructions, and touch up minor nicks and abrasions in finish. Maintain signs in a clean condition during construction and protect from damage until acceptance by Owner.

END OF SECTION 101423

SECTION 102800

TOILET, BATH, AND LAUNDRY ACCESSORIES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Public-use washroom accessories.
 - 2. Underlavatory guards.
- B. Related Requirements:
 - 1. Section 093013 " Tiling"

1.2 COORDINATION

- A. Coordinate accessory locations with other work to prevent interference with clearances required for access by people with disabilities, and for proper installation, adjustment, operation, cleaning, and servicing of accessories.
- B. Deliver inserts and anchoring devices set into concrete or masonry as required to prevent delaying the Work.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.
 - 2. Include anchoring and mounting requirements, including requirements for cutouts in other work and substrate preparation.
 - 3. Include electrical characteristics.
- B. Samples: For each exposed product and for each finish specified, full size.
 - 1. Approved full-size Samples will be returned and may be used in the Work.
- C. Product Schedule: Indicating types, quantities, sizes, and installation locations by room of each accessory required.
 - 1. Identify locations using room designations indicated.
 - 2. Identify accessories using designations indicated.

1.4 INFORMATIONAL SUBMITTALS

- A. Sample Warranty: For manufacturer's special warranties.

1.5 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For accessories to include in maintenance manuals.

1.6 WARRANTY

- A. Manufacturer's Special Warranty for Mirrors: Manufacturer agrees to repair or replace mirrors that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, visible silver spoilage defects.
 - 2. Warranty Period: 15 years from date of Substantial Completion.
- B. Manufacturer's Special Warranty for Hand Dryers: Manufacturer agrees to repair or replace hand dryers that fail in materials or workmanship within specified warranty period.
 - 1. Warranty Period: 10 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- B. Structural Performance: Design accessories and fasteners to comply with the following requirements:
 - 1. Grab Bars: Installed units are able to resist 250 lbf (1112 N) concentrated load applied in any direction and at any point.

2.2 PUBLIC-USE WASHROOM ACCESSORIES

- A. Source Limitations: Obtain each type of public-use washroom accessory from single source from single manufacturer.
- B. Paper Towel Dispenser:
 - 1. Basis of Design Product – Bobrick B-262
 - 2. Other acceptable manufacturers:
 - a. American Specialties, Inc
 - b. Bradley Corp.
 - 3. Description: Surface Mounted Paper Towel Dispenser

4. Mounting: Wall Mounted
 - a. Protrusion Limit: Installed unit protrudes maximum 4 inches (102 mm) from wall surface.
5. Operation: Touch free infrared sensor.
6. Cover Material and Finish: Stainless Steel
7. Electrical Requirements: Dedicated circuit required. See manufacturer's requirements.

C. Soap Dispenser:

1. Basis of Design Product: Bobrick B-40
2. Other acceptable manufacturers:
 - a. American Specialties, Inc
 - b. Bradley Corp.
3. Description: Liquid Soap Dispenser
4. Mounting: Wall Mounted

D. Mirror Unit:

1. Basis of Design Product: Bobrick
2. Other acceptable manufacturers:
 - a. American Specialties, Inc
 - b. Bradley Corp.
3. Size: 24"W x 36"H,
4. Mirror: One piece roll formed $\frac{3}{4}$ " x $\frac{3}{4}$ " angle-frame. Heavy gauge stainless steel w/ $\frac{1}{4}$ " glass.

E. Grab Bar:

1. Basis of Design Product: Bobrick B-5806.99
2. Other acceptable manufacturers:
 - a. American Specialties, Inc
 - b. Bradley Corp.
3. Mounting: Flanges with concealed fasteners.
4. Material: Stainless steel, 0.05 inch thick.
 - a. Finish: Smooth, ASTM A480/A480M No. 4 finish (satin).
5. Outside Diameter: 1-1/2 inches.
6. Configuration and Length: As indicated on Drawings
7. Material and Finish: Stainless steel, ASTM A480/A480M No. 4 finish (satin).

F. Toilet Tissue Dispenser:

1. Basis of Design Product: Bobrick B-2888
2. Other acceptable manufacturers:

- a. American Specialties, Inc
 - b. Bradley Corp.
- 3. Description: Surface mounted toilet tissue dispenser
- 4. Mounting: surface mounted.
- 5. Toilet Tissue Dispenser Capacity: two rolls
- 6. Material and Finish: Stainless steel, ASTM A480/A480M No. 4 finish (satin).
- 7. Lockset: Tumbler type.

G. Toilet Cover Dispenser:

- 1. Basis of Design Product: Bobrick B-221
- 2. Other acceptable manufacturers:
 - a. American Specialties, Inc
 - b. Bradley Corp.
- 3. Mounting: Surface
- 4. Minimum Capacity: 250 covers (1 box)
- 5. Material and Finish: Stainless steel, ASTM A480/A480M No. 4 finish (satin).
- 6. Lockset: Tumbler type for waste receptacle.

H. Sanitary Napkin Disposal:

- 1. Basis of Design Product: Bobrick B-262
- 2. Other acceptable manufacturers:
 - a. American Specialties, Inc
 - b. Bradley Corp.
- 3. Description: Surface Mounted sanitary napkin dispenser
- 4. Mounting: Surface
- 5. Material and Finish: Stainless steel, ASTM A480/A480M No. 4 finish (satin).

I. Urinal Screen

- 1. Basis of Design Product: Bobrick B-1085
- 2. Substitutions per Division 01
- 3. High Pressure laminate urinal screen

2.3 UNDERLAVATORY GUARDS

A. Underlavatory Guard:

- 1. Description: Insulating pipe covering for supply and drain piping assemblies that prevents direct contact with and burns from piping; allow service access without removing coverings.
- 2. Material and Finish: Antimicrobial, molded plastic, white.

2.4 MATERIALS

- A. Stainless Steel: ASTM A240/A240M or ASTM A666, Type 304, 0.031-inch-minimum nominal thickness unless otherwise indicated.

- B. Brass: ASTM B19, flat products; ASTM B16/B16M, rods, shapes, forgings, and flat products with finished edges; or ASTM B30, castings.
- C. Steel Sheet: ASTM A1008/A1008M, Designation CS (cold rolled, commercial steel), 0.036-inch-minimum nominal thickness.
- D. Galvanized-Steel Sheet: ASTM A653/A653M, with G60 (Z180) hot-dip zinc coating.
- E. Galvanized-Steel Mounting Devices: ASTM A153/A153M, hot-dip galvanized after fabrication.
- F. Fasteners: Screws, bolts, and other devices of same material as accessory unit, unless otherwise recommended by manufacturer or specified in this Section, and tamper and theft resistant where exposed, and of stainless or galvanized steel where concealed.
- G. Chrome Plating: ASTM B456, Service Condition Number SC 2 (moderate service).
- H. Mirrors: ASTM C1503, Mirror Glazing Quality, clear-glass mirrors, nominal 6.0 mm thick.

2.5 FABRICATION

- A. General: Fabricate units with tight seams and joints, and exposed edges rolled. Hang doors and access panels with full-length, continuous hinges. Equip units for concealed anchorage and with corrosion-resistant backing plates.
- B. Keys: Provide universal keys for internal access to accessories for servicing and resupplying. Provide minimum of six keys to Owner's representative.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install accessories according to manufacturers' written instructions, using fasteners appropriate to substrate indicated and recommended by unit manufacturer. Install units level, plumb, and firmly anchored in locations and at heights indicated.
 - 1. Remove temporary labels and protective coatings.
- B. Grab Bars: Install to comply with specified structural-performance requirements.

3.2 ADJUSTING AND CLEANING

- A. Adjust accessories for unencumbered, smooth operation. Replace damaged or defective items.
- B. Clean and polish exposed surfaces according to manufacturer's written instructions.

END OF SECTION 102800

SECTION 105200

FIRE EXTINGUISHERS AND CABINETS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Portable fire extinguishers.
 - 2. Cabinets and wall brackets.
 - 3. Accessories

1.2 REFERENCES

- A. ASTM International (ASTM) E814 - *Standard Test Method for Fire Tests of Through-Penetration Firestops*.
- B. National Fire Protection Association (NFPA) 10 - *Portable Fire Extinguishers*.
- C. Underwriters Laboratories (UL):
 - 1. 154 - *Carbon Dioxide Fire Extinguishers*.
 - 2. 299 - *Dry Chemical Fire Extinguishers*.
 - 3. 626 - *2-1/2 Gallon Stored Pressure, Water Type Fire Extinguishers*.
 - 4. 711 - *Rating and Fire Testing of Fire Extinguishers*.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Shop Drawings: Indicate cabinet and bracket locations and mounting heights.
 - 2. Product Data: Include data on extinguishers and cabinets, brackets, cabinet dimensions, operational features, materials, finishes, and anchorage.
- B. Closeout Submittals:
 - 1. Maintenance Data: Include test, refill, or recharge schedules and re-certification requirements.

1.4 QUALITY ASSURANCE

- A. Provide fire extinguishers complying with UL 711 and NFPA 10.
- B. Cabinets in Fire Rated Partitions: Tested in accordance with ASTM E814 with fire resistance rating equivalent to adjacent construction.
- C. Conform to applicable accessibility code for locating extinguishers.

1.5 PROJECT CONDITIONS

- A. Do not install extinguishers when ambient temperature may cause freezing of extinguisher ingredients.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers:
 - 1. Ansul Incorporated.
 - 2. JL Industries.
 - 3. Larsen's Mfg. Co.
 - 4. Potter Roemer.
- B. Substitutions: Not permitted.

2.2 COMPONENTS

- A. Extinguishers:
 - 1. Multi-purpose dry chemical type, UL 299, cast steel tank, Class [2A:10B:C, 10 pound nominal capacity.
- B. Cabinets:
 - 1. Formed aluminum sheet.
 - 2. Configuration: Semi-recessed, sized to accommodate extinguishers.
 - 3. Trim: Flat trim.
 - 4. Door:
 - a. Vertical glass style equipped with pull handle and keyed lock with emergency release or pull to break glass feature.

- b. Hinge doors for 180 degree opening with continuous piano hinge.
 - c. Glazing: Clear tempered glass.
 - d. Graphics: Letter FIRE EXTINGUISHER vertically on door in red die-cut vinyl pressure sensitive letters.
- C. Brackets: Formed galvanized steel, sized to accommodate extinguisher.

2.3 ACCESSORIES

- A. Mounting Hardware: Type best suited to application.

2.4 FINISHES

- A. Cabinet: No. 8 polished.
- B. Brackets: Primed for field painting.
- C. Extinguishers: Baked enamel, red color.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install cabinets and brackets in accordance with manufacturer's instructions.
- B. Set plumb, level, and rigid.
- C. Place an extinguisher in each cabinet, and on each bracket.

END OF SECTION 105200

EXHIBIT “C”
SPECIAL CONDITIONS

EXHIBIT "D"
CERTIFICATION
LABOR CODE - SECTION 1861

I, the undersigned Contractor, am aware of the provisions of Section 3700, et seq., of the California Labor Code which require every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions of the Code, and I, the undersigned Contractor, agree to and will comply with such provisions before commencing the performance of the Work on this Contract.

[INSERT CONTRACTOR NAME]

By: _____
Signature

Name (Print)

Title (Print)

EXHIBIT “E”

PUBLIC WORKS CONTRACTOR REGISTRATION CERTIFICATION

Pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. See <http://www.dir.ca.gov/Public-Works/PublicWorks.html> for additional information.

No bid will be accepted nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work.

Contractor hereby certifies that it is aware of the registration requirements set forth in Labor Code sections 1725.5 and 1771.1 and is currently registered as a contractor with the Department of Industrial Relations.¹

Name of Contractor: _____

DIR Registration Number: _____

DIR Registration Expiration: _____

Small Project Exemption: _____ Yes or _____ No

Unless Contractor is exempt pursuant to the small project exemption, Contractor further acknowledges:

- Failure to submit this form or comply with any of the above requirements may result in a finding that the bid is non-responsive.
- Contractor shall maintain a current DIR registration for the duration of the project.
- Contractor shall include the requirements of Labor Code sections 1725.5 and 1771.1 in its contract with subcontractors and ensure that all subcontractors are registered at the time of bid opening and maintain registration status for the duration of the project.

Name of Contractor _____

Signature _____

Name and Title _____

Dated _____

¹ If the Project is exempt from the contractor registration requirements pursuant to the small project exemption under Labor Code Sections 1725.5 and 1771.1, please mark “Yes” in response to “Small Project Exemption.”

EXHIBIT “F”
PAYMENT AND PERFORMANCE BONDS

PERFORMANCE BOND

KNOW ALL PERSONS BY THESE PRESENTS:

THAT WHEREAS, the City of Ceres (hereinafter referred to as "City") has awarded to Sierra Traffic Markings, Inc, (hereinafter referred to as the "Contractor") an agreement for Crows Landing and Morgan Road Striping (hereinafter referred to as the "Project").

WHEREAS, the work to be performed by the Contractor is more particularly set forth in the Contract Documents for the Project dated 22 September 2025, (hereinafter referred to as "Contract Documents"), the terms and conditions of which are expressly incorporated herein by reference; and

WHEREAS, the Contractor is required by said Contract Documents to perform the terms thereof and to furnish a bond for the faithful performance of said Contract Documents.

NOW, THEREFORE, we, Sierra Traffic Markings, Inc., the undersigned Contractor and _____ as Surety, a corporation organized and duly authorized to transact business under the laws of the State of California, are held and firmly bound unto the City in the sum of NINETY NINE THOUSAND TWO HUNDRED TEN DOLLARS, (\$99,210.00), said sum being not less than one hundred percent (100%) of the total amount of the Contract, for which amount well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that, if the Contractor, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the Contract Documents and any alteration thereof made as therein provided, on its part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their intent and meaning; and shall faithfully fulfill all obligations including the one-year guarantee of all materials and workmanship; and shall indemnify and save harmless the City, its officers and agents, as stipulated in said Contract Documents, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

As a condition precedent to the satisfactory completion of the Contract Documents, unless otherwise provided for in the Contract Documents, the above obligation shall hold good for a period of one (1) year after the acceptance of the work by City, during which time if Contractor shall fail to make full, complete, and satisfactory repair and replacements and totally protect the City from loss or damage resulting from or caused by defective materials or faulty workmanship, Surety shall undertake and faithfully fulfill all such obligations. The obligations of Surety hereunder shall continue so long as any obligation of Contractor remains. Nothing herein shall limit the City's rights or the Contractor or Surety's obligations under the Contract, law or equity, including, but not limited to, California Code of Civil Procedure section 337.15.

Whenever Contractor shall be, and is declared by the City to be, in default under the Contract Documents, the Surety shall remedy the default pursuant to the Contract Documents, or shall promptly, at the City's option:

- (1) Take over and complete the Project in accordance with all terms and conditions in the Contract Documents; or
- (2) Obtain a bid or bids for completing the Project in accordance with all terms and conditions in the Contract Documents and upon determination by Surety of the lowest responsive and responsible bidder, arrange for a Contract between such bidder, the Surety and the City, and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the contract price, including other costs and damages for which Surety may be liable. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor by the City under the Contract and any modification thereto, less any amount previously paid by the City to the Contractor and any other set offs pursuant to the Contract Documents.
- (3) Permit the City to complete the Project in any manner consistent with local, California and federal law and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the contract price, including other costs and damages for which Surety may be liable. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor by the City under the Contract and any modification thereto, less any amount previously paid by the City to the Contractor and any other set offs pursuant to the Contract Documents.

Surety expressly agrees that the City may reject any contractor or subcontractor which may be proposed by Surety in fulfillment of its obligations in the event of default by the Contractor.

Surety shall not utilize Contractor in completing the Project nor shall Surety accept a bid from Contractor for completion of the Project if the City, when declaring the Contractor in default, notifies Surety of the City's objection to Contractor's further participation in the completion of the Project.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project to be performed thereunder shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project, including but not limited to the provisions of sections 2819 and 2845 of the California Civil Code.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this _____ day of _____, 20__).

(Corporate Seal)

Contractor/ Principal

By _____

Title _____

(Corporate Seal)

Surety

By _____

Attorney-in-Fact

Signatures of those signing for the Contractor and Surety must be notarized and evidence of corporate authority attached.

(Attach Attorney-in-Fact Certificate)

Title _____

The rate of premium on this bond is _____ per thousand. The total amount of premium charges, \$_____.

(The above must be filled in by corporate attorney.)

THIS IS A REQUIRED FORM

Any claims under this bond may be addressed to:

(Name and Address of Surety)

(Name and Address of Agent or Representative for service of process in California, if different from above)

(Telephone number of Surety and Agent or Representative for service of process in California)

NOTE: A copy of the Power-of-Attorney authorizing the person signing on behalf of the Surety to do so must be attached hereto.

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____, 20____, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

- ☐ Individual
☐ Corporate Officer

Title(s)

Title or Type of Document

- ☐ Partner(s) ☐ Limited
 ☐ General

Number of Pages

- ☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Date of Document

Signer is representing:
Name Of Person(s) Or Entity(ies)

Signer(s) Other Than Named Above

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS That

WHEREAS, the City of Ceres (hereinafter designated as the "City"), by action taken or a resolution passed XXXX XX, XXXX has awarded to XXXXXXXXXX, Inc. hereinafter designated as the "Principal," a contract for the work described as follows:

Rockefeller Water Building Improvements (the "Project"); and

WHEREAS, the work to be performed by the Principal is more particularly set forth in the Contract Documents for the Project dated XXXX XX, 20XX ("Contract Documents"), the terms and conditions of which are expressly incorporated by reference; and

WHEREAS, said Principal is required to furnish a bond in connection with said contract; providing that if said Principal or any of its Subcontractors shall fail to pay for any materials, provisions, provender, equipment, or other supplies used in, upon, for or about the performance of the work contracted to be done, or for any work or labor done thereon of any kind, or for amounts due under the Unemployment Insurance Code or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of said Principal and its Subcontractors with respect to such work or labor the Surety on this bond will pay for the same to the extent hereinafter set forth.

NOW THEREFORE, we, the Principal and _____ as Surety, are held and firmly bound unto the City in the penal sum of XXXXXXXXXXXX Dollars (\$XXX,XXX.00) lawful money of the United States of America, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if said Principal, his or its subcontractors, heirs, executors, administrators, successors or assigns, shall fail to pay any of the persons named in Section 9100 of the Civil Code, fail to pay for any materials, provisions or other supplies, used in, upon, for or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or amounts due under the Unemployment Insurance Code with respect to work or labor performed under the contract, or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department or Franchise Tax Board from the wages of employees of the contractor and his subcontractors pursuant to Section 18663 of the Revenue and Taxation Code, with respect to such work and labor the Surety or Sureties will pay for the same, in an amount not exceeding the sum herein above specified.

This bond shall inure to the benefit of any of the persons named in Section 9100 of the Civil Code so as to give a right of action to such persons or their assigns in any suit brought upon this bond.

It is further stipulated and agreed that the Surety on this bond shall not be exonerated or released from the obligation of this bond by any change, extension of time for performance, addition, alteration or modification in, to, or of any contract, plans, specifications, or agreement pertaining or relating to any scheme or work of improvement herein above described, or pertaining or relating to the furnishing of labor, materials, or equipment therefore, nor by any change or modification of any terms of payment or extension of the time for any payment pertaining or relating to any scheme or work of improvement herein above described, nor by any rescission or attempted rescission of the contract, agreement or bond, nor by any conditions precedent or subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or

agreement or under the bond, nor by any fraud practiced by any person other than the claimant seeking to recover on the bond and that this bond be construed most strongly against the Surety and in favor of all persons for whose benefit such bond is given, and under no circumstances shall Surety be released from liability to those for whose benefit such bond has been given, by reason of any breach of contract between the owner or City and original contractor or on the part of any obligee named in such bond, but the sole conditions of recovery shall be that claimant is a person described in Section 9100 of the Civil Code, and has not been paid the full amount of his claim and that Surety does hereby waive notice of any such change, extension of time, addition, alteration or modification herein mentioned and the provisions of sections 2819 and 2845 of the California Civil Code.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this _____ day of _____, 20__.

(Corporate Seal)

Contractor/ Principal

By _____

Title _____

(Corporate Seal)

Surety

By _____

Attorney-in-Fact

Title _____

Signatures of those signing for the Contractor and Surety must be notarized and evidence of corporate authority attached. A Power-of-Attorney authorizing the person signing on behalf of the Surety to do so must be attached hereto.

NOTE: A copy of the Power-of-Attorney authorizing the person signing on behalf of the Surety to do so must be attached hereto.

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____, 20____, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

- ☐ Individual
☐ Corporate Officer

Title(s)

Title or Type of Document

- ☐ Partner(s) ☐ Limited
 ☐ General

Number of Pages

- ☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Date of Document

Signer is representing:
Name Of Person(s) Or Entity(ies)

Signer(s) Other Than Named Above

APPENDIX

CITY OF CERES STANDARD DESIGNS

THE FOLLOWING STANDARDS ARE FOR REFERENCE ONLY
**REFER TO THE CITY OF CERES WEBSITE FOR THE COMPLETE LISTING OF STANDARD
DETAILS**

<https://www.ci.ceres.ca.us/DocumentCenter/View/2214/Approved-2018-Standard-Specifications-and-Design>

STATE GENERAL PREVAILING WAGE RATES

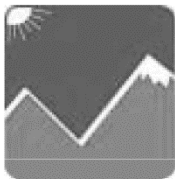
General prevailing wage determination
Made by the Director of Industrial Relations

Pursuant to California Labor Code part 7,
Chapter 1, article 2, sections 1770, 1773, and 1773.1

State of California Department of Industrial Relations Website:

<http://www.dir.ca.gov/OPRL/PWD/index.htm>

REGULATION VIII – FUGITIVE PM10 PROHIBITIONS



San Joaquin Valley
Air Pollution Control District

COMPLIANCE ASSISTANCE BULLETIN August 2006

Regulation VIII – Fugitive PM10 Prohibitions Requirements on Paved and Unpaved Public Roads

District Rule 8061(*Paved and Unpaved Roads*) of Regulation VIII (*Fugitive PM10 Prohibitions*) specifies the design criteria for constructing new or modifying existing paved roads and the types of control measures required for limiting fugitive dust emissions from unpaved roads and shoulders. Several compliance dates and deadlines described in the rule apply specifically to city, county, and state agencies. The purpose of this bulletin is to summarize the new requirements for public agencies that own or maintain paved and unpaved roads. The entire rule may be found at www.valleyair.org/rules/1ruleslist.htm - reg8.

- **Constructing New Unpaved Roads:** Effective October 1, 2004, constructing a new unpaved road is prohibited in all urban areas unless the unpaved road is used for a temporary activity that does not exceed six months of use over a consecutive three-year period. Temporary activities may include construction access roads, special events, or traffic detours. The unpaved surface must be maintained in a stabilized condition at all times in order to control fugitive emissions.
- **PM10-Efficient Street Sweepers:** These requirements apply to the routine cleaning of existing paved public roads within urban areas. Effective July 1, 2005, an agency or its contractor may only purchase PM10-efficient street sweepers for their fleets and at least one sweeper must be placed into service by July 1, 2008. PM10-efficient street sweepers are to be used along routine street sweeper routes, which have been predetermined and prioritized by the agency as having paved curbs with the greatest actual or potential for dirt and silt loading. If an agency cannot meet these provisions due to budgetary constraints, a statement of financial hardship must be submitted to the District and the USEPA for review and approval.
- **Cleaning Paved Roads after a Storm Event:** Within 24 hours of discovery, the agency or contractor responsible for maintaining the roadway must remove the accumulated mud and dirt from the paved road or restrict vehicles from traveling over the mud and dirt until the materials can be removed. This requirement applies if the accumulated mud and dirt is a result of wind or water erosion and runoff, is at least one inch thick, and covers an area of at least 50 square feet. Cleanup may be performed manually with a shovel and broom, or with a conventional or PM10-efficient street sweeper, but must be performed in a manner that minimizes fugitive dust. Using a blowing device or a dry rotary brush or broom is prohibited. Redirecting traffic is one way to restrict vehicles from traveling over the mud and dirt. Upon agency notification, the District may approve an extension of the 24-hour cleanup requirement if restricting vehicles is deemed unsafe and removing the mud and dirt is not possible within 72 hours because crews are not available over a weekend or holiday.

Northern Region Office
4800 Enterprise Way
Modesto, CA 95356-8718
(209) 557-6400 ♦ FAX (209) 557-6475

Central Region Office
1990 East Gettysburg Avenue
Fresno, CA 93726-0244
(559) 230-6000 ♦ FAX (559) 230-6062

Southern Region Office
2700 "M" Street, Suite 275
Bakersfield, CA 93301-2373
(661) 326-6900 ♦ FAX (661) 326-6985

- **Posting Speed Limit Signs on Unpaved Roads:** Effective October 1, 2005, public agencies must establish a maximum speed limit of 25 miles per hour for the unpaved roads under their jurisdictions. This requirement applies to the unpaved road segments where vehicle traffic reaches or exceeds 26 annual average daily trips (AADT). At a minimum, agencies are to post at least one speed limit sign in each direction for every mile of unpaved road located within an urban area, and one sign in each direction for every two miles of unpaved road within a rural area. For example, an unpaved road located within an urban area that is ½ mile long and exceeds 26 AADT requires at least one sign posted in each direction. The unpaved surface must be maintained in a stabilized condition at all times in order to control fugitive emissions.
- **Paving Existing Unpaved Roads and Paving or Stabilizing Unpaved Shoulders:** On January 1, 2005, agencies provided the District with a report listing each unpaved road located within an urban area and each paved road with unpaved shoulders within urban and rural areas. On July 1, 2005, agencies provided a report listing each unpaved road located within a rural area. These reports include the length in miles and the AADT for each subject road and unpaved shoulder within the agency's jurisdiction.

As of January 1, 2005, agencies are to pave an annual average of 20 percent of the unpaved roads listed in their urban area unpaved road report, thereby paving 100 percent of these unpaved roads by January 1, 2010. This requirement does not apply to rural unpaved roads.

In urban areas, agencies are to pave or stabilize at least four-feet of unpaved shoulders on at least 50 percent of the existing paved roadways having the highest AADT. In rural areas, this is required on at least 25 percent of the existing paved roadways with the highest AADT. Compliance with these provisions must be complete by January 1, 2010.

If an agency cannot meet these provisions due to budgetary constraints, a statement of financial hardship must be submitted to the District and the USEPA for review and approval.

- **Incremental Progress Reports:** Due on April 1 of each year, from 2006 through 2010, agencies must report their incremental progress to the District by reporting the total miles of urban unpaved roads that were paved over the previous calendar year, the total miles of unpaved shoulders that were paved or stabilized over the previous calendar year, and the percentage of cumulative miles treated relative to the original reports.

For more information please contact the Compliance Department of the District office nearest to you. Information on Regulation VIII is available on the District's website at:

www.valleyair.org



COMPLIANCE ASSISTANCE BULLETIN
April 2007

Fugitive Dust Control at Construction Sites: New Requirements

Regulation VIII, Fugitive PM10 Prohibitions, of the District's Rules and Regulations apply to many activities that generate fugitive dust, and particularly to construction sites.

Fugitive dust is emitted into the air by activities that disturb the soil, such as earthmoving and vehicular/equipment traffic on unpaved surfaces. Windblown dust is also of concern where soil has been disturbed at construction sites.

The District adopted Regulation VIII in 1993 and its most recent amendments became effective on October 1, 2004. This is a basic summary of the regulation's requirements as they apply to construction sites.

These regulations affect all workers at a regulated construction site, including everyone from the landowner to the subcontractors. Violations of Regulation VIII are subject to enforcement action including fines.

Visible Dust Emissions (VDE) may not exceed 20% opacity during periods when soil is being disturbed by equipment or by wind at any time. Visible Dust Emissions opacity of 20% means dust that would obstruct an observer's view of an object by 20%. District inspectors are state certified to evaluate visible emissions. Dust control may be achieved by applying water before/during earthwork and onto unpaved traffic areas, phasing work to limit dust, and setting up wind fences to limit wind blown dust.

Soil Stabilization is required at regulated construction sites after normal working hours and on weekends and holidays. This requirement also applies to inactive construction areas such as phased projects where disturbed land is left unattended. Applying water to form a visible crust on the soil and restricting vehicle access are often effective for short-term stabilization of disturbed surface areas. Long-term methods including applying dust suppressants and establishing vegetative cover.

Carryout and Trackout occur when materials from emptied or loaded vehicles falls onto a paved surface or shoulder of a public road or when materials adhere to vehicle tires and are deposited onto a paved surface or shoulder of a public road. Should either occur, the material must be cleaned up at least daily, and immediately if it extends more than 50 feet from the exit point onto a paved road. The appropriate clean-up methods require the complete removal and cleanup of mud and dirt from the paved surface and shoulder. Using a blower device or dry sweeping with any mechanical device other than a PM10-efficient street sweeper is a violation. Larger construction sites, or sites with a high amount of traffic on one or more days, must prevent carryout and trackout from occurring by installing gravel pads, grizzlies, wheel washers, paved interior roads, or a combination thereof at each exit point from the site. In many cases, cleaning up trackout with water is also prohibited as it may lead to plugged storm drains. Prevention is the best method.

Unpaved Access and Haul Roads, as well as unpaved vehicle and equipment traffic areas at construction sites must have dust control. Speed limit signs limiting vehicle speed to 15 mph or less at construction sites must be posted every 500 feet on uncontrolled and unpaved roads.

Northern Region Office
4800 Enterprise Way
Modesto, CA 95356-8718
(209) 557-6400 ♦ FAX (209) 557-6475

Central Region Office
1990 East Gettysburg Avenue
Fresno, CA 93726-0244
(559) 230-6000 ♦ FAX (559) 230-6062

Southern Region Office
2700 "M" Street, Suite 275
Bakersfield, CA 93301-2373
(661) 326-6900 ♦ FAX (661) 326-6985

Storage Piles and Bulk Materials have handling, storage, and transportation requirements that include applying water when handling materials, wetting or covering stored materials, and installing wind barriers to limit VDE. Also, limiting vehicle speeds, loading haul trucks with a freeboard of six inches or greater along with applying water to the top of the load, and covering the cargo compartments are effective measures for reducing VDE and carryout from vehicles transporting bulk materials.

Demolition activities require the application of water to the exterior of the buildings and to unpaved surfaces where materials may fall. A Dust Control Plan will be required for large demolition projects. Consider all structures slated for demolition as possibly being regulated due to potential asbestos, per District Rule 4002 - *National Emission Standards for Hazardous Air Pollutants*. Contact the District well before starting because a 10 working-day notice will likely be required before a demolition can begin.

Dust Control Plans identify the dust sources and describe the dust control measures that will be implemented before, during, and after any dust generating activity for the duration of the project. Owners or operators are required to submit plans to the District at least 30 days prior to commencing the work for the following:

- Residential developments of ten or more acres of disturbed surface area.
- Non-residential developments of five or more acres of disturbed surface area.
- The relocation of more than 2,500 cubic yards per day of materials on at least three days.

Operations may not commence until the District has approved the Dust Control Plan. A copy of the plan must be on site and available to workers and District employees. **All work on the site is subject to the requirements of the approved dust control plan. A failure to abide by the plan by anyone on site may be subject to enforcement action.**

Owners or operators of construction projects that are at least one acre in size and where a Dust Control Plan is not required, must provide written notification to the District at least 48 hours in advance of any earthmoving activity.

Record Keeping is required to document compliance with the rules and must be kept for each day any dust control measure is used. The District has developed record forms for water application, street sweeping, and "permanent" controls such as applying long term dust palliatives, vegetation, ground cover materials, paving, or other durable materials. Records must be kept for one year after the end of dust generating activities (Title V sources must keep records for five years).

Exemptions exist for several activities. Those occurring above 3,000 feet in elevation are exempt from all Regulation VIII requirements. Further, Rule 8021 – *Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities* exempts the following construction and earthmoving activities:

- Blasting activities permitted by California Division of Industrial Safety.
- Maintenance or remodeling of existing buildings provided the addition is less than 50% of the size of the existing building or less than 10,000 square feet (due to asbestos concerns, contact the District at least two weeks ahead of time).
- Additions to single family dwellings.
- The disking of weeds and vegetation for fire prevention on sites smaller than ½ acre.
- Spreading of daily landfill cover to preserve public health and safety and to comply with California Integrated Waste Management Board requirements.

Nuisances are prohibited at all times because District Rule 4102 – *Nuisance* applies to all construction sources of fugitive dust, whether or not they are exempt from Regulation VIII. It is important to monitor dust-generating activities and implement appropriate dust control measures to limit the public's exposure to fugitive dust.

For more information please contact the Compliance Division of the District office nearest to you. Information on Regulation VIII, where you may obtain copies of record keeping forms, the Dust Control Plan template, and the Construction Notification form, is available on the District's website at:

www.valleyair.org, under Compliance Assistance/Dust Control.