

# MONTEREY PENINSULA WATER SUPPLY PROJECT

## REQUEST FOR PROPOSAL FOR THE CONSTRUCTION OF THE CASTROVILLE PIPELINE



**MONTEREY PENINSULA ENGINEERING**  
CONTRACTORS & ENGINEERS

SINCE 1980

License # 972425

Monterey Peninsula Engineering  
192 Healy Ave, Marina CA 93933  
(831) 384-4081

Contact: Peter Taormina  
[peter@MPE2000.com](mailto:peter@MPE2000.com)  
(831) 277-6112



Submitted To:  
California American Water  
511 Forest Lodge Road, Suite 100  
Pacific Grove, California 93950  
Attn: Lori Girard, Corporate Counsel

**ISSUE DATE: MAY 31, 2019**  
**DUE DATE: JULY 23, 2019**

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**SECTION 1.0 EXECUTIVE SUMMARY**

**A. PROPOSAL FORM 1: TRANSMITTAL LETTER**

CALIFORNIA AMERICAN WATER  
511 FOREST LODGE ROAD, SUITE 100  
PACIFIC GROVE CALIFORNIA, 93950  
Attn: Lori Girard, lori.girard@amwater.com

July 23, 2019

Re: Monterey Peninsula Water Supply Project – Construction of the Castroville Pipeline

Dear Sir/Madam:

**Monterey Peninsula Engineering, A Partnership** (the “Proposer”) hereby submits its Proposal in response to the Request for Proposals for the Monterey Peninsula Water Supply Project Construction of the Castroville Pipeline (the “RFP”) issued by California-American Water Company (“CAWC”) on May 31, 2019, as amended.

As a duly authorized representative of the Proposer, I hereby certify, represent, and warrant, on behalf of the Proposer team, as follows in connection with the Proposal:

1. The Proposer acknowledges receipt of the RFP and the following addenda:

| <u>No.</u> | <u>Date</u>     |
|------------|-----------------|
| <u>1</u>   | <u>7/2/2019</u> |
| <u>2</u>   | <u>7/8/2019</u> |
| <u> </u>   | <u> </u>        |

- 5.2.3.1.1 The submittal of the Proposal has been duly authorized by, and in all respects is binding upon, the Proposer. Attachment 1 to this Transmittal Letter is a Certificate of Authorization which evidences my authority to submit the Proposal and bind the Proposer.
- 5.2.3.1.2 All information and statements contained in the Proposal are current, correct and complete, and are made with full knowledge that CAWC will rely on such information and statements in selecting the most advantageous Proposal to CAWC and executing the Contract.
- 5.2.3.1.3 Attachment 2 to this Transmittal Letter sets forth the Proposer’s Project team and identifies each team member’s proposed role with respect to the Project. Attachment 3 to this Transmittal Letter provides licensing information for each Project team member.

PF1-1



- 5.2.3.1.4 Not used.
- 5.2.3.1.5 Not used.
- 5.2.3.1.6 Not used.
- 5.2.3.1.7 Neither the Proposer nor any Project team member is currently suspended or debarred from doing business in the State of California;
- 5.2.3.1.8 There is no action, suit or proceeding, at law or in equity, before any court or similar governmental body, against the Proposer, wherein an unfavorable decision, ruling or finding would have a materially adverse effect on the ability of the Proposer to perform their respective obligations under the Contract or the other transactions contemplated hereby, or which, in any way, would have a materially adverse effect on the validity or enforceability of the obligations proposed to be undertaken by the Proposer, or any Contract or instrument entered into by the Proposer in connection with the transactions contemplated hereby.
- 5.2.3.1.9 No corporation, partnership, individual or association, officer, director, employee, manager, parent, subsidiary, affiliate or principal shareholder of the Proposer has been adjudicated to be in violation of any state or federal anti-trust or similar statute within the preceding five years, or previously adjudged in contempt of any court order enforcing such laws.
- 5.2.3.1.10 The Proposer and all Project team members have reviewed all of the engagements and pending engagements of the Proposer and all Project team members and no potential exists for any conflict of interest or unfair advantage.
- 5.2.3.1.11 No person or selling agency has been employed or retained to solicit the award of the Contract under an arrangement for a commission, percentage, brokerage or contingency fee or on any other success fee basis, except bona fide employees of the Proposer.
- 5.2.3.1.12 The principal contact person who will serve as the interface between CAWC and the Proposer for all communications is:

NAME: Peter J. Taormina

TITLE: Manager

ADDRESS: 192 Healy Avenue, Marina, CA 93933

PHONE: (831) 384-4081

FAX: (831) 384-5078

EMAIL: [peter@mpe2000.com](mailto:peter@mpe2000.com)

PF1-2



- 5.2.3.1.13 The key technical and legal representatives available to provide timely response to written inquiries submitted and to attend meetings requested by CAWC are:

Technical Representative:

NAME: Peter J. Taormina  
TITLE: Manager  
ADDRESS: 192 Healy Avenue, Marina, CA 93933  
PHONE: (831) 384-4081  
FAX: (831) 384-5078  
EMAIL: [peter@mpe2000.com](mailto:peter@mpe2000.com)

Legal Representative:

NAME: Paul B. Bruno  
TITLE: Manager  
ADDRESS: 192 Healy Avenue, Marina, CA 93933  
PHONE: (831) 384-4081  
FAX: (831) 384-5078  
EMAIL: [paul@mpe2000.com](mailto:paul@mpe2000.com)

- 5.2.3.1.14 The Proposer has carefully examined all documents constituting the RFP and the addenda thereto.
- 5.2.3.1.15 The Contract in the form issued with this RFP is agreed to, except where changes have been requested in Proposal Form 11 and such changes have been indicated as conditions of the Proposal.
- 5.2.3.1.16 If selected, the Proposer agrees to negotiate in good faith to enter into a Contract that reflects the substantive terms and conditions of the RFP and the Proposal.



MONTEREY PENINSULA WATER SUPPLY PROJECT  
REQUEST FOR PROPOSALS FOR THE CONSTRUCTION OF THE CASTROVILLE PIPELINE

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5.2.3.1.17 The Proposer has submitted all Proposal Forms and applicable bid packages and such Proposal Forms and applicable bid packages are a part of this Proposal.

Having carefully examined the RFP and all other documents bound therewith, together with all addenda thereto, all information made available by CAWC, and being familiar with the Project (as described in the RFP and the Contract) and the various conditions affecting the work, the Proposer hereby offers to furnish all labor, materials, supplies, equipment, facilities and services which are necessary, proper or incidental to carry out such work as required by and in strict accordance with the RFP and the Proposal, all for the prices set forth in the submitted bid packages.

MPE Management Group, Inc., a General Partner

Monterey Peninsula Engineering, Inc., a General Partner

\_\_\_\_\_  
Name of Proposer

\_\_\_\_\_  
Name of Proposer

Peter J. Taormina

Peter J. Taormina

\_\_\_\_\_  
Name of Designated Signatory

\_\_\_\_\_  
Name of Designated Signatory

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Secretary

\_\_\_\_\_  
Vice President

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

*Note: If this Proposal is being submitted by a corporation, the Proposal shall be executed in the corporate name by the president or other corporate officer with authority to bind the corporation, and the corporate seal shall be affixed and attested to by the clerk. A certificate of the secretary of the corporation evidencing the officer's authority to execute the Proposal shall be attached.*

*If this Proposal is being submitted by a joint venture or general partnership, it shall be executed by all partners, and any partner that is a corporation shall follow the requirements for execution by a corporation, as set forth above.*

*If this Proposal is being submitted by a limited partnership or a limited liability company, it shall be executed by the managing partner(s) or managing member thereof, and such shall also submit proof of authority to so execute the Proposal, in a form satisfactory to CAW. Any partner or member that is a corporation shall follow the requirements for execution by a corporation, as set forth above.*

PF1-4



## **SIGNATURE AUTHORITY for PARTNERSHIP**

Monterey Peninsula Engineering, a California general partnership, CSLB #972425, is comprised of two partners – Monterey Peninsula Engineering, Inc., a California Corporation, and MPE Management Group, Inc., a California Corporation.

Section 6, Other Matters, of the Statement of Partnership Authority filed with the California Secretary of State provides that:

“Any officer of either general partner, Monterey Peninsula Engineering, Inc, and MPE Management Group, Inc., may execute contracts on behalf of the Partnership in order to the conduct business and affairs of Monterey Peninsula Engineering, a general partnership.”

The Officers of the two partner corporations are as follows –

### **Monterey Peninsula Engineering, Inc.**

|                   |                     |
|-------------------|---------------------|
| Bart J. Bruno     | President           |
| James B. Bruno    | Vice President      |
| Peter J. Taormina | Vice President      |
| Paul B. Bruno     | Secretary/Treasurer |

### **MPE Management Group, Inc**

|                   |                     |
|-------------------|---------------------|
| Paul B. Bruno     | President           |
| James B. Bruno    | Vice President      |
| Peter J. Taormina | Secretary/Treasurer |

Any Officer listed above of either Partner entity sign on behalf of the Partnership and can act as a Manager of the partnership.

### **Attachments**

- Statement of Partnership Authority filed with Secretary of State, March 21, 2002
- MPE Management Group Corporate Resolution of Signature Authority
- Monterey Peninsula Engineering Corporate Resolution of Signature Authority



MONTEREY PENINSULA WATER SUPPLY PROJECT  
REQUEST FOR PROPOSALS FOR THE CONSTRUCTION OF THE CASTROVILLE PIPELINE

MAR 26 2002 12:29 FR DATASEARCH

916 922 5199 TO 18317542011 P.02/02



**State of California**  
**Secretary of State**  
**Bill Jones**

Form GP-1

**STATEMENT OF PARTNERSHIP AUTHORITY**

**IMPORTANT-- Read instructions on back before completing form.**

1. NAME OF PARTNERSHIP  
**MONTEREY PENINSULA ENGINEERING**

2. STREET ADDRESS OF CHIEF EXECUTIVE OFFICE  
**192 HEALY AVENUE** CITY/STATE/COUNTRY: **MARINA, CA USA** ZIP CODE: **93933**

3. STREET ADDRESS OF A CALIFORNIA OFFICE, IF ANY  
CITY: \_\_\_\_\_ STATE: **CA** ZIP CODE: \_\_\_\_\_

4.  A. LIST THE FULL NAMES AND MAILING ADDRESSES OF ALL PARTNERS (ATTACH ADDITIONAL PAGES, IF NECESSARY) OR:  B. STATE THE FULL NAME AND MAILING ADDRESS OF AN AGENT APPOINTED AND MAINTAINED BY THE PARTNERSHIP WHO WILL MAINTAIN A LIST OF THE NAMES AND MAILING ADDRESSES OF ALL PARTNERS.

NAME: **MONTEREY PENINSULA ENGINEERING, INC.**  
ADDRESS: **192 HEALY AVE**  
CITY: **MARINA** STATE/COUNTRY: **CA** ZIP CODE: **93933**  
NAME: **MPE MANAGEMENT GROUP INC.**  
ADDRESS: **192 HEALY AVE**  
CITY: **MARNIA** STATE/COUNTRY: **CA** ZIP CODE: **93933**

NAME: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
CITY: \_\_\_\_\_  
STATE/COUNTRY: \_\_\_\_\_  
ZIP CODE: \_\_\_\_\_



5. NAMES OF ALL PARTNERS AUTHORIZED TO EXECUTE INSTRUMENTS TRANSFERRING REAL PROPERTY HELD BY THE PARTNERSHIP (ATTACH ADDITIONAL PAGES, IF NECESSARY)

PARTNER NAME: **MONTEREY PENINSULA ENGINEERING, INC.** PARTNER NAME: \_\_\_\_\_  
PARTNER NAME: **MPE MANAGEMENT GROUP INC.** PARTNER NAME: \_\_\_\_\_  
PARTNER NAME: \_\_\_\_\_ PARTNER NAME: \_\_\_\_\_

6. OTHER MATTERS, IF ANY: (ATTACH ADDITIONAL PAGES, IF NECESSARY)  
Any officer of either general partner, Monterey Peninsula Engineering, Inc. and MPE Management Group, Inc., may execute contracts on behalf of the Partnership in order to conduct the business and affairs of Monterey Peninsula Engineering, a general partnership.

7. NUMBER OF PAGES ATTACHED, IF ANY: **NONE**

8. I DECLARE UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING IS TRUE AND CORRECT.

SIGNATURE OF PARTNER: DATE EXECUTED: **3/19/02**  
BY **BAR T J BRUNO**, PRESIDENT  
TYPE OR PRINT NAME OF PARTNER: **MONTEREY COUNTY, CALIFORNIA**  
COUNTY AND STATE EXECUTED

SIGNATURE OF PARTNER: DATE EXECUTED: **3/19/02**  
BY **PAUL F BRUNO**, PRESIDENT  
TYPE OR PRINT NAME OF PARTNER: **MONTEREY COUNTY, CALIFORNIA**  
COUNTY AND STATE EXECUTED

For Secretary of State Use  
**302002085012**  
FILE #  
DOCUMENT # **9575**

**ENDORSED - FILED**  
In the office of the Secretary of State  
of the State of California  
**MAR 21 2002**  
**BILL JONES, Secretary of State**

9. RETURN TO:  
NAME: **LOMBARDO & GILLES**  
ADDRESS: **318 CAYUGA STREET**





**CORPORATE RESOLUTION OF SIGNATURE AUTHORITY**

Whereas MPE Management Group, Inc. is a California corporation filed with California Secretary of State; and

Whereas, it is in the best interests of the corporation to enter into contracts and other legal documents as part of its regular business activities.

Now, therefore be it resolved, that any one of the following officers

|                   |                     |
|-------------------|---------------------|
| Paul B. Bruno     | President           |
| James B. Bruno    | Vice President      |
| Peter J. Taormina | Secretary/Treasurer |

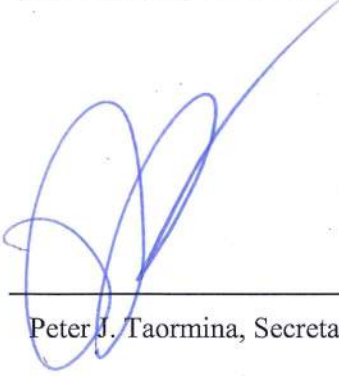
of the MPE Management Group, Inc. be, and hereby is authorized, directed, and empowered for, and on behalf of, and in the name of this corporation by their signature to bind the corporation.

Resolved further, that a signature of an above named officer is hereby deemed to be conclusive evidence of such officer's authority to act on behalf of this corporation.

Resolved further, that this corporation hereby ratifies and confirms the acts of its officers, agents and employees in heretofore obligating this corporation.

\*\*\*\*\*

I, Peter J. Taormina, Secretary of MPE Management Group, Inc., a corporation duly organized and existing under the laws of the State of California, do certify that the foregoing is a full, true, and correct copy of certain resolutions of the Board of Directors of said corporation, duly passed and adopted at a special meeting of the Board of Directors on May 22, 2017.

  
\_\_\_\_\_  
Peter J. Taormina, Secretary

5 / 22 / 17  
Date



**CORPORATE RESOLUTION OF SIGNATURE AUTHORITY**

Whereas Monterey Peninsula Engineering, Inc., is a California corporation filed with California Secretary of State; and

Whereas, it is in the best interests of the corporation to enter into contracts and other legal documents as part of its regular business activities.

Now, therefore be it resolved, that any one of the following officers

|                   |                     |
|-------------------|---------------------|
| Bart J. Bruno     | President           |
| James B. Bruno    | Vice President      |
| Peter J. Taormina | Vice President      |
| Paul B. Bruno     | Secretary/Treasurer |

of the Monterey Peninsula Engineering, Inc., be, and hereby is authorized, directed, and empowered for, and on behalf of, and in the name of this corporation by their signature to bind the corporation.

Resolved further, that a signature of an above named officer is hereby deemed to be conclusive evidence of such officer's authority to act on behalf of this corporation.

Resolved further, that this corporation hereby ratifies and confirms the acts of its officers, agents and employees in heretofore obligating this corporation.

\*\*\*\*\*

I, Paul B. Bruno, Secretary of MPE Monterey Peninsula Engineering, Inc., a corporation duly organized and existing under the laws of the State of California, do certify that the foregoing is a full, true, and correct copy of certain resolutions of the Board of Directors of said corporation, duly passed and adopted at a special meeting of the Board of Directors on May 22, 2017.



Paul B. Bruno, Secretary

5 / 22 / 17  
Date



**(Use State-Appropriate form for Notary Public)**

State of California

County of Monterey

On this 23rd day of July, 2019, before me appeared **Peter J. Taormina**, who is **Secretary of MPE Management Group, Inc.**, personally known to me to be the person described in and who executed this Transmittal Letter and acknowledged that she/he signed the same freely and voluntarily for the uses and purposes therein described.

In witness thereof, I have hereunto set my hand and affixed my official seal the day and year last written above.

Notary Public in and for the State of \_\_\_\_\_ (Seal)

**SEE ATTACHED NOTARY**

\_\_\_\_\_  
(Name Printed)

Residing at \_\_\_\_\_

Commission Number \_\_\_\_\_



## 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 Monterey

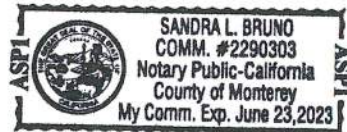
On July 23, 2019 before me, Sandra L. Bruno, Notary Public  
(insert name and title of the officer)

personally appeared Peter J. Taormina  
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 *Sandra L. Bruno* (Seal)



*Peter J Taormina signing as Secretary of MPE Management Group, Inc.*

**(Use State-Appropriate form for Notary Public)**

State of California

County of Monterey

On this 23rd day of July, 2019, before me appeared **Peter J. Taormina**, who is **Vice President of Monterey Peninsula Engineering, Inc.**, personally known to me to be the person described in and who executed this Transmittal Letter and acknowledged that she/he signed the same freely and voluntarily for the uses and purposes therein described.

In witness thereof, I have hereunto set my hand and affixed my official seal the day and year last written above.

Notary Public in and for the State of \_\_\_\_\_ (Seal)

**SEE ATTACHED NOTARY**

\_\_\_\_\_  
(Name Printed)

Residing at \_\_\_\_\_

Commission Number \_\_\_\_\_



## ACKNOWLEDGMENT

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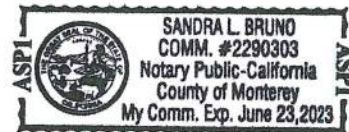
State of California  
County of Monterey

On July 23, 2019 before me, Sandra L. Bruno, Notary Public  
(insert name and title of the officer)

personally appeared Peter J. Taormina  
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 *Sandra L. Bruno* (Seal)

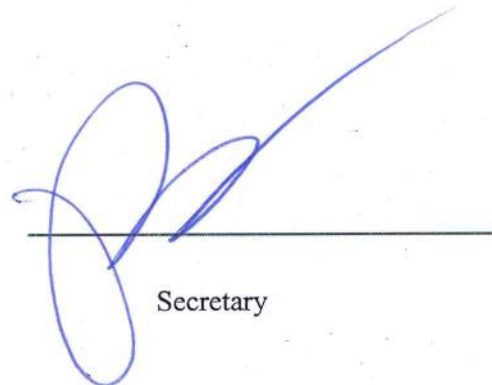
*Peter J Taormina signing as Vice President of Monterey Peninsula Engineering, Inc.*

**Attachment 1 CERTIFICATE OF AUTHORIZATION\***

I, **Peter J. Taormina**, a resident of Carmel in the State of **California**, DO HEREBY CERTIFY that I am the **Secretary of MPE Management Group Inc.**, (a corporation) a general partner in **Monterey Peninsula Engineering, A Partnership** duly organized and existing under and by virtue of the laws of **California**; that I have custody of the records of such corporation; and that as of the date of this certification, **Peter J. Taormina**, holds the title of **Secretary** of the corporation, and is authorized to execute and deliver in the name and on behalf of the corporation the Proposal submitted by the partnership in response to the Request for Proposals for Monterey Peninsula Water Supply Project Construction of the Castroville Pipeline, issued by California- American Water Company on **May 31, 2019**, as amended; and all documents, letters, certificates and other instruments which have been executed by such officer on behalf of the corporation in connection therewith.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of the partnership this **23rd** day of **July, 2019**.

(Affix Seal Here)



Secretary

*\* Note: Separate certifications shall be submitted if more than one corporate officer has executed documents as part of the Proposal. Proposers shall make appropriate conforming modifications to this Certificate in the event that the signatory's address is outside of the United States.*

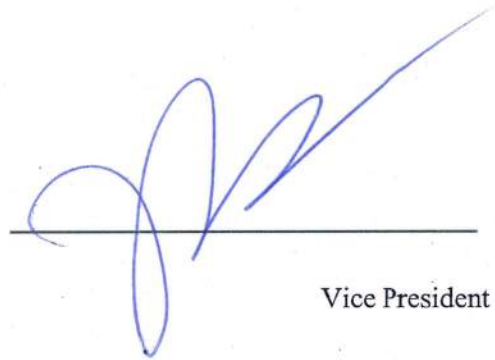


**Attachment 1 CERTIFICATE OF AUTHORIZATION\***

I, **Peter J. Taormina**, a resident of Carmel in the State of **California**, DO HEREBY CERTIFY that I am the **Vice President** of **Monterey Peninsula Engineering, Inc.**, (a corporation) a general partner in **Monterey Peninsula Engineering, A Partnership**, duly organized and existing under and by virtue of the laws of **California**; that I have custody of the records of such corporation; and that as of the date of this certification, **Peter J. Taormina**, holds the title of **Vice President** of the corporation, and is authorized to execute and deliver in the name and on behalf of the corporation the Proposal submitted by the partnership in response to the Request for Proposals for Monterey Peninsula Water Supply Project Construction of the Castroville Pipeline, issued by California- American Water Company on **May 31, 2019**, as amended; and all documents, letters, certificates and other instruments which have been executed by such officer on behalf of the corporation in connection therewith.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of the partnership this **23rd** day of **July, 2019**.

(Affix Seal Here)



Vice President

*\* Note: Separate certifications shall be submitted if more than one corporate officer has executed documents as part of the Proposal. Proposers shall make appropriate conforming modifications to this Certificate in the event that the signatory's address is outside of the United States.*





Attachment 2  
PROJECT TEAM MEMBER LIST

Proposals shall identify the names and roles of the Proposer and any Significant Subcontractors and all other Project team members identified to date:

| <u>NAME:</u>                          | <u>ROLE:</u>                                   |
|---------------------------------------|--|
| <u>Monterey Peninsula Engineering</u> | <u>Grading, concrete, piping</u>               |
| <u>Darrel Varni Electric, Inc.</u>    | <u>Electrical/controls/instrumentation sub</u> |
| <u>Northern Directional Drilling</u>  | <u>8" HDD sub</u>                              |
| <u>Aqueous Vets</u>                   | <u>Pipe supplier</u>                           |
| <u>Underground Solutions</u>          | <u>Fusible PVC Installer Sub</u>               |
| <u>Pacific Boring</u>                 | <u>Jack and Bore Sub</u>                       |
| <u> </u>                              | <u> </u>                                       |
| <u> </u>                              | <u> </u>                                       |

Monterey Peninsula Engineering, A Partnership  
Name of Proposer

Peter J. Taormina  
Name of Designated Signatory

  
Signature

Manager  
Title



**Attachment 3  
 PROJECT TEAM LICENSE LIST**

Attach corresponding copies of applicable licenses

| License No. | Classification | Name of License               | Renewal Date | Active (Yes/No) |
|-------------|----------------|-------------------------------|--------------|-----------------|
| 972425      | A,B, Haz       | MPE                           | 4/30/2020    | Yes             |
| 1037877     | A              | Aqueous Vets                  | 4/30/2020    | Yes             |
| 735622      | C10            | Darrel Varni Electric         | 12/30/2020   | Yes             |
|             |                |                               |              |                 |
| 915332      | A              | Northern Directional Drilling | 5/31/2020    | Yes             |
| 553794      |                | Pacific Boring                |              | Yes             |
|             |                |                               |              |                 |
|             |                |                               |              |                 |
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|             |                |                               |              |                 |



## B. EXECUTIVE SUMMARY

Monterey Peninsula Engineering has carefully reviewed the scope of work and feels confident we can execute this project in an efficient and safe manner while maintaining the timeline and our stringent safety goals.

We have long established working relationships with most of the entities associated with this project. City of Marina, CCSD, TAMC, Dole Fresh, MPWPCA and County of Monterey are among a few that we have contracted with on various work within this projects sphere of influence. Our home offices are within a few miles of the project site. This proximity providing MPE a distinct advantage towards the timely and efficient solving of those inevitable site specific problems that could arise.

The work encompassed by this proposal is to construct a small diameter transmission main from Marina to Castroville with associated trenchless crossings, pressure reduction, flow meter and valve appurtenances. Our firm has completed many such projects for CAW and other clients over the past 40 years. Regularly working in the Salinas Valley provides significant experience working in and around agricultural operations. We understand the special requirements of farming operations and their crop protection protocols. Furthermore we can utilize a 100% local workforce providing a direct benefit to our local economy and help highlight CAWC's commitment to Peninsula business.

### **Bid Format**

We have primarily followed the bid schedule to develop our base pricing. We have also offered an alternate price to install fusible PVC for the buried portion of the 12" pipeline (vs ductile iron). This option will reduce the need for the robust cathodic protection measures outlined in the plans and increase productivity thus lower costs and project timeline.

Although the plans detail specific cathodic protection measures, the utilization of zinc coatings and/or epoxy coatings should preclude the need of such cathodic protection. Therefore, we omitted those as a cost saving measure.

### **Timeline**

We estimate all work can be completed in the timeline depicted on our proposed schedule.

### **CWSRF Requirements**

Monterey Peninsula Engineering (MPE) agrees to cooperate with Owner to meet all CWSRF financing requirements applicable to the Project and MPE has included all costs necessary to comply with AIS requirements in the Contract Price.



**Project Team**

| <b>MPE Team Member</b> | <b>Position</b>                 | <b>Role in the Project</b>                                   |
|------------------------|---------------------------------|--|
| <b>Peter Taormina</b>  | <b>Manager</b>                  | <b>Chief Estimator/ Project Manager</b>                      |
| <b>Etheline Cimatú</b> | <b>Project Manager</b>          | <b>Project Manager Assistance</b>                            |
| <b>Jim Bruno</b>       | <b>Operations Manager</b>       | <b>Equipment and crew coordination/Field Superintendence</b> |
| <b>Darrel Varni</b>    | <b>Electrical Subcontractor</b> | <b>Electrical Supervisor</b>                                 |
|                        |                                 |  |
|                        |                                 |  |
|                        |                                 |  |



C. PROPOSAL FORM 2: NON-COLLUSION AFFIDAVIT

STATE OF California )  
 : SS.:  
COUNTY OF Monterey )

I, Peter J. Taormina, a resident of Carmel in the State of California, of full age, being duly sworn according to law, on my oath depose and say that:

5.2.3.1.17.1.1.1.1 I am the Manager of Monterey Peninsula Engineering, A Partnership, formed in the state of California, the Proposer making the Proposal in response to the Request for Proposals for the Monterey Peninsula Water Supply Project Construction of the Castroville Pipeline issued by California-American Water Company on May 31, 2019, as amended, and that I executed said Proposal with full authority to do so;

5.2.3.1.17.1.1.1.2 The prices in this Proposal have been arrived at independently without collusion, fraud, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other Proposer or with any competitor;

5.2.3.1.17.1.1.1.3 Unless otherwise required by law, the prices which have been quoted in this Proposal have not been knowingly disclosed by the Proposer and will not knowingly be disclosed by the Proposer prior to opening, directly or indirectly, to any other Proposer or to any competitor; and

5.2.3.1.17.1.1.1.4 No attempt has been made or will be made by the Proposer to induce any other person or entity to submit or not to submit a Proposal for the purpose of restricting competition.

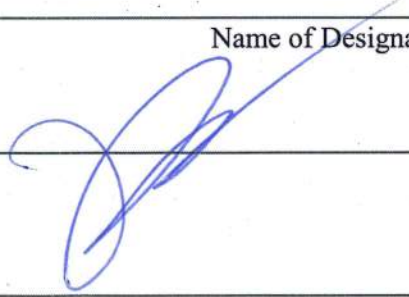
I, hereby affirm under the penalties of perjury that the foregoing statements are true.

Monterey Peninsula Engineering, A Partnership

\_\_\_\_\_  
Name of Proposer

Peter J. Taormina

\_\_\_\_\_  
Name of Designated Signatory

  
\_\_\_\_\_  
Signature

Manager

\_\_\_\_\_  
Title

PF2-1



(Use State-Appropriate Form for Notary Public)

State of California

County of Monterey

On this 23rd day of July, 2019, before me appeared Peter J. Taormina, who is Manager of Monterey Peninsula Engineering, A Partnership personally known to me to be the person described in and who executed this Transmittal Letter and acknowledged that she/he signed the same freely and voluntarily for the uses and purposes therein described.

In witness thereof, I have hereunto set my hand and affixed my official seal the day and year last written above.

(Seal)

Notary Public in and for the State of \_\_\_\_\_

**SEE ATTACHED NOTARY**

\_\_\_\_\_  
(Name Printed)

Residing at \_\_\_\_\_

Commission Number \_\_\_\_\_



# 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.

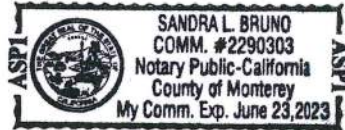
State of California  
County of Monterey

On July 23, 2019 before me, Sandra L. Bruno, Notary Public  
(insert name and title of the officer)

personally appeared Peter J. Taormina  
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  (Seal)

*Peter J Taormina signing as Manager of Monterey Peninsula Engineering. A Partnership*

D. PROPOSAL FORM 3: DISCLAIMER STATEMENT

The information contained in or otherwise provided in connection with the Request for Proposals for the Monterey Peninsula Water Supply Project Construction of the Castroville Pipeline (the "RFP") issued by California-American Water Company ("CAWC") on May 31, 2019, as amended, has been prepared by CAWC and, while such information is believed to be accurate and reliable, except as otherwise expressly set forth in the RFP, CAWC makes no representation as to such accuracy or reliability. In no way shall any such information constitute a representation or warranty by CAWC or any of its officials, employees, agents, consultants, attorneys, representatives, contractors, or subcontractors (the "CAWC Representatives"). The Proposer hereby releases and forever discharges CAWC and the CAWC Representatives from any and all claims which such Proposer has, had or may hereafter have arising out of any information contained in or otherwise provided in connection with the RFP. Any party who intends to submit a response to this RFP is specifically invited to independently verify the accuracy of the information contained herein.

Monterey Peninsula Engineering, A Partnership

\_\_\_\_\_  
Name of Proposer

Peter J. Taormina

\_\_\_\_\_  
Name of Designated Signatory



\_\_\_\_\_  
Signature

Manager

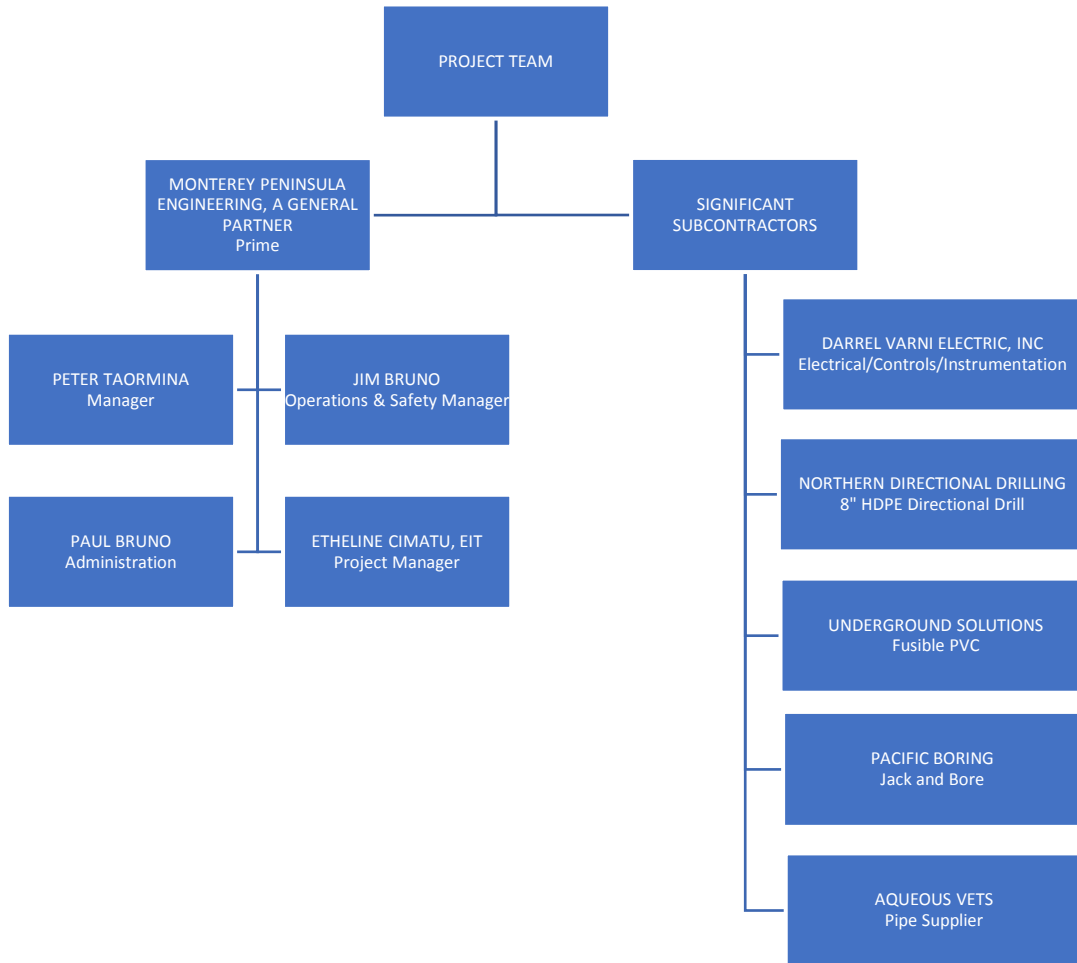
\_\_\_\_\_  
Title





## SECTION 2.0 GENERAL PROJECT TEAM INFORMATION

### A. PROJECT ORGANIZATION CHART



**B. PROPOSAL FORM 4 : KEY PERSONNEL<sup>1</sup>**

*(Copy and complete this form for Key Personnel. Attach additional pages along with organizational charts as needed)*

**General Information<sup>2</sup>**

Name: Peter J. Taormina

Firm: Monterey Peninsula Engineering

Title: Manager, VP & Chief Estimating

Year employed by firm: 31 Years

Total Professional Experience: 31 Years

Professional Registration and Licenses (type/number/state/year)<sup>3</sup> RME for Class A, B, Haz/ Lic. 972425/CA/ Expires 4/30/2020

**Project-Specific Information**

Title/Assignment Program Director

**Description of Role/Responsibilities:**

|                         |                        |                                  |
|-------------------------|------------------------|----------------------------------|
| Commitment <sup>4</sup> | Permitting <u>10</u> % | Construction <u>20</u> %         |
|                         |                        | Startup and Testing: <u>20</u> % |

**Footnotes:**

<sup>1</sup> Proposers shall duplicate this form for all Key Personnel. Refer to subsection 4.4.2 of the RFP for a list of the minimum personnel for which this form shall be completed.

<sup>2</sup> Please indicate any staff that has changed from that provided in the Statement of Qualifications in accordance with subsection 4.4.2 of the RFP. Attach pages as necessary.

<sup>3</sup> Where applicable, key construction personnel must provide either: (1) proof of current California licensure; or (2) if not currently licensed in California, a detailed plan to obtain a required California license no later than the effective date of the Contract.

<sup>4</sup> Commitment indicates the amount of time (in percent) that the individual would be available to work on the Project during the construction, start-up and testing phases of the Project. Indicate by "N/A" where the individual is not proposed to be involved in a particular phase of the Project.



B. PROPOSAL FORM 4 : KEY PERSONNEL<sup>1</sup>

*(Copy and complete this form for Key Personnel. Attach additional pages along with organizational charts as needed)*

General Information<sup>2</sup>

Name: Jim Bruno

Firm: Monterey Peninsula Engineering, A Partnership

Title: Manager, VP & Operations

Year employed by firm: 38 Years

Total Professional Experience: 38 Years

Professional Registration and Licenses (type/number/state/year) Class A/Lic 641871/CA/issued 4/10/1992

**Project-Specific Information**

Title/Assignment Executive, Construction Superintendent, Safety Manager, and QA/QC Manager

Description of Role/Responsibilities:

Commitment<sup>4</sup>      Permitting N/A %      Construction 40 %  
Startup and Testing: N/A %

Footnotes:

<sup>1</sup> Proposers shall duplicate this form for all Key Personnel. Refer to subsection 4.4.2 of the RFP for a list of the minimum personnel for which this form shall be completed.

<sup>2</sup> Please indicate any staff that has changed from that provided in the Statement of Qualifications in accordance with subsection 4.4.2 of the RFP. Attach pages as necessary.

<sup>3</sup> Where applicable, key construction personnel must provide either: (1) proof of current California licensure; or (2) if not currently licensed in California, a detailed plan to obtain a required California license no later than the effective date of the Contract.

<sup>4</sup> Commitment indicates the amount of time (in percent) that the individual would be available to work on the Project during the construction, start-up and testing phases of the Project. Indicate by "N/A" where the individual is not proposed to be involved in a particular phase of the Project.



B. PROPOSAL FORM 4 : KEY PERSONNEL<sup>1</sup>

*(Copy and complete this form for Key Personnel. Attach additional pages along with organizational charts as needed)*

General Information<sup>2</sup>

Name: Paul Bruno

Firm: Monterey Peninsula Engineering, A Partnership

Title: CFO Administration

Year employed by firm: 31 Years

Total Professional Experience: 31 Years

Professional Registration and Licenses (type/number/state/year) N/A

**Project-Specific Information**

Title/Assignment Executive Leadership

Description of Role/Responsibilities:

Commitment<sup>4</sup>      Permitting N/A %      Construction 20 %  
Startup and Testing: N/A %

Footnotes:

<sup>1</sup> Proposers shall duplicate this form for all Key Personnel. Refer to subsection 4.4.2 of the RFP for a list of the minimum personnel for which this form shall be completed.

<sup>2</sup> Please indicate any staff that has changed from that provided in the Statement of Qualifications in accordance with subsection 4.4.2 of the RFP. Attach pages as necessary.

<sup>3</sup> Where applicable, key construction personnel must provide either: (1) proof of current California licensure; or (2) if not currently licensed in California, a detailed plan to obtain a required California license no later than the effective date of the Contract.

<sup>4</sup> Commitment indicates the amount of time (in percent) that the individual would be available to work on the Project during the construction, start-up and testing phases of the Project. Indicate by "N/A" where the individual is not proposed to be involved in a particular phase of the Project.



B. PROPOSAL FORM 4 : KEY PERSONNEL<sup>1</sup>

*(Copy and complete this form for Key Personnel. Attach additional pages along with organizational charts as needed)*

General Information<sup>2</sup>

Name: Etheline Cimatu

Firm: Monterey Peninsula Engineering, A Partnership

Title: Project Manager

Year employed by firm: 5 Years

Total Professional Experience: 8 Years

Professional Registration and Licenses (type/number/state/year)<sup>3</sup> N/A

**Project-Specific Information**

Title/Assignment Project Manager

Description of Role/Responsibilities:

Commitment<sup>4</sup>          Permitting 10 %                                  Construction 60 %

Startup and Testing: 30 %

Footnotes:

<sup>1</sup> Proposers shall duplicate this form for all Key Personnel. Refer to subsection 4.4.2 of the RFP for a list of the minimum personnel for which this form shall be completed.

<sup>2</sup> Please indicate any staff that has changed from that provided in the Statement of Qualifications in accordance with subsection 4.4.2 of the RFP. Attach pages as necessary.

<sup>3</sup> Where applicable, key construction personnel must provide either: (1) proof of current California licensure; or (2) if not currently licensed in California, a detailed plan to obtain a required California license no later than the effective date of the Contract.

<sup>4</sup> Commitment indicates the amount of time (in percent) that the individual would be available to work on the Project during the construction, start-up and testing phases of the Project. Indicate by "N/A" where the individual is not proposed to be involved in a particular phase of the Project.



## B. PROPOSAL FORM 4 : KEY PERSONNEL<sup>1</sup>

*(Copy and complete this form for Key Personnel. Attach additional pages along with organizational charts as needed)*

### General Information<sup>2</sup>

Name: Darrel Varni

Firm: Darrel Varni Electric, Inc.

Title: President

Year employed by firm: 20 Years

Total Professional Experience: 28 Years

Professional Registration and Licenses (type/number/state/year) Project Manager/Foreman

### **Project-Specific Information**

Title/Assignment Provide supervision for all electrical installation

Description of Role/Responsibilities:

|                         |                                  |                          |
|-------------------------|----------------------------------|--------------------------|
| Commitment <sup>4</sup> | Permitting <u>0</u> %            | Construction <u>40</u> % |
|                         | Startup and Testing: <u>40</u> % |                          |

---

#### Footnotes:

<sup>1</sup> Proposers shall duplicate this form for all Key Personnel. Refer to subsection 4.4.2 of the RFP for a list of the minimum personnel for which this form shall be completed.

<sup>2</sup> Please indicate any staff that has changed from that provided in the Statement of Qualifications in accordance with subsection 4.4.2 of the RFP. Attach pages as necessary.

<sup>3</sup> Where applicable, key construction personnel must provide either: (1) proof of current California licensure; or (2) if not currently licensed in California, a detailed plan to obtain a required California license no later than the effective date of the Contract.

<sup>4</sup> Commitment indicates the amount of time (in percent) that the individual would be available to work on the Project during the construction, start-up and testing phases of the Project. Indicate by "N/A" where the individual is not proposed to be involved in a particular phase of the Project.



B. PROPOSAL FORM 4 : KEY PERSONNEL<sup>1</sup>

*(Copy and complete this form for Key Personnel. Attach additional pages along with organizational charts as needed)*

General Information<sup>2</sup>

Name: Rob Crow

Firm: Aqueous Vets

Title: President & CEO

Year employed by firm: 5 Years

Total Professional Experience: 25 (12 @ Aegion/Underground Solutions) Years

Professional Registration and Licenses (type/number/state/year)<sup>3</sup> Aqueous Vets Class A General Contractor, License #1037877

**Project-Specific Information**

Title/Assignment Project Manager

Description of Role/Responsibilities:

|                         |            |            |   |                      |            |   |
|-------------------------|------------|------------|---|----------------------|------------|---|
| Commitment <sup>4</sup> | Permitting | <u>n/a</u> | % | Construction         | <u>100</u> | % |
|                         |            |            |   | Startup and Testing: | <u>n/a</u> | % |

Footnotes:

<sup>1</sup> Proposers shall duplicate this form for all Key Personnel. Refer to subsection 4.4.2 of the RFP for a list of the minimum personnel for which this form shall be completed.

<sup>2</sup> Please indicate any staff that has changed from that provided in the Statement of Qualifications in accordance with subsection 4.4.2 of the RFP. Attach pages as necessary.

<sup>3</sup> Where applicable, key construction personnel must provide either: (1) proof of current California licensure; or (2) if not currently licensed in California, a detailed plan to obtain a required California license no later than the effective date of the Contract.

<sup>4</sup> Commitment indicates the amount of time (in percent) that the individual would be available to work on the Project during the construction, start-up and testing phases of the Project. Indicate by "N/A" where the individual is not proposed to be involved in a particular phase of the Project.

PF4-1



**B. PROPOSAL FORM 4 : KEY PERSONNEL<sup>1</sup>**

*(Copy and complete this form for Key Personnel. Attach additional pages along with organizational charts as needed)*

**General Information<sup>2</sup>**

Name: Tommy Demus

Firm: Northern Directional Drilling

Title: Owner

Year employed by firm: 11 years

Total Professional Experience: 21 years

Professional Registration and Licenses (type/number/state/year)<sup>3</sup> 915332, A, CA, 5/1/2020

**Project-Specific Information**

Title/Assignment Project Manager

Description of Role/Responsibilities:  
Project Oversight

|                               |   |                                  |  |
|-------------------------------|---|----------------------------------|--|
| <b>Commitment<sup>4</sup></b> | <b>Permitting</b> <u>na</u> %           | <b>Construction</b> <u>100</u> % |  |
|                               | <b>Startup and Testing:</b> <u>na</u> % |                                  |  |

Footnotes:

<sup>1</sup> Proposers shall duplicate this form for all Key Personnel. Refer to subsection 4.4.2 of the RFP for a list of the minimum personnel for which this form shall be completed.

<sup>2</sup> Please indicate any staff that has changed from that provided in the Statement of Qualifications in accordance with subsection 4.4.2 of the RFP. Attach pages as necessary.

<sup>3</sup> Where applicable, key construction personnel must provide either: (1) proof of current California licensure; or (2) if not currently licensed in California, a detailed plan to obtain a required California license no later than the effective date of the Contract.

<sup>4</sup> Commitment indicates the amount of time (in percent) that the individual would be available to work on the Project during the construction, start-up and testing phases of the Project. Indicate by "N/A" where the individual is not proposed to be involved in a particular phase of the Project.





B. PROPOSAL FORM 4 : KEY PERSONNEL<sup>1</sup>

*(Copy and complete this form for Key Personnel. Attach additional pages along with organizational charts as needed)*

**General Information**<sup>2</sup>

Name: Clay Beavers

Firm: Pacific Boring, Inc.

Title: Superintendent

Year employed by firm: 37 years

Total Professional Experience: 50+ years

Professional Registration and Licenses (type/number/state/year)<sup>3</sup> California Contractor's License #553794

**Project-Specific Information**

Title/Assignment Superintendent

Description of Role/Responsibilities:

Oversee set up, productivity & completion of bore and jack work.

|                                |  |                                  |
|--------------------------------|--|----------------------------------|
| <b>Commitment</b> <sup>4</sup> | <b>Permitting</b> <u>N/A</u> %           | <b>Construction</b> <u>100</u> % |
|                                | <b>Startup and Testing:</b> <u>N/A</u> % |                                  |

Footnotes:

<sup>1</sup> Proposers shall duplicate this form for all Key Personnel. Refer to subsection 4.4.2 of the RFP for a list of the minimum personnel for which this form shall be completed.

<sup>2</sup> Please indicate any staff that has changed from that provided in the Statement of Qualifications in accordance with subsection 4.4.2 of the RFP. Attach pages as necessary.

<sup>3</sup> Where applicable, key construction personnel must provide either: (1) proof of current California licensure; or (2) if not currently licensed in California, a detailed plan to obtain a required California license no later than the effective date of the Contract.

<sup>4</sup> Commitment indicates the amount of time (in percent) that the individual would be available to work on the Project during the construction, start-up and testing phases of the Project. Indicate by "N/A" where the individual is not proposed to be involved in a particular phase of the Project.



C. DBE REQUIREMENT STATEMENT

**DIVERSE BUSINESS ENTERPRISES REQUIREMENT STATEMENT**

Owner utilizes the established guidelines from the California Public Utilities Commission (“CPUC”) to qualify diverse suppliers and requires certification as a Diverse Business Enterprise (“DBE”) by the Supplier Clearinghouse and/or the California Department of General Services. To be eligible for award of a contract from this solicitation, the bidder/proposer must execute and submit, as part of his or her bid/proposal, this statement. DBEs are divided into four classifications, as follows: Minority Business Enterprises (“MBE”), Women-Owned Business Enterprises (“WBE”), Disabled Veteran Business Enterprises (“DVBE”), and Lesbian, Gay, Bi-Sexual and Transgender Business Enterprises (“LGBTBE”). This statement shall be deemed a material factor in the Owner’s evaluation of the bid/proposal. Failure to complete and submit this statement, or the inclusion of a false statement, shall render the bid/proposal non-responsive.

The CPUC has set a goal for Owner to achieve at least 21.5% of total contract spend on DBEs, divided into the four classifications as follows: MBE – 15%, WBE – 5%, DVBE – 1.5%, and LGBTBE – goal to be established in 2020.

Owner has established certain minimum requirements, as set forth below, for the percentage of the total Contract Price that must be paid to DBEs (the “DBE Minimum”). The DBE Minimum for a contract will depend upon the total Contract Price for that contract, as set forth below. For example, for a contract with a Contract Price of \$1,200,000, the DBE Minimum is 25% and, therefore, at least \$300,000 must be paid to DBEs either as the primary contractor or as one or more subcontractors. Further, for a contract with a Contract Price of \$4,000,000, the DBE Minimum is 30% and, therefore, at least \$1,200,000 must be paid to DBEs either as the primary contractor or as one or more subcontractors.

**DBE UTILIZATION**

RAIPER ..... 5%  
AQUEOUS ..... 23%  
VOLBECKI TRUCKING ... 2%

Notwithstanding the DBE Minimum set forth above, a bidder/proposer may propose, and is strongly encouraged to propose, a higher percentage of the Contract Price to be paid to DBEs. As part of its submission, the must respond to the questions below and identify the percentage of the Contract Price that will be paid to DBEs (such percentage must be NO LOWER THAN the DBE Minimum set forth above). The percentage of the Contract Price that will be paid to DBEs (to the bidder/proposer as primary contractor or to subcontractors), as indicated on this form, will be a contractual requirement (the “DBE Requirement”) that must be met by the bidder/proposer in performing the Contract Services. Failure to meet the DBE Requirement will be considered a breach of the contract and may result in termination of the contract by the Owner.



MONTEREY PENINSULA WATER SUPPLY PROJECT  
REQUEST FOR PROPOSALS FOR THE CONSTRUCTION OF THE CASTROVILLE PIPELINE

---

Complete the items below:

1. Is bidder/proposer certified as a Diverse Business Enterprise with the CPUC Supplier Clearinghouse and/or the California Department of General Services?

Respond YES or NO:       No      

If YES, provide a copy of your certification with your bid/proposal and identify which classification your firm is certified under (i.e., MBE, WBE, DVBE, or LGTBTE):

2. What is the DBE Requirement (the percentage of the Contract Price that will be paid to DBEs) that bidder/proposer will agree to in the contract for the Contract Services?

  30   % of Contract Price (such percentage must be equal to or greater than the DBE Minimum as set forth above)

Bidder/Proposer Name:   Monterey Peninsula Engineering, a partnership  

Printed Name of Authorized Person:   Peter J. Taormina  

Signature of Authorized Person: \_\_\_\_\_

Title of Authorized Person:   Manager  



#### D. LOCAL RESOURCES UTILIZATION PLAN

Monterey Peninsula Engineering is headquartered here in Monterey County. We make every effort to hire from the local work force and to utilize other local businesses. Nearly 100% of our employees are Monterey Bay Area residents (Residents of Monterey, Santa Cruz, and San Benito Counties) with roughly 70% coming from Monterey County. We will advise our subcontractors, sub-consultants, vendors, and suppliers of the Good Faith effort to Hire Monterey Bay Area Residents requirement and if they do not already meet the 50% threshold, we will require them to utilize local recruitment sources when hiring workers for this project. During the life of the project, we will continue to monitor the makeup of our workforce as well as the workforce of those companies we are contracting with to ensure the 50% threshold is maintained.



### SECTION 3.0 TECHNICAL PROPOSAL

#### A. PROPOSAL FORM 10: PRELIMINARY PROJECT SCHEDULE, SCHEDULED CONSTRUCTION DATE AND SCHEDULED ACCEPTANCE DATE

The Proposer shall submit a preliminary Project schedule with the Proposal that includes important construction activities and milestones from issuance of the Notice to Proceed through final completion. This preliminary Project schedule shall be submitted in both written and electronic formats. The level of detail shall be in summary level for major procurement and construction activities. Major milestones throughout the construction period shall be included.

The preliminary Project schedule shall consist of, but not be limited to, the following:

- (i) Important procurement activities and milestones
- (ii) (ii) Important construction activities and milestones
- (iii) (iii) Important commissioning and testing milestones
- (iv) (iv) It shall indicate the sequence of Work and the time of starting and completing each part.

In addition, the Proposer shall summarize and provide a list of proposed major milestones and completion dates including, but not limited to:

5.2.3.2 Issuance of Notice to Proceed

5.2.3.3 Expected delivery of all materials and equipment

5.2.3.4 Date of construction commencement

5.2.3.5 Completion of major structures

5.2.3.6 Commissioning and functional testing commencement

5.2.3.7 Substantial Completion Date

5.2.3.8 Acceptance test

5.2.3.9 Date of acceptance

5.2.3.10 Date of Completion and readiness for final payment

The Proposer shall use the following format to provide this information:

PF10-1



| <b>TABLE 5-1 MAJOR ACTIVITIES AND MILESTONES<sup>1</sup></b> |                           |                         |
|--|---------------------------|-------------------------|
| <b>ACTIVITY NUMBER</b>                                       | <b>ACTIVITY/MILESTONE</b> | <b>DATE<sup>2</sup></b> |
|  | See attached schedule     |                         |
|  |                           |                         |
|  |                           |                         |
|  |                           |                         |
|  |                           |                         |
|  |                           |                         |
|  |                           |                         |
|  |                           |                         |
|  |                           |                         |

Monterey Peninsula Engineering, A Partnership

\_\_\_\_\_  
 Name of Proposer

Peter J. Taormina  
 \_\_\_\_\_

Name of Designated Signatory

\_\_\_\_\_  
 Signature

\_\_\_\_\_  
 Manager  
 Title

Footnotes:

- <sup>1</sup> List each major activity and milestone separately.
- <sup>2</sup> Indicate the end of activity or date milestone achieved.



## PROJECT APPROACH & DELIVERY

### Introduction

Monterey Peninsula Engineering (M.P.E.) has been successfully completing underground infrastructure projects within the tri-County area over the past 40-years. With its experienced and well versed team, M.P.E. strives to complete projects on time and under budget while minimizing the impact to surrounding communities, environment, and natural habitats. We have listed the following relevant projects completed in the last four years:

A. Main Ave & Madrone Pipeline Restoration Project, Santa Clara Valley Water District

- Value: \$10,661,486
- 2,800 LF 36" HDPE pipe
- 6,500 LF 30" HDPE pipe
- 4,900 LF 24" HDPE pipe
- 1 EA Isolation Valve Vault
- 1 EA Chemical Injection Vault
- 2 EA PRV Vaults
- 1 EA Dissipater Structure

B. Interties 2, 3, & 4, San Lorenzo Valley Water District

- Value: \$5,558,556
- 12,865 LF 12" DIP pipe
- 1,507 LF 12" HDPE pipe
- 448 LF 12" Steel Above Ground Water Main (on Bridge)
- 982 LF 8" DIP pipe
- 1 EA 350 GPM Booster Pump Station
- 1 EA 700 GPM Booster Pump Station

C. Groundwater Treatment Plant Relocation Project, United States Corps of Engineers

- Value: \$4,000,000
- 14000 LF of 8" & 10" HDPE
- Dual Containment Piping
- Large Flowmeter Vaults

D. First St. Water Utility Improvements, City of Gilroy

- Value: \$5,990,174
- 8,050 LF 24" DIP Pipe
- 31 EA Fire Hydrants
- 21 Tie-ins

The subsequent sections will help demonstrate how M.P.E. and its team will successfully execute the contract.



### **Coordinating Subcontractors**

M.P.E.'s project team will be up-to-date regarding the current state of the project at all times in order to adequately schedule subcontractors with proper notice in order to diligently prosecute the work without delay. Detailed updated schedules will provide our team with accurate project timelines which will allow for proper scheduling of subcontractors.

Furthermore, we have a long working history with our listed subcontractors, Darrel Varni Electric, Pacific Boring, and Northern Direction Drilling.

### **Material Procurement**

M.P.E. will purchase pipeline and vault materials through Aqueous Vets. Although Aqueous Vets is a relatively young company, we have completed several successful projects with the. We will coordinate with Aqueous Vets to determine what lead times are for required material to be used on the project. Our team will then prioritize and notify the Owner of material with long lead times in an effort to expedite submittal approvals to get these materials ordered first. Material procurement will be shown in the baseline construction schedule for coordination scheduling purposes.

### **Current Company Workload**

MPE's current average Gross between 40 to 50 million per year. We have five full time production pipeline crews, and with the completion of two large underground projects, we have ample capacity to manage this project. Additionally, M.P.E.'s corporate office is within a 2 mile proximity of the project site, furthering our ability to focus on this project.

### **Sequencing**

Below is an outline of construction sequencing to take place in order to successfully complete the project:

1. Pre-construction activities
2. Prepare staging areas and receive/stockpile construction material
3. Prepare and implement SWPPP
4. Construction
  - a. USA site
  - b. Pothole existing utilities
  - c. Propose alignment
  - d. Prepare and execute trenchless and above-ground piping
  - e. Clear proposed pipeline alignment and pre-cut grade
  - f. String pipe
  - g. Excavate trench, install pipe, and backfill
  - h. Install/construct vaults
  - i. Startup/testing
  - j. Restore site
5. Project Closeout



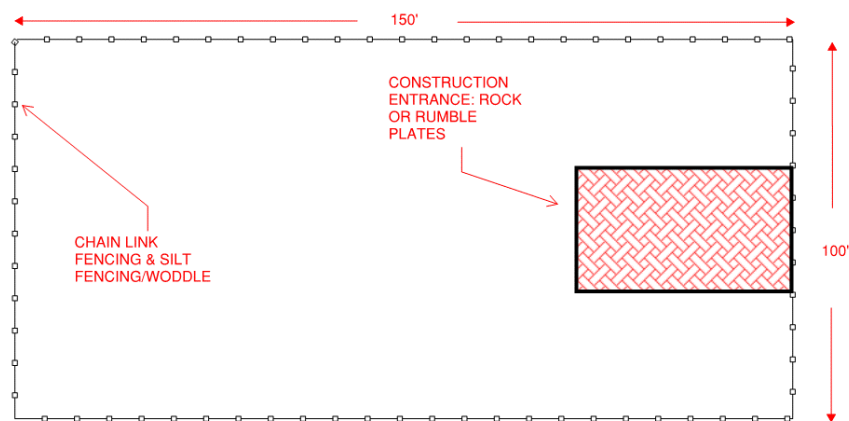


## Pre-Construction Activities

Before construction begins, M.P.E. will employ in preconstruction activities which include the submittal process, material procurement, scheduling, community outreach, pre-construction surveys, planning, and permitting. Included in the pre-construction activities is the development and submission of a Soil and Groundwater Management Plan, Site Specific Health and Safety Plan, Storm Water Pollution Prevention Plan (SWPPP), Groundwater Dewatering Control and Disposal Plan, Traffic Control and Safety Assurance Plan, Dust Control Plan, Emergency Response Plan, Construction Waste Reduction and Recycling Plan, and Noise Control Plan.

## Equipment and Material Staging

Construction materials will be stored strategically within the proposed right-of-way, adjacent to the planned pipeline alignment. If additional space is needed, an additional, offsite staging area will be procured within proximity to the project in order to facilitate construction. These staging areas will be used to stockpile various construction material, such as pipe, fittings, valves, vaults, sand, etc. and provide areas to store construction equipment. Below is a detail illustrating what a typical staging area will look like, however, each location will be dependent upon the governing agency and/or private property owner restrictions.



TYPICAL CONSTRUCTION STAGING AREA

Additionally, M.P.E.'s primary headquarters is conveniently located less than two miles away from the southern-most project limit, which will allow for immediate response to various matters that may arise, and access to a wide variety of equipment, material, and tools that may be required to complete the work during the course of construction.

MONTEREY PENINSULA WATER SUPPLY PROJECT  
REQUEST FOR PROPOSALS FOR THE CONSTRUCTION OF THE CASTROVILLE PIPELINE

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### Prepare and Implement SWPPP

M.P.E. will prepare, submit, and implement a Storm Water Pollution Prevention Plan (SWPPP) in accordance with State Water Resources Control Board NPDES General Permit for stormwater discharges associated with construction activity. The SWPPP will identify erosion and sediment control measures (BMPs) to protect water quality of creeks and wetlands.

### Construction

Below is an outline demonstrating the general sequence of construction activities in order to successfully complete the project

1. USA Site
  - a. Delineate limits of construction
  - b. Call USA North (811) to notify
2. Pothole existing utilities
  - a. Excavate to verify existing utility locations
  - b. Determine potential conflicts
3. Propose alignment
  - a. Proposed pipeline alignment based on location of existing utilities
  - b. Gain approval from all parties
4. Prepare and execute trenchless and above-ground piping
  - a. Excavate jacking and receiving pits
  - b. Install casing by jack and bore method
  - c. Install pipelines by horizontal directional drilling
  - d. Install pipeline under bridge
5. Clear proposed pipeline alignment and pre-cut existing grade
  - a. Clear and grub pipeline alignment
  - b. Cut existing grade to allow for proper shoring methods
6. String Pipe
  - a. Fuse PVC in sections and stage along proposed alignment
7. Excavate trench, install pipe, and backfill
  - a. Excavate trench to depth required for pipeline installation



MONTEREY PENINSULA WATER SUPPLY PROJECT  
REQUEST FOR PROPOSALS FOR THE CONSTRUCTION OF THE CASTROVILLE PIPELINE

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- b. Trench spoils to be stockpile alongside trench
  - c. Place fusion welded section of pipe in trench
  - d. Backfill trench with sand in pipe zone, then native to finish grade
8. Install/construct vaults
  - a. Excavate and install vaults
  - b. Install piping within vaults
9. Startup/testing
  - a. Pressure test and disinfect pipe
  - b. Startup PRV and flow meter
10. Restore site
  - a. Restore site to acceptable condition

### **Construction Management**

During the construction phase of the project, M.P.E. will provide all management and related services as necessary to adequately supervise, monitor, and coordinate the work with the team, subcontractors, and vendors. Our Team will manage all conditions of the site work rules and will establish and monitor safety,

### **Quality Control**

Monterey Peninsula Engineering will develop and enforce a quality control system (Exhibit A, Section 5.0) in order to ensure that the highest required standards of construction are met. The plan in general will address the following elements:

1. Source of materials
  - Sources of materials will be depicted and provided by submittals.
  - Procurement of materials shall be sourced by our material supplier.
2. Work quality
  - All work shall be performed in accordance with Contract Documents.
  - All construction activity shall be performed by qualified mechanics, craft-persons, artisans, and workers skilled and experienced in their field of work.
  - Piping materials that are zinc and/or epoxy coated do not require sacrificial anodes and/or jumpers.
3. Manufacturers specifications and instructions
  - All products and materials shall be used and installed per manufacturer's specifications and instructions outlined in all product and material details.
4. Specialist applications/installers
  - Any material and/or product that require special application shall be installed/handled by appropriate and qualified installer.
5. Manufacturers field services
  - MPE shall have manufacturer of any product that requires special knowledge or skill, install to the proper application if applicable.
  - Manufacturers authorized representatives shall be present at any time of phase their work is to take place such as a Actuator Valve, Flowmeter, Backflow Device and a Pressure Reducing Vault.
6. Engineer's monitoring
  - The contractors Project Engineer shall adhere to their responsibilities



MONTEREY PENINSULA WATER SUPPLY PROJECT  
REQUEST FOR PROPOSALS FOR THE CONSTRUCTION OF THE CASTROVILLE PIPELINE

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7. Engineers inspections and tests
  - Procedures will be approved by California American Water prior to testing. Inspection and test procedures will be prepared in accordance with this procedure. Testing may be performed to specific testing procedures, generic procedures approved to specific work control documents, specifications, or drawings. Compaction testing shall be provided by MPE.
8. Contractors quality testing
  - This procedure establishes the control, methods, and responsibilities by which personnel will conduct inspections and tests on processes, structures, and components during the course of construction activities.
9. Test reports
  - Reports on testing shall be acquired contractor by MPE provided and appointed Compaction Testing Firm and submitted to owner for documentation.
  - Test reports shall include Fusion Testing and Data Logging, and Compaction Testing.
  - Test reports shall include actual test results, and identification of all non-conforming items.
10. Quality control audits
  - The Engineer may perform quality control audits of the MPE and sub-contractors quality records and performance and shall be made available to the Engineer.
11. Certificates of compliance
  - MPE may use certificates of compliance for certain materials and products in lieu of the specified sampling and testing procedures. The certificate of compliance shall be accompanied by a certified copy of test results or shall state that such test results are on file with producer or manufacturer and shall be furnished to the owner on request.
12. Special inspections
  - Special inspections required shall be executed by an independent inspection firm, not affiliated with MPE.

### **Comprehensive Safety Program**

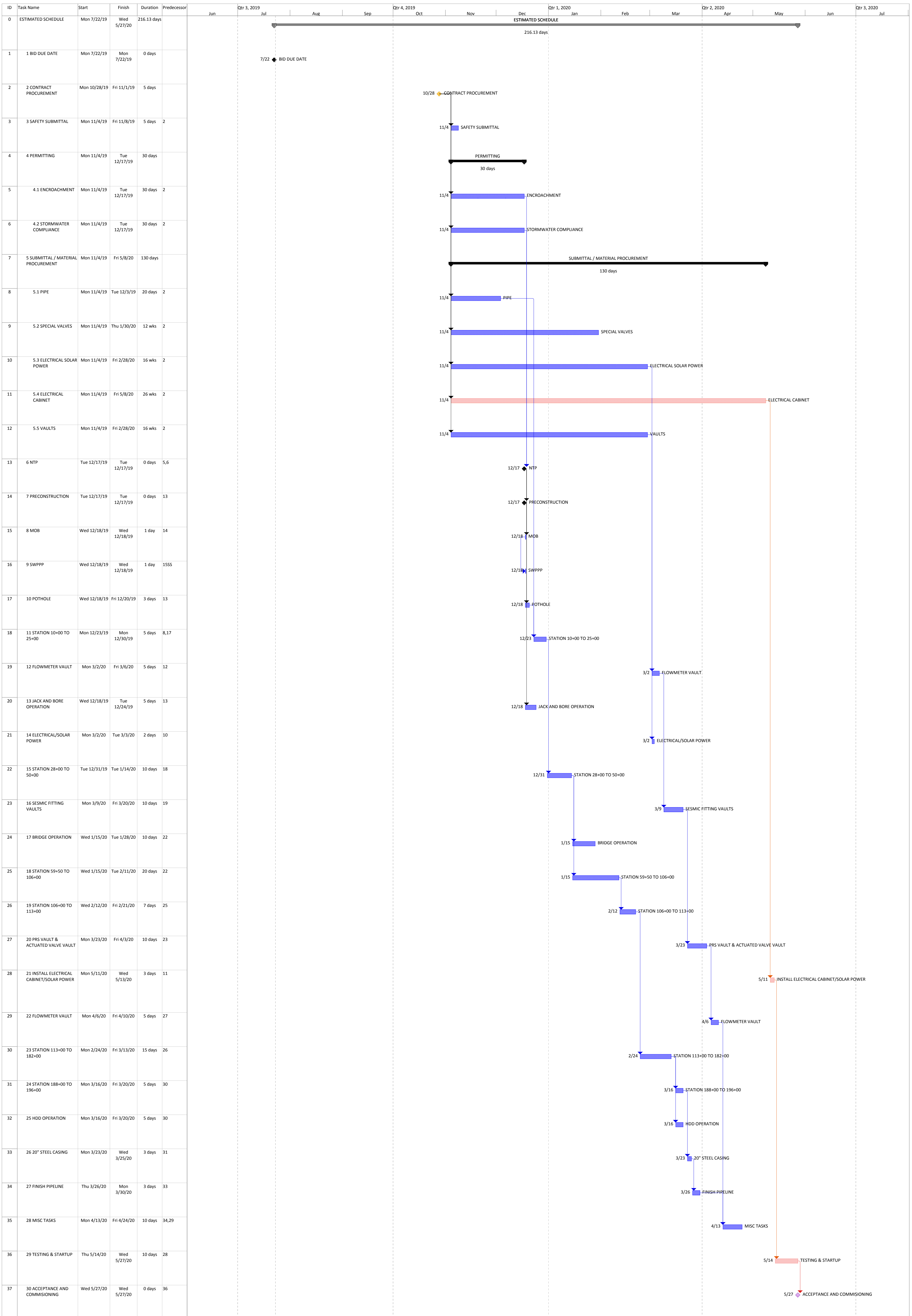
Monterey Peninsula Engineering put safety as a top priority when it comes to project operations. We are continually incorporating new techniques and equipment to perform our work in a safe and productive manner. When it comes to safety, our main concern is that everyone that comes in contact with our jobsite leaves in the same condition that they arrived in. Some of our main safety protocols consist of foreman safety meetings twice a month, weekly tailgate meetings, project specific safety meetings, constant reminders about situational awareness, and a reiteration of the importance of proper personal protective equipment.

MPE will prepare and submit to the owner a comprehensive Safety Program, which complies with the requirements of this project and Occupational Safety and Health (OSHA), as amended. During construction, our Team will monitor compliance by each subcontractor with its contractual safety requirements, and in collaboration with the project personnel charged with monitoring fire and safety regulations, will correct any deficiencies.

*Supplemental: A comprehensive Job Specific Safety Program shall be submitted for review.*



PRELIMINARY SCHEDULE  
CASTROVILLE PIPELINE  
CALIFORNIA AMERICAN WATER



Project: ESTIMATED SCHEDULE  
Date: Tue 7/23/19

|                    |                       |                                      |   |                                 |
|--------------------|-----------------------|--------------------------------------|---|---------------------------------|
| Task Split         | Inactive Milestone    | Finish-only                          | Path Successor Summary Task             | Path Predecessor Normal Task    |
| Milestone          | Inactive Summary      | External Tasks                       | Path Successor Normal Task              | Path Predecessor Milestone Task |
| Summary            | Manual Task           | External Milestone                   | Path Driving Predecessor Milestone Task | Critical                        |
| Project Summary    | Manual Summary Rollup | Path Driven Successor Milestone Task | Path Driving Predecessor Summary Task   | Critical Split                  |
| External Tasks     | Manual Summary        | Path Driven Successor Summary Task   | Path Driving Predecessor Normal Task    | Progress                        |
| External Milestone | Start-only            | Path Driven Successor Normal Task    | Path Predecessor Normal Task            | Deadline                        |
|                    |                       | Path Successor Milestone Task        | Path Predecessor Milestone Task         |                                 |
|                    |                       |                                      | Path Predecessor Summary Task           |                                 |

**SECTION 4.0 BUSINESS AND PRICE PROPOSAL**

A. SUMMARY OF BUSINESS AND PRICE PROPOSAL

**See Executive Summary and BID PACKAGE**



B. ATTACHMENT C: BID PACKAGE



## Bid Addendum No. 1

## CAW MONTEREY PENINSULA WATER SUPPLY PROJECT

| BID ITEM                              | APPROX. QTY. | UNIT   | DESCRIPTION WITH UNIT PRICE (PRICE IS INCLUSIVE OF ALL APPLICABLE TAXES, PROFIT, INSURANCE, BONDS AND OTHER OVERHEAD)                 | UNIT PRICE    | TOTAL ITEM PRICE |
|---------------------------------------|--------------|--------|---|---------------|------------------|
| 1                                     | 1            | ALLOW. | Pre-Construction Activities, Community Outreach & Permits   | \$ 30,000.00  | \$ 30,000.00     |
| 2                                     | 1            | LS     | General Overhead, Bonding and Insurance   | \$ 75,000.00  | \$ 75,000.00     |
| 3                                     | 1            | LS     | Mobilization/Demobilization   | \$ 450,000.00 | \$ 450,000.00    |
| 4                                     | 1            | LS     | Environmental Requirements, Erosion Control and SWPPP   | \$ 10,000.00  | \$ 10,000.00     |
| 5                                     | 4350         | LF     | Silt and Exclusion Fencing  | \$ 3.00       | \$ 13,050.00     |
| 6                                     | 1            | LS     | Health and Safety Compliance  | \$ 1,500.00   | \$ 1,500.00      |
| 7                                     | 15           | Ea     | Utility Potholing   | \$ 600.00     | \$ 9,000.00      |
| 8                                     | 1            | LS     | Staking/Surveying/As-Built Drawings   | \$ 5,000.00   | \$ 5,000.00      |
| 9                                     | 1            | LS     | Traffic Control   | \$ 10,000.00  | \$ 10,000.00     |
| 10                                    | 1            | LS     | Trench Shoring  | \$ 5,000.00   | \$ 5,000.00      |
| 11                                    | 1            | LS     | Trench Dewatering   | \$ 5,000.00   | \$ 5,000.00      |
| 12                                    | 1            | LS     | Jack and Bore under RR at Dole Entry  | \$ 100,000.00 | \$ 100,000.00    |
| 13                                    | 160          | LF     | Install 8" Pipeline in Steel Casing (Hwy 183)   | \$ 300.00     | \$ 48,000.00     |
| 14                                    | 1            | LS     | HDD 400 LF 8" Fused PVC under Tembladero Slough   | \$ 60,000.00  | \$ 60,000.00     |
| 15                                    | 9138         | LF     | Provide and Install 12" DI Pipe   | \$ 108.00     | \$ 986,904.00    |
| 16                                    | 8400         | LF     | Provide and Install 8" DI Pipe with NBR Gaskets for CCSD Portion  | \$ 85.00      | \$ 714,000.00    |
| 17                                    | 180          | LF     | Provide and Install 8" DI Pipe with NBR Gaskets for CAW Portion   | \$ 76.00      | \$ 13,680.00     |
| 18                                    | 258          | EA     | NBR Gaskets for about 5063 LF of 12" DI Pipe (for 20 ft sticks of pipe)   | \$ 40.00      | \$ 10,320.00     |
| 19                                    | 1            | LS     | Chain Link Fencing, Concrete Pads and Grading at 3 Meter Stations   | \$ 25,000.00  | \$ 25,000.00     |
| 20                                    | 1            | LS     | Cathodic Protection for CAW Portion Metallic Pipelines and Appurtenances<br>Cathodic Protection System or Zinc-Coated DIP. Circle One | \$ 50,000.00  | \$ 50,000.00     |
| 21                                    | 1            | LS     | Cathodic Protection for CCSD Portion Metallic Pipelines and Appurtenances   | \$ 50,000.00  | \$ 50,000.00     |
| 22                                    | 1            | LS     | Restoration of Pavement Markings  | \$ 2,000.00   | \$ 2,000.00      |
| 23                                    | 97           | TONS   | AC Pavement   | \$ 300.00     | \$ 29,100.00     |
| 24                                    | 1            | LS     | Lead Testing and Abatement for Caltrans at Hwy 183  | \$ 1,000.00   | \$ 1,000.00      |
| 25                                    | 4571         | CY     | Soil Disposal (Non-hazardous)   | \$ 19.00      | \$ 86,849.00     |
| 26                                    | 48400        | SF     | Seeding (CA Native Mix)   | \$ 0.25       | \$ 12,100.00     |
| 27                                    | 1            | LS     | Electrical and Instrumentation Testing and Startup  | \$ 42,500.00  | \$ 42,500.00     |
| 28                                    | 1            | ALLOW. | Repair of Irrigation Lines and Drain Tiles  | \$ 10,000.00  | \$ 10,000.00     |
| <b>Valves/Appurtenances</b>           |              |        |   |               |                  |
| 29                                    | 6            | EA     | Install 12" Gate Isolation Valve  | \$ 5,000.00   | \$ 30,000.00     |
| 30                                    | 5            | EA     | Install 8" Gate Isolation Valve   | \$ 3,500.00   | \$ 17,500.00     |
| 31                                    | 8            | EA     | 2" Combination ARVs   | \$ 22,000.00  | \$ 176,000.00    |
| 32                                    | 9            | EA     | Pump out Blowoff Assembly   | \$ 13,000.00  | \$ 117,000.00    |
| <b>CAW Lapis Road Meter Station</b>   |              |        |   |               |                  |
| 33                                    | 1            | LS     | Lapis Flow Meter in Vault   | \$ 33,000.00  | \$ 33,000.00     |
| 34                                    | 1            | LS     | Electrical and Instrumentation at Lapis FM (Solar)  | \$ 55,000.00  | \$ 55,000.00     |
| <b>CAW Nashua Road Meter Station</b>  |              |        |   |               |                  |
| 35                                    | 1            | LS     | CSIP Tie-In (12" Tee & 12" GV & 12" x 8" reducer)   | \$ 20,000.00  | \$ 20,000.00     |
| 36                                    | 1            | LS     | 8" RPP Backflow Prevention Device   | \$ 26,000.00  | \$ 26,000.00     |
| 37                                    | 1            | LS     | 8" Pressure Regulating Station in Vault   | \$ 75,000.00  | \$ 75,000.00     |
| 38                                    | 1            | LS     | 8" Actuated Valve in Vault  | \$ 35,000.00  | \$ 35,000.00     |
| 39                                    | 1            | LS     | Electrical and Instrumentation at CAW Nashua Road Meter Station   | \$ 110,000.00 | \$ 110,000.00    |
| 40                                    | 1            | ALLOW. | PG&E Service at CAW Nashua Road Meter Station   | \$ 50,000.00  | \$ 50,000.00     |
| 41                                    | 1            | LS     | PLC/SCADA Programming for CAW (Lapis and Nashua)  | \$ 35,000.00  | \$ 35,000.00     |
| <b>CCSD Nashua Road Meter Station</b> |              |        |   |               |                  |
| 42                                    | 1            | LS     | 8" Flow Meter in Vault  | \$ 48,000.00  | \$ 48,000.00     |
| 43                                    | 1            | LS     | Electrical and Instrumentation at CCSD Nashua Road Meter Station (Solar)  | \$ 120,000.00 | \$ 120,000.00    |
| 44                                    | 1            | LS     | PLC/SCADA Programming for CCSD  | \$ 6,000.00   | \$ 6,000.00      |
| <b>Monte Road Bridge Crossing</b>     |              |        |   |               |                  |
| 45                                    | 2            | EA     | Provide and Install Welded Steel Pipe Casings in Bridge Abutments   | \$ 20,000.00  | \$ 40,000.00     |
| 46                                    | 3450         | LB     | Miscellaneous Metal (Bridge)  | \$ 25.00      | \$ 86,250.00     |
| 47                                    | 830          | LF     | 12" Ductile Iron Pipe between Seismic Joints, Epoxy coated  | \$ 140.00     | \$ 116,200.00    |
| 48                                    | 1            | LS     | Erect waterline pipe hanger system (bridge)   | \$ 90,000.00  | \$ 90,000.00     |
| 49                                    | 2            | EA     | Provide and Install PC Concrete Utility Vault   | \$ 28,000.00  | \$ 56,000.00     |
| 50                                    | 2            | EA     | Provide and Install Seismic Joint in Vault  | \$ 22,000.00  | \$ 44,000.00     |
| 51                                    | 1            | LS     | Concrete Barrier 736 (Railing connection)   | \$ 15,000.00  | \$ 15,000.00     |
| <b>Total</b>                          |              |        |   |               | \$ 4,255,953.00  |
| <b>Alternate Bid Items</b>            |              |        |   |               |                  |
| A                                     | 3450         | L      | Provide All Misc. Metals for Bridge in 316 Stainless Steel  | \$ 42.00      | \$ 144,900.00    |
| B                                     | 8400         | LF     | Provide and Install 8" Fusible PVC Pipe for CCSD Portion  | \$ 80.00      | \$ 672,000.00    |
| C                                     | 9138         | LF     | Provide and Install 12" DI Pipe FOR MARINA PORTION  | \$ 103.00     | \$ 941,214.00    |



C. PROPOSAL FORM 11: ACCEPTANCE OF CONTRACT


Proposer agrees to all of the provisions of the draft Contract except as expressly provided in the track changes or redline version of the draft Contract that is attached to this Proposal Form.

Monterey Peninsula Engineering, A Partnership

Name of Proposer

Peter J. Taormina

Name of Designated Signatory

  
Signature

Manager

Title

PF11-1



**SECTION 5.0 EXHIBITS**

A. CONTRACTOR'S CONSTRUCTION QUALITY PLAN



---

**CALIFORNIA AMERICAN WATER**

**Castroville Pipeline  
for the  
Monterey Peninsula Water Supply  
Project**

**CONTRACTOR'S CONSTRUCTION QUALITY PLAN**

Prepared By

**MONTEREY PENINSULA ENGINEERING**



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**SECTION 1**

**INTRODUCTION**



**1.1 CONSTRUCTION QUALITY PLAN OVERVIEW**

The purpose of this Construction Quality Plan (CQP) is to outline the organizational structure and prospective responsibilities to manage, control, document, and assure that the work complies with the Contract Documents. The Cs organized to provide quality procedures, inspection programs, and testing plans for the features of work defined in the contract specifications. This project, located in Castroville, will furnish, install and test a Fusible Polyvinylchloride (FPVC) below-grade and vaulted pipeline appurtenances.

Monterey Peninsula Engineering will be responsible for administering the construction operations as outlined in the project plans and specifications. Monterey Peninsula Engineering will provide quality control inspection and testing as indicated in the project specifications. Subcontractor responsibilities are described in this CQP under the section that pertains to their involvement. The Field Quality Control Manager is given the authority and organizational freedom to identify quality problems, recommend or initiate solutions, and, when necessary, to limit or control further processing of nonconforming items or procedures until proper disposition has been made. The Field QC Manager shall report directly to a senior management of the Contractor to ensure organizational freedom, identify quality problems, and initiate and recommend solutions.

The management of Monterey Peninsula Engineering has approved this plan, has required implementation of this plan by subcontractors, producers and suppliers, and directs that compliance to this plan is mandatory.

A handwritten signature in blue ink, appearing to read 'Peter Taormina', written over a horizontal line.

Monterey Peninsula Engineering  
**Peter Taormina, Manager**



MONTEREY PENINSULA ENGINEERING

CONTRACTORS & ENGINEERS  
P.O. BOX 2317  
MONTEREY, CA 93942  
(831) 384-4081

**CONSTRUCTION QUALITY PLAN**

## **SECTION 2**

### **PROJECT QUALITY PERSONNEL AND ORGANIZATION**



## **2.1 QUALITY PROGRAM PERSONNEL**

Jim Bruno, with MPE, will be the Field Quality Control Manager (FQCM). Mr. Bruno's qualifications and experience are included in a separate submittal. The FQCM will be available at the project site or at offsite locations as necessary, to manage and monitor the quality of construction and activities and perform the duties outlined in this CQP.

The FQCM will coordinate sampling, testing, and inspection staff from various testing agencies on a daily basis and ensure they have the necessary equipment and training to perform their respective responsibilities. Testers and samplers will be assigned to provide quality testing as required by the project specifications.

### **Project Manager (PM): Peter Taormina**

Responsibilities:

1. Assist the FQCM in approving the Construction Quality Plan and associated procedures.
2. Managing construction activities associated with the Project.
3. Overseeing project personnel work activities.
4. Coordinating sub-contractor activities.
5. Ensuring compliance with the project design criteria.

### **Project Engineer: Etheline Cimatú**

Responsibilities:

1. Maintaining RFI's, procedures, and compliance with engineering quality items.
2. Ensuring personnel complies with quality requirements set forth by the FQCM, safety, and environmental program requirements during the construction activities.

### **Field Quality Control Manager (FQCM): Jim Bruno**

Responsibilities:

1. Develop, manage, and implement the QC plan to ensure that all Work complies with the quality set forth in the Contract.
2. Coordinate and document QC coordination meetings.
3. Be present on-site, perform inspections throughout the Project duration, and bring in other QC personnel as necessary.
4. The field QC Manager shall be present on-site regularly to ensure Work is being performed properly.
5. Managing all quality matters for the project and has the authority to act in all quality matters for the contractor, sub-contractor, and suppliers.
6. Managing the Quality Control personnel and all quality related activities.
7. Reviewing and approving all quality related documents.
8. Managing nonconforming items from identification through correction.
9. Initiate and recommend corrections through appropriate channels
10. Verify correction or implementation of solutions to correct nonconforming items or





conditions

### **Inspectors and Testing Technicians**

MPE will provide inspectors and testing technicians. The inspectors and testing technicians will observe the work in progress and perform quality control tests onsite, in a materials testing laboratory, or offsite as required by the Contract Documents. The FCQM will coordinate inspections and testing with the Inspectors and Testing Technicians.

### **Foremen**

Foremen will coordinate and assist the FCQM to ensure that the material and equipment comply with the requirements of the Contract Specifications.

### **Project Specialized Personnel**

Specialized personnel will be utilized to assist the implementation of the Construction Quality Plan. They will be under the general direction of the Project Engineer to perform various duties such as document control and project tracking.

## **2.2 QC TRAINING**

### **SCOPE**

This Procedure describes the method that will control and maintain Quality Training when required for all Project personnel.

### **RESPONSIBILITIES**

- A. The Project Manager is responsible for:
  - 1. Assigning current and promptly trained personnel for work activities.
  - 2. Ensuring additional training is administered when required for retraining or complex specialized tasks.
- B. The FCQM is responsible for:
  - 1. Ensuring periodic assessments are performed for verification of compliance with this Procedure.
  - 2. When deemed necessary, identifying any additional required training for new Procedures or Revisions.

### **TRAINING**

All Training will be conducted by qualified instructors and will be through a formal class or self-study. Personnel training will be documented on a Training Sheet/Roster and indicate the trainee name, training subject, type of training, and method used (e.g. classroom or self-study).

- A. Training for quality requirements per the Construction Quality Plan may also be through tailgate meetings, preparatory meetings, and initial activity meetings.



- B. Prior to the commencement of work activities, personnel will have the required level of training and/or qualifications for their discipline.
- C. The appropriate construction and/or QC Staff will be trained, as required, for their respective responsibilities as deemed necessary.

#### DOCUMENTATION

- A. Requisite training or certification for Inspection and Testing will be the responsibility of the independent testing and inspection agency.
- B. The FQCM will verify the training/certification requirements for inspectors and technicians from the testing and inspection before scheduling/assigning them to the project site.
- C. Requisite special processes or certification from manufacturer's representative will be the responsibility of the Contractor, assisted by the FQCM. The personnel trained for each special processes/product will be entered into the Personnel Qualifications Log.
- D. Tailgate meetings, preparatory meetings, and initial meetings where training for quality is provided will be documented in training sign-in rosters, or the meeting checklists. Documents of training and attendees will be maintained in accordance with Document Control.

#### QUALITY RECORDS

- A. Personnel Qualifications Log
  - 3. Training Manuals/Resources
  - 4. Training Sign-in Sheets/Rosters



MONTEREY PENINSULA ENGINEERING

CONTRACTORS & ENGINEERS  
P.O. BOX 2317  
MONTEREY, CA 93942  
(831) 384-4081

**CONSTRUCTION QUALITY PLAN**

### **SECTION 3**

## **CONSTRUCTION QUALITY CONTROLS**



### 3.1 DOCUMENTATION

#### SCOPE

These controls establish the method by which all documents for the Project will be managed and controlled. Documents are reviewed and approved prior to use. Appropriate documents are available at locations where they are intended to be used. Previous or obsolete versions of documents are to be annotated as obsolete, superseded, or revised, removed from points of use, and maintained on file (paper and electronic).

#### RESPONSIBILITIES

- B. The Project Manager is responsible for:
  - 1. Ensuring these controls are implemented and consistent with the Contract Document requirements.
  - 2. Processing all contract documents by reviewing for adequacy.
  - 3. Publishing and distributing documents to use for construction.
  - 4. Making such documents available at the construction site where the activity is being performed.
- C. The Project Engineer is responsible for:
  - 1. Ensuring Subcontractor and Supplier Submittals are correct and in compliance with the Contract Documents.
  - 2. Initiating RFI's for the resolution of technical and design problems.
  - 3. Ensuring As-Built drawings are prepared, reviewed, approved, and transmitted to California American Water upon completion of the Project.
  - 4. Maintaining the RFI Log, Submittal Log, and other document logs through completion of the Project.
  - 5. Completing daily records of field activities and submitting them to California American Water within 24 hours of completion of the shift covered or as requested.
- D. The Field Quality Control Manager (FQCM) is responsible for:
  - 1. Coordinating and developing document controls.
  - 2. Reviewing and approving of all revisions to document controls.

#### DOCUMENTATION AND RECORDS CONTROL:

- A. The following types of documents will require control:
  - 1. Drawings
  - 2. Specifications
  - 3. Inspection procedures and records
  - 4. Test procedures and records
  - 5. Special process controls
  - 6. RFI's
  - 7. Submittals
  - 8. Measuring and Testing Equipment Log
  - 9. Daily Field Records



10. Documents will be distributed to the appropriate personnel using the following procedures.
11. A Distribution Log lists the document, revision, document destination, and date issued.
12. Obsolete documents are promptly removed.
13. Revised documents are replaced when received by the document holders of controlled documents.
14. Revised documents are reviewed and approved by the same authorized personnel that performed the original review and approval.
15. Whenever a revision to a document is made, the revision level of each page of that document will be advanced. A bar in the margin adjacent to the revised paragraph delineates the most recent revision. On the next revision, it is removed.
16. Appropriate documents are placed for use at the location where the activity is being performed.
17. All Project documents will be maintained and stored in a safe manner. The document will be arranged in a neat orderly manner via filing indices, register, etc.

#### SUBMITTAL CONTROL:

- A. Submittal Documents will be logged and submitted in accordance with the Contract Documents.
  1. The Contract Submittal List (Attachment 01 33 00 - A) will be used as a guideline for developing a Submittal Log.
  2. A Submittal Log will be created and maintained throughout the duration of the Project.
  3. A Submittal Cover Letter Form will be attached to all submittals separately.
  4. Submittals will be consecutively and uniquely numbered.
  5. References will be made to applicable plans or specification sections.
  6. For all submittal requirements in the Contract Specifications, five hardcopies and one electronic copy will be furnished, unless otherwise directed.
  7. Status of submittals will be reviewed monthly as part of the Project Manager's audit.

#### RFI / REDLINE DRAWING PROCEDURES

- A. Request for Information (RFI):
  1. RFIs will be generated by the Contractor when additional information, clarification, direction, or discrepancy resolution is required.
  2. The Project Engineer will maintain the original RFI Log of the field generated RFI's. This Log will be controlled and maintained as a Quality Record.
  3. Upon initiation, the RFI will be given a consecutive unique number that will appear on the document and on the RFI Log. The initiator's name and signature will also appear on the document. The RFI will then be transmitted to California American Water on the appropriate form.
  4. Upon receipt of the RFI, the required actions will be implemented and appropriate documents marked-up (red-line) to reflect any changes with cross-references to the RFI and impacted Project.



**B. Redline (Record) Drawings:**

1. Legibly record the changes concurrent with the construction progress on a regular basis. Do not conceal any part of the work until changes have been recorded.
2. Reference to field notes, RFIs, change orders, or other documents will not be accepted as sole description of change. All changes will be shown complete on the Redline Construction Drawings.
3. The area or detail of the Redlined Construction Drawing that is currently being revised will be clouded in and marked with a triangle with the revision number enclosed.
4. The revision's description will be noted in the left-hand revision block.
5. The number in both revision blocks will agree.
6. The revision date will be shown.
7. At contract closeout, a new entry in the revision block indicating "Record Drawings" should be included.
8. A Drawing Index will be revised to reflect all the drawings in the package.
9. When more than one change is made in any of the drawings, record copies of the sequences of changes will be clearly identified graphically and dated.
10. Redlined construction drawings will be marked to show the horizontal location, elevation, and dimensions of any revised work.

**RECORDS:**

- Distribution Log
- RFI Log
- Submittal Log
- Redline (Record) drawings
- Daily Field Records

**3.2 SUBCONTRACTOR, SUPPLIER, AND VENDOR CONTROLS**

**SCOPE**

These controls establish guidelines to assure that items and services are procured from Subcontractors and Suppliers that are capable of meeting all requirements of the Contract Documents. This includes the development and control of Procurement Documents and the identification and inclusion of requirements for quality items and services.

**RESPONSIBILITIES**

- A. The Project Manager is responsible for:
1. Overseeing the procurement and delivery of materials from Suppliers and Vendors.
  2. Managing the daily construction activities and installation of materials by Subcontractors.
  3. Specifying and controlling the quality of work performed by the Subcontractors.
- B. The Project Engineer is responsible for:



1. Reviewing all Procurement Documents for permanent materials ensure compliance with these controls and the Contract Documents.
  2. Ensuring materials required for permanent installation during the Project are in accordance with the Contract Documents.
- C. The Field Quality Control Manager (FQCM) is responsible for:
1. All quality control matters for Suppliers, Subcontractors, and Vendors.
  2. Ensuring that Subcontractors/Suppliers meet the requirements set forth in the QCP.
  3. Maintaining a Quality Plan Log that documents the Suppliers, Subcontractors, and Vendors have read and understand the CQP or have their own approved Quality Plan.

#### SUBCONTRACTOR, SUPPLIER, AND VENDOR CONTROL

- A. All Subcontractors, Suppliers, and Vendors will comply with the Contract Documents and this Construction Quality Plan or their own approved plan.
1. The Contractor will review the Subcontractors/Suppliers agreements to ensure the inclusion of applicable quality requirements.
  2. The FQCM will review all Subcontractors and Suppliers Quality Procedures before submitting to California American Water.
  3. Subcontractors, Suppliers, and Vendors will undergo Quality Training as described in this CQP.
- B. Quality characteristics that cannot, or will not, be verified during the onsite installation, will be subject to source inspection.
1. California American Water will be notified of source inspections and will be provided the opportunity to witness all tests or inspections.
  2. Source inspection may not be necessary when the quality of the item can be fully and adequately verified by review of inspection and/or test reports, inspection upon receipt, or other means.
  3. The Contractor will perform internal audits of Subcontractors, Suppliers, and Vendors to ensure compliance with quality controls set forth in this CQP and the Contract Documents.

#### RECORDS

- Quality Plan Log
- Completed Materials Requisitions (MR), Purchase Orders (PO), and other related documentation is to be maintained as Quality Records and retained in Procurement/Purchase Order Files. (See Materials Controls section).

### **3.3 CONTROL OF MATERIALS AND EQUIPMENT**

#### SCOPE

This Procedure establishes the requirements for receiving, handling, storage, and control of



material and equipment.

#### RESPONSIBILITIES

- A. The Project Manager is responsible for:
  1. Ensuring personnel adhere to the controls herein.
  2. Ensuring materials and associated documentation are maintained and controlled in accordance with these controls and the Construction Quality Plan.
- B. The Project Engineer is responsible for specifying material and equipment items needed in accordance with this Procedure in compliance with the Contract Documents.
- C. The Field Quality Control Manager (FQCM) responsibilities are:
  1. Review all certifications of compliance with shipping.
  2. Review the inspection and testing reports from the onsite QA representatives.

#### RECEIVING, HANDLING, STORAGE, AND CONTROL OF MATERIALS AND EQUIPMENT:

1. All materials and equipment delivered to the Project will be inspected as received for compliance with the Contract Documents.
2. Tools and equipment used in the handling, storage, and shipping of material will be identified, inspected, tested, and maintained.
3. Prior to use and periodically, verifications will be performed on all shelf life equipment items that could be installed during work activities, e.g., weld rod. Items found with expired shelf life will be identified, segregated, and strictly controlled until removal from the work site or disposal can be arranged.
4. For traceability of material, the P.O. number and Stock Code number will be maintained on or attached to the material from the point of issue to the point of installation.
5. A Positive Material Identification (PMI) Log will be maintained for all material and equipment that is delivered to the Project. This Log will contain the following:
  - Positive Material Identification Number.
  - Material source.
  - Description of material or equipment.
  - Date received.
  - Supporting documentation number.
  - Quantity received.
  - Condition of material
  - Storage location.
  - Name of receiving inspector.
6. PMI will be implemented so that each item has a unique identification number to distinguish identical items made in separate fabrication processes and confirm the material of construction is the grade of material specified.
7. The Project Manager and FQCM will be informed of any damage or otherwise non-compliant material received into storage or at the work site.
8. Non-compliant material found during receipt or installation at the work site will be segregated from the other items or clearly identified as non-conforming and will be





reported to the FQCM for initiation of an NCR.

9. When stored items are identified by the Project Engineer as requiring Preventative Maintenance, the maintenance will be performed and documented as required.
10. Quality related critical, sensitive, perishable, or high value materials or equipment, which are not covered by reference documents, should require the issuance of a specific procedure, instruction, or checklist. The FQCM will generate this document when needed.
11. Independent testing of items may be performed to ensure compliance with the Contract Documents.

#### MATERIAL REQUISITION:

When materials and equipment are required, the Requestor will ensure any special requirements are identified on the Material Requisition (MR) or Purchase Order (PO). These special requirements may include: Listing, labeling, standards, submittals, codes, subsequent changes to procurement documentation, inspection, testing, material tractability, or environmental requirements.

#### FIELD HANDLING AND STORAGE:

- A. Good housekeeping practices will be maintained in all field storage yards.
- B. The Project Manager will ensure storage areas are provided and controlled as follows:
  1. Storage areas will be strictly controlled and limited to authorized personnel only, as designated by the Project Manager.
  2. The storage facility will maintain the identification, tractability, and integrity of items in compliance with the Contract Documents.
  3. The Technical Specifications and Manufacturer's recommended requirements for maintenance, handling, and storage of items will be adhered to.
  4. Storage, inspection, and segregation areas will be designated for dissimilar items. Where it is not feasible due to size or special handling to segregate items from dissimilar or non-conforming items, each item will be clearly identified and marked.
- C. Materials will be identified and segregated from other materials once received at the work site material storage area. The storage facility will maintain the identification, tractability, and integrity of all material.
- D. Restricted and segregated storage areas will be used for flammable and hazardous material in accordance with Safety Procedures. A Log will be used and maintained to document the issue and return of hazardous or flammable material.
- E. The Project Manager will assign appropriate personnel to draw materials from storage and will ensure personnel are cognizant of the requirements for maintaining tractability and protecting materials from damage during storage and handling.
- F. Materials issued to the work site or storage areas in bulk or lots, may require the transfer of identification and/or markings to ensure tractability.



**MATERIALS RETURNED TO STOCK:**

- A. A. Materials that can be identified as previous stock by the Stock Code Number may be returned to stock after inspection and acceptance.

**SURPLUS AND EXCESS MATERIAL:**

- A. Upon completion of work, the Project Manager will ensure the collection, inventory, and return of all surplus material.
- B. Material will be segregated to await disposition at the Project Manager's discretion. All material documentation, tractability, and segregation requirements will be maintained.

**RECORDS:**

- A. Quality Records include:
  - 1. Purchase Orders (PO's)
  - 2. Material Requisitions (MR's)
  - 3. Flammable and Hazardous Materials Log
  - 4. PMI Log
  - 5. NCR Log
  - 6. Material Safety Data Sheets (MSDS)

**3.4 CONTROL OF NON-CONFORMING ITEMS**

**SCOPE**

These controls establish the methods and responsibilities by which Non-Conformance items will be identified, tracked, and resolved for compliance with the Contract Documents.

**RESPONSIBILITIES**

- A. The Project Manager is responsible for:
  - 7. Ensuring the requirements of the Non-Conformance process are implemented.
  - 8. Interface with California American Water to clarify work scope or design issues as required to satisfactorily implement and complete work required by Non-Conformance Report (NCR) dispositions.
- B. The Field Quality Control Manager (FQCM) is responsible for:
  - 1. Recognizing non-conforming conditions and determining if an NCR is necessary
  - 2. Coordinating activities to control NCR routing and corrective action implementation.
  - 3. Drafting and/or reviewing NCRs.
  - 4. Documenting the resolution and closing of NCRs.
  - 5. All personnel are responsible for reporting Non-Conforming conditions to their responsible supervisor. The responsible supervisor will report the Non-Conforming condition to the FQCM for determination of the need for a Non-Conformance



Report.

6. Work activities resulting from NCRs will be completed in accordance with the disposition of that report. When an NCR disposition requires a third-party inspection, the responsible supervisor will be notified to coordinate required inspection activities.

#### NON-CONFORMANCE CONTROL

- A. Non-Conformance conditions, which are identified through testing, inspections, or receiving, will be promptly reported to the FQCM by the Foreman or Superintendent in charge of the work item.
- B. NCRs will be prepared upon discovery of non-conformances as determined by the FQCM.
- C. All NCRs will be received by the FQCM and distributed to the responsible party within 24 hours.
- D. A written Corrective Action will be developed by the responsible party and submitted to the FQCM.
  1. The Corrective Action will be included in the Non-Conformance Report and include procedures to resolve the NCR and preventive measures to avoid recurrence.
  2. Corrective Actions will be implemented to bring the Non-Conforming conditions into compliance with the Contract Documents or to remove the Non-Conforming items from the work.
  3. Evaluations proposed to determine conformance will be performed by qualified personnel who have demonstrated competence in the specific discipline.
- E. The Contractor is responsible for the proper disposition of NCRs in collaboration with California American Water. Disposition options will include:
  1. Accept: California American Water accepts the Corrective Action and the Non-Conformance Report
  2. Reject: California American Water rejects the Corrective Action and/or NCR. Explanation should be provided.
  3. Resolve as follows: California American Water provides explanation of how to resolve the NCR properly if the Corrective Action is insufficient.
- F. The FQCM will maintain a file and log of all NCRs issued. The NCR file will be reviewed at intervals of no more than one week to update and verify status of each NCR.

#### QUALITY RECORDS

- A. Non-Conformance Reports (include Corrective Actions)
- B. NCR Log

### 3.5 PROCESS CONTROL

#### SCOPE

This section describes the functions and responsibilities for control of Processes and Special



Process Activities for structures, systems, and components. This Procedure describes how the Construction Process Activities are communicated to all key personnel. This Procedure also applies to Subcontractors and Suppliers of services and materials who specify or perform Special Process Activities on any element of the Project.

#### RESPONSIBILITIES

- A. The Project Manager will assist the FQCM with the implementation of Process and Special Process Procedures in accordance with the Quality Plan.
- B. The Project Engineer will assist the FQCM with the implementation of Process and Special Process Procedures in accordance with the Quality Plan.
- C. The FQCM is responsible for:
  - 1. Developing or acquiring requested Special Construction Process Procedures.
  - 2. Coordinating required inspections activities with California American Water and Inspection Agency.
  - 3. Review processes and procedures for inclusion of required Quality Control activities or requirements.
  - 4. Prepare minutes as a result of any Quality Coordination Meetings

#### PROCESS CONTROL

- A. A preparatory meeting will take place a minimum of 3 days in advance before the start of the definable feature of work. The meeting will review the scope of work to be performed. Topics of discussion will include but not limited to testing plan, submittals, materials, construction methods, and safety. The FQCM, QC specialists, superintendent, safety officer, subcontractor foreman, and District Engineer or his/her QA representative shall be present at the meeting.
- B. An Initial meeting shall take place within 1 day or as soon as reasonably possible of the start of a definable feature of work. The meeting will review the minutes of the preparatory meeting, verify that materials and equipment is on site, establish a level of workmanship and verify that it meets minimum acceptable standards, compare with required samples and mockups as appropriate, and resolve all differences. Those in attendance shall comprise of the same personnel identified at the preparatory meeting.
- C. Specialty Processes may include welding, special coating, and other processes when the results are highly dependent on the process or skill of operators. Also included is work, which must comply with the regulations of other agencies, such as the City.
- D. Special Process Procedures will be developed and will be qualified so that the associated standards, specifications, or other special contractual requirements using qualified personnel and/or equipment. Special Process Procedures will be developed in accordance with the requirements of this Procedure.

#### PROCEDURES



A. Development of Special Processes

1. The FQCM will review the scope of work and determine if special processes will be conducted. If it is determined that a third-party contractor will be used, California American Water will be notified.
2. The FQCM will compile and review the technical information required for conducting the special process and will either acquire an Authority approved procedure or prepare a procedure describing the manner in which the work will be conducted. If a third-party contractor will be performing work involving special processes, the procedure will be developed with assistance from the Contractor and the provided procedure may be submitted to California American Water for approval and implemented accordingly.
3. Special Process Procedures will be developed in accordance with this Procedure and clearly define the essential process steps or attributes as determined by the FQCM. These procedures will provide for:
  - Special Process Description
  - Procedure/Process Qualification
  - Personnel qualification/certification requirements
  - Tool/equipment/M&TE/material requirements
  - Special training requirements
  - Reference to governing codes, regulations, and/or Project Specifications
  - Detailed step-by-step instructions
  - Documentation requirements
4. If it is determined a Special Process needs to be reviewed, due to changes requested by engineering, RFI Requirement, or other circumstances, the proposed changes will be evaluated by the Project Manager and routed for approvals in the same manner as the original.

B. Implementation:

1. Qualified individuals, who meet the qualification requirements specified in the Special Process Procedure, will perform special processes.
2. If qualified individuals are not available to perform Special Process tasks, training sessions will be conducted utilizing instruction from Engineering, Manufacturers Representatives, etc.
3. A list of personnel qualified to perform Special Processes will be developed and maintained by the FQCM. This list will include:
  - Name of individual and Special Processes they are qualified to perform
  - Date of qualification
  - Applicable qualification standard
  - Qualification expiration date
4. At any time during the implementation of Special Processes, California American Water or their designated representative will have the authority to request a retest or demonstration of ability of the individual performing the Special Process work if there is a question regarding their performance.

C. Training:

1. All personnel performing Special Process functions will receive training in the



applicable safety process and documentation requirements of the Special Process Procedure prior to the start of work activities.

## RECORDS

- A. Quality Records include:
  - 1. Special Process personnel qualifications
  - 2. Special Process qualification test records
  - 3. Special Process training records

## 3.6 FACILITY TURNOVER

### SCOPE

These controls establish the methods and responsibilities for facility turnover including contract closeout.

### RESPONSIBILITIES

- A. The Project Manager is responsible for:
  - 1. Requesting a preliminary final inspection from California American Water to determine the state of completeness of the project.
  - 2. Requesting a final inspection from California American Water to determine eligibility for substantial completion.
- B. The Field Quality Control Manager (FQCM) is responsible for:
  - 1. Finalizing all Quality Records and files.
  - 2. Ensuring all NCRs are resolved.
  - 3. Participating in final inspections to address any quality issues.

### FACILITY TURNOVER

- A. Prior to preliminary final inspection, temporary facilities, except as may be required for punch list work, will be removed from the site.
- B. The site and all applicable appurtenances and improvements will be cleaned in accordance with the Contract Documents.
- C. Record drawings and specifications will be completed, signed, and submitted to the Engineer in accordance with the Contract Documents.
- D. Operating instructions for any permanent equipment will be properly mounted and posted in accordance with the Contract Documents.
- E. Guaranties, warranties, and operation/maintenance manuals will be submitted to the Engineer in accordance with the Contract Documents.

### QUALITY RECORDS



MONTEREY PENINSULA ENGINEERING

CONTRACTORS & ENGINEERS  
P.O. BOX 2317  
MONTEREY, CA 93942  
(831) 384-4081

## **CONSTRUCTION QUALITY PLAN**

- A. Record Drawings
- B. Guaranties
- C. Warranties
- D. Operation and Maintenance (O&M) Documents



MONTEREY PENINSULA ENGINEERING

CONTRACTORS & ENGINEERS  
P.O. BOX 2317  
MONTEREY, CA 93942  
(831) 384-4081

## **SECTION 4**

### **TEST PROGRAM PLAN**





## 4.1 TESTING AND INSPECTION CONTROL

### SCOPE

- A. This Procedure establishes the controls, methods, and responsibilities by which personnel will conduct inspections and tests on processes, structures, and components during the course of construction activities.
- B. Contractor is responsible for the quality of their subs' work and their own work, therefore will provide inspection and testing requirements, along with personnel to perform them.
- C. The Contractor shall perform quality control testing and inspections as necessary to ensure compliance with Contract requirements.
- D. All laboratory testing shall be performed by an independent, qualified testing agency approved by the Engineer.
- E. The testing laboratory shall provide qualified technicians and inspectors with prior experience and training. A matrix of the qualifications of the technicians and inspectors will be submitted separately.
- F. California American Water may request a third-party inspection and testing to verify conformance with technical specifications and other requirements.
- G. A List of Tests required to be performed by the Contract Documents is provided in Section 4.0 of this Construction Quality Plan.
- H. The inspection and testing procedures are supplemental to this plan and will be submitted to California American Water for approval prior to commencement of work.

### RESPONSIBILITIES

- A. The Project Manager is responsible for:
  - 4. Interfacing with California American Water as necessary to identify testing requirements, prerequisites and the operational status of affected systems, equipment, or components.
- B. The FQCM is responsible for:
  - 1. Coordinating required inspections with California American Water and Inspections Agency.
  - 2. Overseeing test performance and ensure craft personnel are cognizant of the testing requirements.
  - 3. Developing or acquiring required inspection and/or testing procedures.
  - 4. Developing the Inspection and Test Plan, and all associated checklists and forms.

### FIELD SAMPLES AND MOCK-UPS

- A. Field samples and mock-ups shall be prepared at the jobsite by the Contractor.
- B. Affected finish work shall not be started until approved by the Engineer.
- C. The Contractor shall have product manufacturers inspect and approve field samples and mock-ups that involve their respective materials for proper application or installation.
- D. The contractor shall make arrangements with the respective product manufacturers to provide job or field service.



- E. Completed work shall match the approved field samples and mock-ups.

#### GENERAL

- A. Inspections and tests will be conducted in accordance with California American Water approved test procedures, specifications, and drawings.
- B. Forms used for documenting test results will be part of each test procedure.
- C. Measuring and Test Equipment (M&TE) will be utilized as required by test procedures, specifications, governing codes, and standards.
- D. The FQCM will be responsible for inspection and testing records.
- E. Test failures will be evaluated and resolved in coordination with California American Water and the Contractor. Test failures may require the initiation of an NCR.

#### INSPECTION AND TEST PROCEDURES

- A. Procedures will be approved by California American Water prior to testing. Inspection and Test Procedures will be prepared in accordance with this Procedure. Testing may be performed to specific testing procedures, generic procedures approved to specific work control documents, specifications, or drawings. In any case, test procedures will address and include as applicable/required:
  - 1. Narrative for each test procedure
  - 2. Test set-up
  - 3. Equipment/Instrumentation
  - 4. Step-by-step procedure
  - 5. Anticipated, acceptable test results
  - 6. Report form guidelines INSPECTION/TEST

#### DOCUMENTATION:

- A. Inspection/Test results will be documented in accordance with the approved test procedures.
- B. Inspection/Test documents will be signed and dated by inspectors and testers.
- C. The FQCM will ensure documentation includes:
  - 1. A review for completeness, clarity, and technical content
  - 2. Inspection and Test was performed in accordance with an approved Procedure.
  - 3. Verification that inspection/test results meet approved acceptance criteria, or the results have been evaluated if not within the specified criteria.

#### RECORDS:

- A. Quality Records include:
  - 1. Inspection and Test Records
  - 2. Inspection and test data, evaluation, and analysis documentation ATTACHMENTS:
    - a. None.

#### 4.2 ABANDONMENT OF EXISTING UTILITIES – SECTION 23



## **NARRATIVE**

This procedure covers the inspection and testing procedures for the abandonment of existing utilities. Specifically, the visual, field, and laboratory test procedures covered below are to provide quality control before, during, and after abandonment of existing utilities on the project.

Visual inspections will be performed before and during the abandonment of existing utilities to ensure that the definable feature of work and materials are approved and are performed as per Contract Specifications. The field technician performing the testing and or observation will do so under the responsible charge of a California registered geotechnical engineer.

Personnel performing the testing and inspections will consist of experienced technicians certified to perform each test with oversight from the Field Quality Control Manager (FQCM). All qualifications of personnel will be submitted separately.

Responsibilities will include, but will not be limited to:

1. Verify compliance with the approved Abandonment Plan and contract specifications as required.
2. Provide batch plant tickets for each truck delivery of flowable fill.
3. Check flow characteristics and workability of fill as placement proceeds.
4. Obtain at least three (3) test cylinders for each placement area for determination of 28-day compressive strength and bleeding
5. Record volume of flowable fill placement to demonstrate that abandoned sections of pipeline have been filled. Daily Inspection Reports indicating any abandonment non-conformance shall be submitted to the FQCM within 24 hours of the activity.

## **4.3 EARTHWORK – SECTION 24**

### **NARRATIVE**

This procedure covers the inspection and testing procedures for earthwork. Specifically, the visual, field, and laboratory test procedures covered below are to provide quality control before, during, and after earthwork on the project.

Visual inspections will be performed before and during the earthwork to ensure that the definable feature of work and materials are approve and are performed as per Contract Specifications. The field technician performing the testing and or observation will do so under the responsible charge of a California registered geotechnical engineer.

Personnel performing the testing and inspections will consist of experienced technicians certified to perform each test with oversight from the Field Quality Control Manager (FQCM). All qualifications of personnel will be submitted separately.

Responsibilities will include, but will not be limited to:

3. Verify compliance for fill, backfill, and embankment, as required.
4. Perform laboratory moisture-density relationship tests or other structural property tests as required.
5. In the field, conduct in-place field density and moisture tests using procedures specified in the



contract documents. Frequency of testing as listed in the frequency table allows for representative coverage of each lift, while interfering as little as possible with the earthwork operation's schedule.

6. Periodic sampling and testing of materials to verify continued compliance with specification requirements as outlined in the Test Program Table in this section.
7. Produce and sign Daily Quality Control Reports on the earthwork, identifying locations and verifying Quality Control Acceptance. Daily Inspection Reports indicating earthwork non-conformance shall be submitted to the FQCM within 24 hours of the activity.

### **TEST SETUP**

FQCM will obtain calibration paper(s) for nuclear gages, as well as pertinent laboratory equipment that will be used for testing of onsite and import fill materials. Before field density testing, samples of the fill materials will be tested per the latest version of ASTM D1557 to provide a value to which to test compaction effort, and to verify if any field corrections need to be made to gage readings due to substances in the material affecting the reading, such as lime or cement, or other material will have excessive ionic effects on moisture readings from the gage.

### **EQUIPMENT/INSTRUMENTS**

Field testing apparatus will include a nuclear moisture/density gage and compaction testing tools. The inspector will ensure that the current calibration papers are available for all field equipment. Also, nuclear gage transportation and licensing information must be available with the gage or in the vehicle. The inspector will also verify standard counts on the gage daily prior to use. All equipment used for earthwork testing will be included in a field and laboratory equipment table to track calibration of each instrument used.

### **TEST PROCEDURES**

Before starting any earthwork, verify for the following:

8. Material sources are approved.
9. Materials meet project requirements including lab testing.
10. An adequate water supply is available.

For Excavations, verify the following:

1. Excavation performed to the lines, grades, elevations and dimensions as shown on the drawings or as directed by the Engineer to obtain suitable subgrade/foundation material.
2. Care is taken during excavation work to prevent damage by construction equipment to adjacent structures.
3. Edges of the excavation are benched (2:1 slope)
4. Disposal of contaminated soils, if present, performed in accordance with environmental requirements.
5. Ditches or dikes constructed around excavation work to prevent surface water entering the work area.
6. Open cut slopes are properly protected to minimize sloughing.
7. Completed excavation inspected, tested and accepted by the Engineer prior to placement of structural concrete foundations/slabs, and/or structural backfill.



For Subgrade Preparation, verify the following:

1. The subgrade has been cut and shaped to required grade and elevation,
2. The top 6 inches of subgrade has been scarified, moisture conditioned to 3% above optimum moisture, and compacted to the required relative compaction.
3. Soft spots and unsuitable material are removed.

For Fill Operations, verify the following:

1. Area to receive fill material is properly prepared, (disked and scarified as specified).
2. Provisions are adequate for control and disposal of surface and subsurface water.
3. Fill material is from approved sources and is free of roots, limbs, stumps, boulders, mud, and organic material.
4. Fill and borrow areas are maintained to provide effective drainage and are protected against erosion.

For Compaction Testing, verify the following:

1. Check that the method of fill placement, spreading, lift thickness, moisture conditioning, rolling pattern, and compaction adheres to specification requirements.
2. Compaction equipment is of the proper size and type for the fill method and material used.
3. For Materials Testing of Earthworks, verify the following:
4. Field and laboratory tests conducted at frequency specified to verify physical requirements of the fill material.
5. The inspector will coordinate preparation of testing areas, and testing intervals, with the contractor.
6. The area to be tested should be thoroughly prepared (relatively flat) by compactive effort prior to testing. If not, due to compaction equipment such as sheepsfoot roller compactor, the contractor or inspector shall excavate to a depth sufficient to clear the loose upper materials and prepare a flat surface sufficient to seat the gage.
7. A hole shall be driven or drilled to at least the minimum depth required for nuclear density/moisture testing, and the probe of the gage extended and inserted into the hole.
8. The inspector will verify the gage is adequately seated onto the prepared surface, and the probe is sufficiently embedded into the material to be tested.
9. The gage will then be run for readings, the readings recorded, and compared with the maximum dry density and optimum moisture content of the soil, derived from laboratory testing.
10. Additional testing, as required, either as per contract specifications or at the discretion of the Inspector or Engineer, will be performed during observation of earthwork to verify contract compliance.

### **ANTICIPATED /ACCEPTABLE TEST RESULTS**

Acceptable visual and subjective inspection results are:

1. The excavated surface meet contract requirements for suitability to receive fills, both in workmanship and materials.
2. Import or fill materials meet contract requirements in terms of laboratory tests and material source and materials contained
3. Import or fill materials placed and conditioned/compacted meet contract specifications
4. Materials conditioned or maintained prior to placement of additional fills, structural, or pavement components meet contract requirements.



5. Fill or backfill that does not meet the specified requirements shall be removed or recompacted until the requirements are satisfied.

### **FIELD TEST REPORT FORM**

Daily Reports of Earthwork shall be submitted to the Engineer weekly. Nonconformance Reports will be submitted to the Engineer within 24 hours. Reports shall include the following:

1. Testing Agency
2. Date of test and report preparation
3. Feature of work and/or phase observed.
4. Location elevation, and sequential numbering of compaction tests
5. Compaction curve reference, dry density, moisture content, relative compaction, and other pertinent notes derived from the compaction testing and observation.
6. Sampling performed, location, type of testing to be performed, and laboratory the material was sent to.
7. Observation of methods and procedures of Contractor.

## **4.4 CONCRETE – SECTION 30**

### **NARRATIVE**

This test program covers the inspection and testing procedure for cast in place Portland cement concrete. Specifically, the visual, field, and laboratory test procedures covered in this section are to provide quality control before, during, and after concrete placement on the project. The contractor will select a qualified concrete supplier that is certified by the National Ready-Mix Concrete Association and is capable of meeting project requirements. Prior to concrete placement, a mix design is to be submitted and approved. Visual inspection and sampling will be performed during the placement of the concrete to ensure material placed is uniform and allows for good workability. Laboratory testing will be performed on sampled concrete at specified ages, as required, to verify strength of the concrete.

Personnel performing the testing and inspections will consist of experienced technicians and inspectors certified by the American Concrete Institute (ACI) to perform each test or inspection with oversight from the Quality Control Representative (QCR). All qualifications of the personnel will be submitted separately.

Responsibilities will include:

8. Verify that concrete formwork has been properly fabricated and placed according to approved shop drawings.
1. Verify that methods of conveying and depositing concrete avoid contamination, segregation of the mix, and displacement of reinforcement, embeds and forms.
2. Verify that concrete is being properly consolidated during placement.
3. Verify that concrete is protected from ambient temperature extremes during placement and curing.
4. Verify that concrete is being cured as specified by approved plans, specifications and applicable codes.
5. Sampling and testing will be performed at the required frequencies as outlined in the Test Plan Table.
6. Verify that forms are removed by methods that will prevent damage to the concrete.



7. Produce and sign Daily Quality Control Inspection Reports on concrete placement, identifying locations and verifying Quality control Acceptance of all field and laboratory reports. Daily Inspection Reports indicating dowel installation non-conformance shall be submitted to the Engineer within 24 hours of the dowel installation.

### **TEST SET UP**

The FQCM will obtain calibration and standardization forms for testing and sampling equipment used for concrete sampling. Visual inspections and acceptance of concrete mix designs will be by the Engineer. The Engineer will observe concrete batching, mixing, and placing operations, and the Contractor shall keep records of all concrete placed. Testing services for the Contractor's quality control program, including concrete strength tests, will be provided by various quality testing providers, employed by the Contractor and approved by the Engineer, and shall be performed in accordance with the applicable requirements of ACI 301. Field tests shall be performed by personnel having ACI Level 1 Field Technician Certification. Failure of the Engineer to detect defective work or material shall not prevent later rejection when such defect is discovered, nor shall it obligate the Engineer for final acceptance.

Additional inspection and testing services required by the Engineer because of changes in materials, sources, or proportions; or occasioned by failure of inspections and tests to meet specification requirements, shall be paid for by the Contractor.

MPE will provide materials, labor, and services for sampling and testing of concrete, including the following facilities and services:

1. Preparation, handling, storage, and delivery of concrete test specimens.
2. Suitable containers for the storage, curing, and delivery of concrete test specimens in accordance with ASTM C31 and ASTM C470.
3. Suitable storage for a supply of test cylinder molds, test specimens to be cured at the jobsite, and other items required for sampling and testing.

### **EQUIPMENT/INSTRUMENTS**

MPE will be using the following field equipment and materials for testing and sampling of the concrete samples:

1. Single-use polymer molds for sample containers.
2. Metal slump cones with verified dimensions.
3. Metal scoop.
4. Metal rod appropriate for the size of the sample container for concrete sample consolidation.
5. Wheelbarrow or other container suitable for the size of concrete sample required.
6. Temperature gage or thermometer.
7. Shovel or other suitable means of sampling from the concrete truck chute.
8. Other items as needed for concrete sampling and testing.

Materials and equipment will comply with the relevant ASTM procedures for calibration/standardization. Equipment used for concrete testing will be included in a field and laboratory equipment table to track calibration and accuracies of each instrument used.

### **TEST PROCEDURES**



For Field Sampling Concrete, verify the following:

1. Representative composite samples shall be taken by MPE in accordance with ASTM C172.
2. Each sample shall be obtained from a different batch of concrete on a random basis.
3. Slump Tests and Air Tests will be performed during placing of concrete, as required. At least one test shall be performed at the delivery trucks for each 50 cubic yards of concrete delivered.
4. Concrete Uniformity tests in accordance with ASTM C94, Annex A1 will be performed as required. Each batch of concrete shall be tested as specified in ASTM C94, Annex A1.
5. The concrete temperature shall be recorded on all compression test cylinders made. Freshly mixed concrete shall be tested for temperature hourly when the ambient temperature is below 40 degrees F and above 80 degrees F, and each time compression test cylinders are made.
6. Concrete Compressive Strength Tests
  - a. MPE shall prepare, cast, and deliver to its laboratory, cylinders for laboratory- cured compression test samples.
  - b. Cylinders shall be made and cured in accordance with ASTM C31, with 6" x 12" cylinders used. Cylinders shall be tested in accordance with ASTM C39.
  - c. The minimum number of test cylinders to be made for each class of concrete and for each placement shall be four cylinders for each 100 cubic yards or fraction thereof. When additional sets of test cylinders are required beyond the normal seven and 28-day tests, each set shall consist of a minimum of two test cylinders.
  - d. All cylinders in a set shall be marked with a unique number on one end. The Contractor shall record this number on the record of concrete placed. All cylinders shall be cured by MPE.
  - e. From each set of cylinders cast, one cylinder shall be tested at seven days and a minimum of two cylinders at 28 days in accordance with ASTM C39. If the 28-day tests are satisfactory, the hold cylinder shall be discarded.
  - f. In the event the 28-day tests are below the specified strength requirements, MPE shall then test the hold cylinder at the age selected by the Engineer.
  - g. For CDF the minimum number of test cylinders to be made and for each placement shall be six cylinders for each 100 cubic yards or each day if there is less than 100 cubic yards placed.
  - h. From each set of CDF cylinders cast, one cylinder shall be tested at seven days, two at 28 days, one at 90 days, and a hold.

#### **ANTICIPATED/ACCEPTABLE TEST RESULTS**

The strength of the concrete shall be considered satisfactory, provided the averages of all sets of consecutive strength test results equal or exceed the specified 28-day compressive strength, and no individual strength test result falls below the specified 28-day compressive strength by more than 500 psi. The Engineer will recommend adjustments to the mix proportions, increase in the minimum cement content, additional curing of the structure, or any combination of the above when strength tests acceptance criteria specified are not being met.

When laboratory test results indicate concrete to be more than 300 psi below the specified strength, or if there is a likelihood of low strength concrete, a significant reduction in load- carrying capacity, or absence





of desired durability in the concrete, the Engineer will require tests of cores to be drilled from the areas in question. Test cores shall be obtained from each member or area of suspect strength, from locations designated by the Engineer, and test specimens shall be prepared in accordance with ASTM C42. Three cores shall be taken for each determination of in-place strength. Concrete in the area represented by the core tests will be considered structurally adequate if the average of the three cores is equal to at least 85 percent of the specified design strength and no single core is less than 75 percent of the design strength. Locations represented by erratic core strengths shall be retested at the direction of the Engineer. Fill core holes in accordance with the requirements of Contract Specifications.

Acceptance of the completed concrete work requires conformance with the dimensional tolerances, appearance, and strengths specified in the testing program list and California American Water's Standard Specifications.

#### **FIELD TEST REPORT FORM**

Daily Reports of Concrete Placement and Laboratory test reports shall be submitted to the Engineer weekly. Nonconformance Reports will be submitted to the Engineer within 24 hours.

Field inspection reports shall include the following:

7. Testing Agency
8. Date of test and report preparation
9. Identification location(s) inspected, mix design of concrete sampled, ambient temperature and sample temperature at time of sampling, consistency, placement method and other notable items regarding placement and curing in the field, any revisions to the project plans and specifications, and any discrepancies from the project plans and specifications.
10. Identification of samples taken (may be attached laboratory sheet).

The laboratory concrete compression test results will include the following information:

1. Specimen Number
2. Client ID
3. Sample Age in days
4. Location of sample taken
5. Mix design of concrete sample
6. Nominal Dimension in inches (diameter and height, with diameter to the nearest 0.01 inch)
7. Area in square inches
8. Ultimate load of break, in pound-force
9. Compressive Strength in psi, to the nearest 10 psi
10. Fracture Type (see Figure 2, ASTM C396-39M)
11. Tested by (name or initial of technician)

#### **4.5 ASPHALT PAVING – SECTION 26.01**

##### **NARRATIVE**

This procedure covers the inspection and testing procedures for placement and acceptance of asphalt concrete paving. Specifically, the visual, field, and laboratory test procedures covered below are to provide quality control before, during, and after hot mix asphalt concrete placement on the project.



Visual inspections will be performed before, during and after asphalt pavement placement to ensure that the definable feature of work and materials are approved, and placement and compaction of the base materials are performed per the contract specifications.

Visual inspection will be performed prior to the work to ensure conditions are adequate for the initiation of the work, and during the work to ensure the task is being performed according to approved work plan and Contract Specifications.

Nuclear density testing will be performed on asphalt pavement during the placement and compaction operation.

Personnel performing the testing and inspections will consist of experienced technicians certified to perform each test with oversight from the Field Quality Control Manager (FQCM). All qualifications of personnel will be submitted separately.

Responsibilities in the field will include, but are not limited to:

1. Required number of pavers and rollers are on the project site.
2. Asphalt concrete mix is not segregated.
3. Temperature of the asphaltic concrete is within tolerance prior to placement.
4. Verify tack coat is applied to all vertical surfaces.
5. Verify surface tolerance is being checked frequently.
6. Maintain a test schedule that is updated daily identifying each test.
7. Verify the proper rolling pattern and the required number of passes is being followed.
8. Verify joints and edges are being rolled properly.
9. Obtain sufficient representative samples of the asphalt concrete during production and placement for testing.
10. Perform nuclear density tests at the required frequency.
11. Verify traffic is not allowed on finished pavement until the asphaltic concrete has been allowed to cool sufficiently to handle vehicular loads without being deformed and for at least six hours after placement and compaction.
12. Produce and sign Daily Quality Control Inspection Reports on the asphaltic concrete placement, identifying locations and inspection checkoffs and verifying Quality Control

Acceptance of all asphaltic concrete placement. Submit all daily reports weekly for Quality Assurance review to the Engineer. Daily Inspection Reports indicating asphaltic concrete placement non-conformance shall be submitted to the Engineer within 24 hours of the activity.

### **TEST SETUP**

The FQCM will obtain calibration papers(s) for nuclear gages, as well as pertinent laboratory equipment that will be used for laboratory testing of asphaltic concrete materials.

Quality Control personnel will have the following responsibilities:

1. Verify the materials are from approved sources, materials meet contract specifications, and mix design submittals have been approved and that the area to receive asphaltic concrete has been properly prepared.
2. Monitor importation and/or placement of asphaltic concrete materials.
3. Monitor temperature of the asphaltic concrete onsite before placement and compaction.



4. Perform nuclear density tests with a nuclear gage to verify compactive effort of the material tested in accordance with California Test Method and ASTM D5581
5. Sample and perform laboratory tests as required.
6. After placement and compaction of aggregate base components, MPE will verify finished grade with the Contractor, and monitor the surface moisture condition, as required.

### **EQUIPMENT/INSTRUMENTS**

Field testing apparatus will include a nuclear density gage. The inspector will ensure that the current calibration papers, as well as other gage transportation and licensing information, is available with the gage or in the vehicle. The inspector will also verify standard counts on the gage daily prior to use.

Equipment used for asphalt concrete testing will be included in a field and laboratory equipment table to track calibration and accuracies of each instrument used.

Field monitoring will also include use of an asphalt thermometer. The inspector will ensure the thermometer has been calibrated or standardized prior to use on site. The temperature of the asphaltic concrete will be monitored by use of the thermometer, both on the trucks awaiting placement, and placed asphaltic concrete before and after rolling.

The inspector will coordinate preparation of testing areas, and testing intervals, with the contractor.

Additional testing, as required, either as per contract specifications or at the discretion of the Inspector or Engineer, will be performed during observation of asphalt concrete placement to verify contract compliance.

### **PROCEDURE**

Before starting Asphalt Concrete placement, the following should be verified:

1. Asphaltic concrete sources approved, to include materials in the mix and supporting laboratory tests.
2. A pre-construction conference (preparatory phase inspection) is held with the contractor and District, or city agents as needed, to review the paving methods as follows:
3. Number of pavers to be used.
4. Number of rollers to be used.
5. Number of trucks to be used.
6. Width of spread in successive layers.
7. Weighing procedure and number of load tickets to be prepared.
8. Method of traffic management.
9. Aggregate base has been placed, tested, and approved by the Engineer.
10. Contact surfaces of curbs, gutters, maintenance holes, and cold joints have received tack coat.
11. Asphalt paving equipment meets specifications for placement.

For field testing, verify the following:

1. Check that the method of asphaltic concrete placement, spreading, lift thickness, temperature, rolling pattern, and compaction adheres to specification requirements in Section 39 of Caltrans Standard Specifications.
2. Compaction equipment is of the proper size and type for the fill method and material used.



For materials testing of Asphalt Concrete placement, verify the following:

1. Field and laboratory tests conducted at frequency specified to verify physical requirements of the asphaltic concrete material.
2. Asphaltic concrete material meets temperature requirements immediately prior to placement and compaction.
3. Asphaltic concrete material placed in proper lift thickness.
4. Asphaltic concrete material meets compaction (density) requirements.
5. Dimensional requirements are being maintained.
6. Density tests performed at random locations and at specified frequency.
7. Any surface irregularities are properly corrected.

#### **ANTICIPATED /ACCEPTABLE TEST RESULTS**

Acceptable visual and subjective inspection results are:

1. The prepared aggregate base surface meet contract requirements for suitability to receive asphaltic concrete, both in workmanship and materials.
2. Asphaltic concrete materials meet contract requirements in terms of laboratory tests and material source and materials contained, to include gradation, bitumen content, R- Value, and Sand Equivalent, and other tests as required by the Engineer.
3. Asphaltic concrete materials placed and compacted meet contract specifications, of 96% relative compaction.

#### **FIELD TEST REPORT FORM**

Reporting of Results:

1. Daily Reports of Asphalt Concrete paving shall be submitted to the Engineer weekly.
2. Nonconformance Reports will be submitted to the Engineer within 24 hours.
3. Reports on the attached forms shall include the following:
4. Testing Agency
5. Date of test and report preparation
6. Feature of work and/or phase observed
7. Location elevation, and sequential numbering of compaction tests
8. Compaction curve reference, maximum density, relative compaction, temperature, and other pertinent notes derived from the compaction testing and observation
9. Sampling performed, location, type of testing to be performed, and laboratory the material was sent to
10. Observation of methods and procedures of Contractor

## **4.6 TESTING AND INSPECTION PLAN**

### **NARRATIVE**

This section covers the testing and inspection requirements for the project. The contractor shall coordinate with the Lead Test Coordinator for all additional testing as described in the specifications.



## 4.7 INSPECTION, MEASURING, AND TEST EQUIPMENT

### SCOPE

This Procedure established the responsibilities and guidelines for the calibration, storage, use, and control of Measuring and Testing Equipment (M&TE).

### RESPONSIBILITIES

- A. The Project Manager is responsible for:
  - 1. Ensuring the requirements of the M&TE processes are implemented.
- B. The QCR is responsible for:
  - 1. The documentation, control, and issue of M&TE
  - 2. Ensuring only current calibrated and correct M&TE is used for acceptance testing.
- C. Personnel using calibrated M&TE are responsible for their proper use, handling, and maintenance and notifying supervision of any suspected damage or out of tolerance devices.

### GENERAL

- A. Calibration certificate reports will be obtained and maintained for all M&TE in accordance to applicable standards, specifications, and practices.
- B. When purchasing M&TE, the requestor will indicate on the request a requirement for calibration form the Supplier and a Certificate of Compliance as a part of the purchase.
- C. A Master Calibration Log of M&TE will be maintained that includes:
  - 1. A description of the M&TE
  - 2. M&TE Serial Number
  - 3. Identification Number
  - 4. Last Calibration Date
  - 5. Calibration Due Date
  - 6. Method and required frequency of calibration
  - 7. Required accuracy and range of tolerances
- D. M&TE will be suitable for the conditions in which it will be used and be an instrument capable of sufficient accuracy to fulfill specified requirements.
- E. When necessary, M&TE will be furnished with directions for application operation and calibration procedures.
- F. M&TE will be stored in a controlled environmentally protected area when not in use.
- G. M&TE will be labeled with:
  - 1. A unique identification number
  - 2. Date the device was last calibrated
  - 3. The initials of the person who performed the calibration
  - 4. Calibration due date
- H. If there is sufficient reason to question the calibration or accuracy of the equipment or device, it will not be used.



- I. M&TE found out of calibration or damaged, will be promptly removed from the field, Red Tagged, and designated for calibration, repair, or disposal.
- J. Personnel using M&TE will be cognizant of the correct application, operation, and use requirements of M&TE. Training sessions may be held as determined by the FQCM for personnel familiarization. This training will be documented.

#### RECORDS:

- A. Quality Records include:
  - 1. M&TE Master Calibration Log
  - 2. Calibration Certification Reports

## 4.8 INSPECTION AND TEST STATUS

### SCOPE

This Procedure describes the method in which the inspection status of a product is identified to ensure that it has passed inspection before it is used or installed. This Procedure also describes the method in which the inspection status of each definable phase of work is inspected, tested, or verified prior to acceptance on the Project.

### RESPONSIBILITIES

- A. A. The Project Manager is responsible for:
  - 1. 1. Personnel adhering to the requirements of this Procedure
  - 2. 2. Materials and associated documentation are maintained and controlled in accordance with this Procedure and Construction Quality Plan.
- B. B. The FQCM is responsible for coordinating activities to assure the inspection status of a product or phase of work is identified.
  - 1. 1. The FQCM is responsible for the implementation of the Supplemental Procedures, provided in Section 4.0 of this Construction Quality Plan.
  - 2. 2. The FQCM will supervise the Inspections Agency in reporting disposition of tests and inspections.
  - 3. 3. The FQCM will be responsible for documenting rework items and nonconformance items, and initiating nonconformance reports, when tasks or products are found to be below what is required from the Contract Specifications.

### STATUS INDICATORS

- A. The acceptance status is determined and enforced by the FQCM, receiving inspection personnel, and Inspections Agency.
- B. In-process inspection hold points are utilized when necessary in accordance with applicable standards, specifications, and common industry standards.
- C. The acceptance conforms to the Contract Documents.
- D. Non-conforming items are marked to show the items after inspection and testing, separated from



accepted items.

1. Non-conforming tasks will be noted as rework items, if there is a means of corrective action for the task or item. If the deficiency is not corrected at the end of five days, a Non-Conformance Report will be issued by the FQCM and forwarded to the Engineer.
  2. Non-conforming products will be positively identified and appropriately tagged by the Contractor or FQCM, and segregated from other approved products, or otherwise isolated to prevent use on the project.
- E. All non-conforming items will be held and separated from other items, as practicable, until the Contractor disposes of them.

**APPENDIX A**  
**SAMPLE FORMS**





# MONTEREY PENINSULA ENGINEERING

CONTRACTORS & ENGINEERS  
P.O. BOX 2317  
MONTEREY, CA 93942  
(831) 384-4061

## Daily Technician | Retesting

ClientName  
ProjectLongName  
Address2  
CityState

Request By reqby  
Date ReqDate  
Time ReqTime  
Task Task

Phone PhoneNo  
Cell CellNo

Remarks:

Reference Documents:

General Contractor:

Sub-Contractor:

Material Supplier:

Equipment On-Site:

Summary of Observations:

Limits of Areas Approved:

Limits of Areas Not Approved:

|                             |                        |            |  |   |
|-----------------------------|------------------------|------------|--|---|
| <b>Date</b>                 | <b>Weather</b>         |            |  | <b>Barcode</b><br><b>DocumentNo</b><br><b>ProjectNumber</b> |
| <i>Client Authorization</i> | Technician's Signature | Reg Hours  |  |   |
|                             |                        | OT Hours   |  |   |
| <i>Representing</i>         | EmpName - Empld        | Begin Time |  |   |
|                             |                        | End Time   |  |   |



# MONTEREY PENINSULA ENGINEERING

CONTRACTORS & ENGINEERS  
P.O. BOX 2317  
MONTEREY, CA 93942  
(831) 384-4081

## Daily Technician | Asphalt Paving

ClientName  
ProjectLongName  
Address2  
CityState

Request By reqby  
Date ReqDate  
Time ReqTime  
Task Task

Phone PhoneNo  
Cell CellNo

Remarks:

Reference Documents: \_\_\_\_\_

General Contractor: \_\_\_\_\_

Sub-Contractor: \_\_\_\_\_

Material Supplier: \_\_\_\_\_

Equipment On-Site: \_\_\_\_\_

Summary of Observations: \_\_\_\_\_

Limits of Areas Approved: \_\_\_\_\_

Limits of Areas Not Approved: \_\_\_\_\_

|                             |                        |            |  |   |
|-----------------------------|------------------------|------------|--|---|
| <i>Date</i>                 | <i>Weather</i>         |            |  | <b>Barcode</b><br><b>DocumentNo</b><br><b>ProjectNumber</b> |
| <i>Client Authorization</i> | Technician's Signature | Reg Hours  |  |   |
|                             |                        | OT Hours   |  |   |
| <i>Representing</i>         | EmpName - Empld        | Begin Time |  |   |
|                             |                        | End Time   |  |   |



**MONTEREY PENINSULA ENGINEERING**

CONTRACTORS & ENGINEERS  
P.O. BOX 2317  
MONTEREY, CA 93942  
(831) 384-4081

# Daily Technician | Concrete Paving

ClientName  
ProjectLongName  
Address2  
CityState

Request By reqby  
Date ReqDate  
Time ReqTime  
Task Task

Phone PhoneNo  
Cell CellNo

Remarks:

Reference Documents: \_\_\_\_\_

General Contractor: \_\_\_\_\_

Sub-Contractor: \_\_\_\_\_

Material Supplier: \_\_\_\_\_

Equipment On-Site: \_\_\_\_\_

Summary of Observations: \_\_\_\_\_

Limits of Areas Approved: \_\_\_\_\_

Limits of Areas Not Approved: \_\_\_\_\_

|                             |                        |            |  |   |
|-----------------------------|------------------------|------------|--|---|
| <i>Date</i>                 | <i>Weather</i>         |            |  | <b>Barcode</b><br><b>DocumentNo</b><br><b>ProjectNumber</b> |
| <i>Client Authorization</i> | Technician's Signature | Reg Hours  |  |   |
|                             |                        | OT Hours   |  |   |
| <i>Representing</i>         | EmpName - Empld        | Begin Time |  |   |
|                             |                        | End Time   |  |   |



# Daily Technician | ACI Concrete Technician

ClientName  
ProjectLongName  
Address2  
CityState

Request By reqby  
Date ReqDate  
Time ReqTime  
Task Task

Phone PhoneNo  
Cell CellNo

Remarks:

Reference Documents: \_\_\_\_\_

General Contractor: \_\_\_\_\_

Sub-Contractor: \_\_\_\_\_

Material Supplier: \_\_\_\_\_

Equipment On-Site: \_\_\_\_\_

Summary of Observations: \_\_\_\_\_

Limits of Areas Approved: \_\_\_\_\_

Limits of Areas Not Approved: \_\_\_\_\_

|                             |                        |            |  |   |
|-----------------------------|------------------------|------------|--|---|
| <b>Date</b>                 | <b>Weather</b>         |            |  | <b>Barcode</b><br><b>DocumentNo</b><br><b>ProjectNumber</b> |
| <i>Client Authorization</i> | Technician's Signature | Reg Hours  |  |   |
|                             |                        | OT Hours   |  |   |
| <i>Representing</i>         | EmpName - Empld        | Begin Time |  |   |
|                             |                        | End Time   |  |   |



MONTEREY PENINSULA ENGINEERING

CONTRACTORS & ENGINEERS  
 P.O. BOX 2317  
 MONTEREY, CA 93942  
 (831) 384-4081

## Daily Inspection | Non Destructive Testing

ClientName  
 ProjectLongName  
 Address2  
 CityState

Request By reqby  
 Date ReqDate  
 Time ReqTime  
 Task Task

Phone PhoneNo  
 Cell CellNo

Remarks:

Reference Documents:

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General Contractor:

---

Sub-Contractor:

---

Material Supplier:

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Work Inspected:

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**The Work Inspected**  MET  DID NOT MEET  
 THE REQUIREMENTS OF THE APPROVED DOCUMENTS

|                     |                      |            |  |   |
|---------------------|----------------------|------------|--|---|
| Date                | Weather              |            |  | <p style="text-align: center;">Barcode<br/>         DocumentNo<br/>         ProjectNumber</p> |
| EmpName - Empld     | Certification        | Reg Hours  |  |   |
|                     |                      | OT Hours   |  |   |
| Inspector Signature | Client Authorization | Begin Time |  |   |
|                     |                      | End Time   |  |   |