



**CITY OF MORRO BAY
WATER RECLAMATION FACILITY
CITIZEN ADVISORY COMMITTEE (WRFCAC)
AGENDA**

The City of Morro Bay is dedicated to the preservation and enhancement of the quality of life. The City shall be committed to this purpose and will provide a level of municipal service and safety consistent with and responsive to the needs of the public.

**Regular Meeting
Wednesday, August 5, 2015
Community Center Studio Room - 3:00 P.M. to 5:00 P.M.
1001 Kennedy Way, Morro Bay, CA**

John Diodati, Chairperson

Bill Woodson,
Vice Chairperson

Dale Guerra

Barbara Spagnola

Mary (Ginny) Garelick

Paul Donnelly

Valerie Levulett

Planning Commission
Member: Richard Sadowski

Public Works Advisory Board
Member: Steven Shively

ESTABLISH QUORUM AND CALL TO ORDER
MOMENT OF SILENCE/PLEDGE OF ALLEGIANCE
ANNOUNCEMENTS/PRESENTATIONS

PUBLIC COMMENT PERIOD

Members of the audience wishing to address the Board on City business matters other than scheduled items may do so at this time. To increase the effectiveness of the Public Comment Period, the following rules shall be followed:

- When recognized by the Chair, please come forward to the podium and state your name and address for the record. Board meetings are audio and video recorded and this information is voluntary and desired for the preparation of minutes.
- Comments are to be limited to three minutes.
- All remarks shall be addressed to the Board, as a whole, and not to any individual member thereof.
- The Board respectfully requests that you refrain from making slanderous, profane or personal remarks against any elected official, commission and/or staff.
- Please refrain from public displays or outbursts such as unsolicited applause, comments or cheering.
- Any disruptive activities that substantially interfere with the ability of the Board to carry out its meeting will not be permitted and offenders will be requested to leave the meeting.
- Your participation in Board meetings is welcome and your courtesy will be appreciated.

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Public Works Department at (805) 772-6262. Notification 24 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting.

A. CONSENT CALENDAR

A-1 Approval of minutes from the Water Reclamation Facility Citizen Advisory Committee special meeting of July 8, 2015
Staff Recommendation: Approve minutes as submitted.

- A-2 Water Reclamation Facility Project Update
Recommendation: Receive update.
 - B. OLD BUSINESS**
 - B-1 WRFCAC Sub-Committee Updates and Recommendations
Finance, Environmental and Engineering Sub-Committees to present their analyses and findings to the entire committee.
Recommendation: Receive and consider updates.
 - C. NEW BUSINESS**
 - C-1 Consideration of Program Management Services Proposal and the Selection Committee's Recommendation for Contract Award
Recommendation: Review and provide recommendations to City Council.
 - C-2 Consideration of a change in the meeting day and location
Recommendation: Review and provide recommendations to City Council
 - D. COMMITTEE MEMBER CLOSING COMMENTS**
 - E. ADJOURNMENT**
Adjourn to the Water Reclamation Facility Citizen Advisory Committee meeting, tentatively scheduled at the Community Center Multi-Purpose Room, 1001 Kennedy Way, on September 9, 2015, at 3:00 p.m.
-

This agenda is subject to amendment up to 72 hours prior to the date and time set for the meeting. Please refer to the agenda posted at the Public Works Department, 955 Shasta Avenue, for any revisions or call the department at 772-6262 for further information.

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Materials related to an item on this agenda submitted to the Committee after publication of the agenda packet are available for inspection at the Public Works Department during normal business hours or at the scheduled meeting.

Rob Livick presented the staff report.

B. OLD BUSINESS

B-1 WRFCAC SUB-COMMITTEE UPDATES AND RECOMMENDATIONS

Finance, Environmental and Engineering Sub-Committees to present their analyses and findings to the entire committee.

<https://youtu.be/kEBY1jWPgaE?t=8m40s>

Finance Sub-Committee member Mary Garelick stated she, Barbara Spagnola and Rob Livick attended a pre-proposal meeting on June 9, 2015. The purpose of the meeting was to answer questions that the consultants had on the RFP for Program Management. Mary Garelick, Dave Buckingham, Sam Taylor and Rob Livick met to discuss funding mechanisms, outreach strategies for the WRF and potential public/private partnerships. The City is actively developing a grant strategy and is reaching out to the regulatory agencies.

Valerie Levulett stated she attended the Pre-Statement of Qualification meeting on June 19, 2015 for the Environmental Review and the presentation was given by John Rickenbach.

The Environmental and Engineering Sub-Committees had no updates.

The public comment period was opened, seeing none, the public comment period was closed.

C. NEW BUSINESS

C-1 Review of Facility Master Plan (FMP) proposed Scope of Work, Fee Estimate and Schedule from Black and Veatch along with Staff's recommendation for Contract Award.

<https://youtu.be/kEBY1jWPgaE?t=11m21s>

3:45pm – Richard Sadowski excused himself from the meeting.

3:49pm – John Diodati excused himself from the meeting and Bill Woodson took over chairing the meeting.

The public comment period was opened, seeing none, the public comment period was closed.

MOTION:

Mary Garelick moved to approve Item C-1 to include the following: Barbara Spagnola's invoice recommendations, insure that Black & Veatch along with staff are clear on change orders, have clarification as to the role and participation of this Board and to incorporate the Engineering Sub-Committee in the process. The motion was seconded by Barbara Spagnola and carried unanimously 7-0.

D. COMMITTEE MEMBER CLOSING COMMENTS

<https://youtu.be/kEBY1jWPgaE?t=1h5m57s>

The public comment period was opened, seeing none, the public comment period was closed.

ADJOURNMENT

The meeting adjourned at 4:12 p.m.



AGENDA NO: A-2

MEETING DATE: August 5, 2015

Staff Report

DATE: July 30, 2015

TO: Water Reclamation Facility Citizens Advisory Committee

FROM: Rob Livick, PE/PLS - Public Services Director/City Engineer

SUBJECT: Water Reclamation Facility (WRF) Project Update

RECOMMENDATION

Staff recommends the Council review the information regarding the current status and the proposed next steps regarding the development of a WRF project proposal for the Rancho Colina site and for the Council to provide any further direction as necessary.

ALTERNATIVES

No alternatives are recommended.

FISCAL IMPACT

Attachment 2 is a summary of the existing contract with consultants used to assist in the WRF project.

DISCUSSION

Staff provides this report as a monthly update to the progress made to date on the new WRF project. With the denial of the permit for the WWTP project in its current location, the City has embarked on a process for a WRF. This staff report provides a review of what has occurred to date. See Attachment 1 for a brief review of dates, status and accomplishments on the WRF facility project. Note the shaded information has been added since your last review.

ATTACHMENTS

1. Timeline of WRF events January 2013 to present
2. Summary of Project Expenses and Estimated Costs

Prepared By: ___RL___

Dept Review: ___RL___

City Manager Review: _____

City Attorney Review: _____

WRF Project Timeline
January 2013 - Present

Date	Action
August 17, 2015	Scheduled: City Council Workshop (3:30 - 5:00 pm) "WRF Construction 101" - How to build a WRF in less than five years
August 11, 2015	Scheduled: City Council Award of PM Contract
August 5, 2015	Scheduled: WRFCAC Meeting - Review of scope of work, fees and schedule for MKN as WRF PM consultant
July 29, 2015	City staff met with representatives from Rancho Colina to discuss the terms of the MOU for the potential property Purchase.
July 28, 2015	Interview with the PM team of MKN/Rickenbach. Committee recommends selection of MKN as PM
July 22, 2015	PM selection Team met to discuss one proposal received for PM and recommend that they interview the one proposer
July 21, 2015	Environmental Review Selection Committee met to review the six SOQs submitted. The Committee Recommends the City Interview four teams: Dudek, ESA, Rincon, AMEC
July 15, 2015	Kick off Meeting with Black and Veatch FMP Consultant
July 14, 2015	Proposals due for Program Management Services
July 14, 2015	SOQ due for Environmental Review Services
July 14, 2015	City Council Meeting - Award of FMP Contract
July 8, 2015	WRFCAC Meeting - Recommend for B&V as FMP consultant
July 1, 2015	New water and Wastewater Rates in effect
June 30, 2015	Staff Review of Black and Veatch Final Scope of Work
June 22, 2015	Discussions with Black and Veatch regarding Scope of Work
June 19, 2015	Pre Proposal Meeting for Project Management RFP
June 19, 2015	Pre SOQ Meeting for Environmental Review SOQ
June 18, 2015	The CSD BOD approved the FY 15/16 WWTP operating budget
June 17, 2015	Presentation to the Realtor group regarding project status
June 16, 2015	Prospective FMP consultant interviews -Carollo Engineers and Black and Veatch. Selection Committee unanimously recommends Black and Veatch
June 11, 2015	Joint Meeting with the Cayucos Sanitary District for Budget Approval and Audit results - Canceled
June 9, 2015	City Council adopted Resolution 31-15, approving the FY 15/16 Budget including wastewater
June 1, 2015	Meeting with WRFCAC subcommittee for initial review of FMP proposals
May 29, 2015	Released RFP for Environmental Review (CEQA/NEPA) for the new WRF
May 26, 2015	Public Hearing for Increases in Water and Sewer Rates held. Received 933/2707 required protests. City Council adopted resolution 30-15 setting new water and sewer rates for the next five years
May 12, 2015	City Council adopted Resolution 25-15 providing direction to staff.
May 12, 2015	Proposal received from Black and Veatch and Carollo responding to Facilities Master Plan RFP
May 7, 2015	Special WRFCAC Meeting to discuss recommendations to the City Council regarding moving forward with the project.
May 4, 2015	Morro Bay Staff issued an addendum to the WRF FMP RFP, eliminating the CSD from the review process and establishing a two party contract.
April 30, 2015	Joint Meeting of the CSD Board of Directors and Morro Bay City Council for continued discussion regarding the MOU for the New WRF. CSD Presented Resolution 2015-1 suspending participation with Morro Bay on a New WRF at the Rancho Colina Site
April 8, 2015	Rate Notices to be Mailed out to all City property owners and residents
April 8, 2015	WRFCAC Meeting to appoint members to WRF FMP review committee

New items are indicated by shading.

WRF Project Timeline
January 2013 - Present

Date	Action
March 24, 2015	City Council Approves Proposition 218 Notice for Water and Sewer Rate Adjustments and Schedules Public Hearing for May 26, 2015
March 19, 2015	Issued Contract to KMA for Preliminary Biological Assessment of Rancho Colina site and pipeline corridor.
March 19, 2015	Release RFP for WRF Facilities Master Planning
March 11, 2015	Joint Meeting of Morro Bay City Council and Cayucos Sanitary District Board of Directors in Cayucos
February 25, 2015	JFR Contract Amendment #4 for \$44,279.00 to assist with fatal flaw analysis
February 25, 2015	Facilities Master Plan RFP Completed for internal staff review
February 23, 2015	CSD Legal Council transmitted CSD DRAFT MOU to City
February 19, 2015	Letter from Ken Harris, RWQCB regarding the New WRF project and deadline for operations.
February 19, 2015	Public Works Advisory Board – Second Water and Sewer Rate Study Workshop
February 11, 2015	WRFCAC Meeting to review MOU for Now
February 11, 2015	Scheduled Joint Meeting of Morro Bay City Council and Cayucos Sanitary District Board of Directors in Cayucos was canceled
February 5, 2015	Meeting between Morro Bay Council Subcommittee and Cayucos Sanitary District Board Sub Committee to Discuss the MOU for Now
January 29, 2015	Public Works Advisory Board – Water and Sewer Rate Study Workshop
January 26, 2015	Meeting with between Morro Bay and Cayucos Staff to discuss next steps and "MOU for Now"
January 26, 2015	Meeting with between Morro Bay Staff, JFR/MKN and City Council sub-committee to discuss next steps and "MOU for Now"
January 13, 2015	City Council to review "Next-Steps" and provide direction to Staff.
January 8, 2015	Staff presentation of the "Next-Steps" to the City Council and CSD Board
December 11, 2014	Staff presented to the City Council and the CSD Board of Directors the Final JFR report, including the CMC evaluation by Carollo Engineers. The CSD Board of Directors concurred that based on the information presented that the Rancho Colina site appeared the most viable and cost effective.
December 9, 2014	City Council meets to review the Final JFR report, including the CMC evaluation by Carollo Engineers. The City Council expresses their preference for Rancho Colina as their preferred site for the New WRF. The cost estimates indicated that the CMC site was nearly double that of the Rancho Colina site.
December 8, 2014	Carollo Engineers releases their Technical Memorandum regarding CMC WWTP capacity and necessary facility expansion to accommodate increase flows from City and CSD.
December 8, 2014	Meeting between MBNEP and City staff to discuss concerns regarding the siting of the WRF at CMC and increased pollutant loads to Chorro Creek.
December 8, 2014	Meeting between City staff and the WRF Technical Committee (Irons/Smukler) to review the project status.
December 1, 2014	Tour of the existing CMC facility with representatives from CDCR, CSD and the City.
November 19, 2014	Conference call between CDCR, CSD and Morro Bay staff regarding the logistics of siting at the CMC location.
November 18, 2014	Meeting between City and California Coastal Commission staff regarding a variety of projects in Morro Bay including the WRF siting.
November 13, 2014	Staff presented to the City Council and the CSD Board of Directors the status of the CMC Capacity Analysis and also updated the CSD Board on the City Council meeting of November 12, 2014

New items are indicated by shading.

Date	Action
November 12, 2014	The City Council reviewed the draft report from John Rickenbach Consulting regarding final site preference. As the result of the report being incomplete, without the Carollo CMC engineering analysis including comparable cost estimates, the City Council choose to delay their decision on final site preference until such time that the report is complete and the WRFAC has had a chance to review and make a recommendation.
November 5, 2014	The WRFAC met and reviewed the draft report from John Rickenbach Consulting regarding final site preference. As the result of the report being incomplete, without the Carollo CMC engineering analysis including comparable cost estimates, the WRFAC moved to recommend to City Council to delay their decision on final site preference until such time that the report is complete and the WRFAC has had a chance to review and make a recommendation to the City Council.
October 28, 2014	Cleath-Harris and Associates presented the Hydrogeological Technical Memoranda regarding the relative benefits of a Creek discharge in the Chorro Valley and In-Lieu recharge in the Morro Valley to the City Council at their regular meeting.
October 22, 2014	Meeting of the WRFAC where they reviewed the Hydrogeological Technical Memoranda by Cleath-Harris and Associates and toured the Rancho Colina site.
October 20, 2014	A conference call between Morro Bay, CSD, CMC, Regional Board and CDCR was held to discuss the viability and timing of a regional facility at CMC. At that meeting CDCR authorized the release of WWTP data to Carollo for their process modeling.
October 10, 2014	A project kick off meeting was held at the City's Public Services offices for the Carollo CMC work, City and CSD staff along with the City's consultants were in attendance.
October 9, 2014	Meeting between the Morro Bay City Council and the Cayucos Sanitary District Board of Directors Meeting in Cayucos. City Council directed, by motion, City staff to work cooperatively with Cayucos Sanitary District staff.
October 8, 2014	Meeting of the WRFAC where they reviewed the LWA report regarding permitting constraints, Kestrel Consulting report regarding financing and grants and they formed three technical subcommittees.
October 2, 2014	Meeting of the Morro Bay City Council Technical/Executive Committee and the Cayucos Sanitary District Board of Directors in Morro Bay
September 30, 2014	The Public Services director executed a contract with Carollo Engineers for the study of capacity and expansion capability at the CMC site.
September 26, 2014	Meeting with Bartle Wells (Sewer and Water Rate Consultant) regarding hearing schedule and additional data needs
September 25, 2014	Received final scope and estimated fee (\$101,945) from Carollo Engineers for the evaluation of the CMC option, Carollo requested changes to the standard City contract which are being reviewed by the City Attorney
September 23, 2014	City Council Special Meeting reviewed the Report by Larry Walker and Associates regarding the Water Quality permitting implications at each of the two final proposed sites. Council also discussed the potential of joint City Council/WRFAC meetings and status of the CMC evaluation
September 11, 2014	Joint meeting of the Morro Bay City Council and the Cayucos Sanitary District Board of Directors Meeting in Morro Bay.
September 10, 2014	First Meeting of the WRFAC
August 12, 2014	City Council confirmed Citizen Appointments to the WRFAC
July 16, 2014	Kick off meeting with Larry Walker Associates regarding discharge permit requirements for various disposal/reuse options for the new WRF project.
July 10, 2014	Meeting with Cayucos Sanitary District staff to discuss the scope of work for the proposed Carollo Engineers CMC capacity evaluation study.
July 9, 2014	City Council conducted interviews for positions on the WRF Citizens Advisory Committee (WRFAC). City Council appointed seven members to the WRFAC.

New items are indicated by shading.

Date	Action
June 30, 2014	Staff met internally to gather preliminary information for Bartle Wells Rate Study. Staff will have all info to Bartle Wells by the end of July.
June 27, 2014	Kick off meeting with Kestrel Consulting to discuss funding strategies for the new WRF project.
June 27, 2014	Meeting with Cleath-Harris to review draft Chorro Creek discharge study and effect on City water supply. Authorized Cleath-Harris to perform a similar study for the Morro Valley.
June 25, 2014	Meeting with John Rickenbach and Mike Nunley to discuss project schedule for the WRF project
June 20, 2014	City executed a contract with Larry Walker Associates in the amount of \$24,970 to advise the City regarding discharge permit requirements for various disposal/reuse options for the new WRF project.
June 15, 2014	City executed a contract with Kestrel Consulting in the amount of \$20,530 to develop funding strategies for the new WRF project.
June 14, 2014	Staff has met with a variety of alternative project delivery method firms to explore the requirements for this process, firm include: Carollo, CDMSmith; and Black and Veatch.
May 27, 2014	City Council adopted Resolution 34-14 that provides direction to staff regarding the "Rancho Colina" site, continuing parallel path discussion regarding the CMC site, and forming a Citizen's Advisory Committee.
May 23, 2014	Selected Bartle Wells as Water and Sewer Rate Study consultant. The estimated fee for the study is not to exceed \$67,440.
May 22, 2014	The City Clerk posted the notice of the formation of a new, limited term and scope, i.e. Water Reclamation Facility Citizen's Advisory Committee. Applications are due to the Clerk by Friday, June 13, 2014.
May 13, 2014	Council Approved New Water Reclamation Facility Project Report on Reclamation and Council Selection of a WRF Site and provided direction to staff to return to Council with a resolution that captured the motions made.
May 8, 2014	May JPA Meeting cancelled.
May 1, 2014	Scheduled site visit at Giannini site with WRF Subcommittee, JRF Consulting and Property Owner.
April 23, 2014	Meeting to review the "Rancho Colina" site with the Morro Bay and CSD Sub-Committees along with Water Board staff.
April 21, 2014	"Rancho Colina" site visit with staff and Council persons Leage and N. Johnson.
April 18, 2014	Letter sent to property owners of potential WRF sites, inviting a discussion regarding siting potential
April 11, 2014	"Rancho Colina" site visit with staff and Council person C. Johnson.
April 10, 2014	April JPA Meeting cancelled
March 21, 2014	Meeting between City of Morro Bay (Irons/Smukler) and CSD (Enns/Lloyd) Sub-Committees along with Morro Bay and CSD County and Water Board Staff to discuss overall project status and the CMC option.
March 20, 2014	WRF Sub-Committee meeting along with staff and property owner at the "Rancho Colina" Morro Valley site to get an overview of the potential for it as a project location.
March 10, 2014	March JPA Meeting cancelled.
March 6, 2014	Scheduled WRF Subcommittee meeting with staff to discuss grant opportunities and schedules.
February 28, 2014	Received a revised scope of work for a contract amendment received from Rickenbach recognizing the accelerated time schedule for the WRF. Estimated fees not to exceed \$76,129.

New items are indicated by shading.

WRF Project Timeline
January 2013 - Present

Date	Action
February 25, 2014	City Council received a status update on the New WRF and adopted Resolution 17-14 prescribing a 5-year time frame for the construction of the New WRF.
February 24, 2014	City Council Discussion of Eater and Sewer Rates at special Workshop and Council discussion and direction regarding City DRAFT MOU and CSD DRAFT MOU.
February 13, 2014	WRF Sub-Committee meeting to discuss the 5 year time schedule and grant opportunities.
February 13, 2014	February JPA Meeting held.
February 11, 2014	Mid-year Budget adjustment to include additional funding for WRF alternative site analyses. \$100,000 was approved.
January 31, 2014	Status report preparation assigned to Public Services Director.
January 29, 2014	Received proposal from Rickenbach for a contract amendment to perform due diligence on alternative WRF sites for final site selection. Estimated fees not to exceed \$63,806.
January 23, 2014	Onsite staff meeting with property owner at Rancho Colina to tour a potential location.
January 23, 2014	Telephone discussion with City's Water Attorney regarding water rights to creek discharge of wastewater.
January 20, 2014	Received proposal from Cleath-Harris to study Chorro Creek discharge and effect on City water supply. Estimated fees not to exceed \$7,500.
January 16, 2014	January JPA Meeting canceled.
December 19, 2013	December JPA Meeting held – Verbal update by both CMB and CSD.
December 10, 2013	Presentation of Options Report to City Council.
November 19, 2013	Meeting with RWCQB Staff regarding project Status and Permit Renewal.
November 14, 2013	November 2013 JPA Meeting Cancelled.

599-8312-6105 P0234-8312	Contract Amount (1)	Amount Paid (2)	Remaining Contract
SITE ALTERNATIVES ANALYSIS - SITE PREFERENCE SELECTION			
JFR Consulting – Site Selection/Project Management Assistance			
Original Contract	\$ 117,256		
Amendment #1	\$ 76,129		
Amendment #2	\$ 91,336		
Amendment #3	\$ 23,147		
Amendment #4	\$ 44,279		
Total Contract + Direct Reimbursable Costs	\$ 352,147	\$ 352,288	\$ (141)
Kestrel Consulting – Assessment Funding			
Total Contract + Direct Costs	\$ 20,530	\$ 8,380	\$ 12,150
Larry Walker and Associates – Permitting Constraints			
Original Contract	\$ 24,970		
Amendment #1	\$ 5,100		
Total Contract + Direct Costs	\$ 30,070	\$ 30,151	\$ (81)
Cleath-Harris Associates – Stream Flow Augmentation			
Contract Amount	\$ 7,500		
Amendment #1	\$ 6,500		
Amendment #2	\$ 4,000		
Total Contract + Direct Costs	\$ 18,000	\$ 18,348	\$ (348)
Carollo Engineers – CMC Capacity, Siting Evaluation and Cost Estimate			
Total Contract + Direct Costs	\$ 101,945	\$ 87,361	
(Proposed to be Reimbursed by RWQCB using SEP Funds)		\$ (87,361)	
Net Amount	\$ 101,945	\$ -	\$ 14,584
Outside Legal - Water Rights		\$ 7,880	
Appraisal - Righetti Site		\$ 5,500	
Total Site Selection	\$ 522,692	\$ 409,167	\$ 26,164
FATAL FLAWS			
Kevin Merk Associates – Preliminary Bio Assessment			
Total Contract + Direct Costs	\$ 12,835	\$ 3,245	\$ 9,590
Fugro - Hydrogeological			
Total Contract + Direct Costs	\$ 38,600	\$ 1,618	\$ 36,983
Farwestern Archeological			
Total Contract + Direct Costs	\$ 12,000		
Larry Walker Associates - Pretreatment (Salt) Assessment			
Total Contract + Direct Costs	\$ 23,640	\$ 3,470	\$ 20,170
Total Fatal Flaws	\$ 87,075	\$ 8,333	\$ 66,743
FACILITIES MASTER PLAN			
Black and Veatch			
Total Contract + Direct Costs	\$ 710,123	\$ -	\$ 710,123
ENVIRONMENTAL REVIEW (CEQA/NEPA Compliance)			
Consultant to be Determined			
PROGRAM MANAGEMENT			
MKN Associates			
Total Contract Year One +	\$ 902,808	\$ -	\$ 902,808
Estimated Amount for Eight Years - Including Construction Management	\$10.5Million		
Kestrel Consulting - SRF and Prop 1 Support/Applications	\$ 65,752	\$ -	\$ 65,752
Total Consultant Contract Amount (to date)	\$ 2,288,450	\$ 417,500	\$ 1,705,837

Notes:

- Does not include reimbursible costs, ie copies, travel and other direct expenses
- Includes reimbursible costs, ie copies, travel and other direct expenses



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WATER RECLAMATION FACILITY
CITIZEN ADVISORY COMMITTEE (WRFCAC)
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Recommendation: Review and provide recommendations to City Council.
 - C-2 Consideration of a change in the meeting day and location
Recommendation: Review and provide recommendations to City Council
- D. COMMITTEE MEMBER CLOSING COMMENTS**
- E. ADJOURNMENT**
Adjourn to the Water Reclamation Facility Citizen Advisory Committee meeting, tentatively scheduled at the Community Center Multi-Purpose Room, 1001 Kennedy Way, on September 9, 2015, at 3:00 p.m.

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Rob Livick presented the staff report.

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Valerie Levulett stated she attended the Pre-Statement of Qualification meeting on June 19, 2015 for the Environmental Review and the presentation was given by John Rickenbach.

The Environmental and Engineering Sub-Committees had no updates.

The public comment period was opened, seeing none, the public comment period was closed.

C. NEW BUSINESS

C-1 Review of Facility Master Plan (FMP) proposed Scope of Work, Fee Estimate and Schedule from Black and Veatch along with Staff's recommendation for Contract Award.

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3:45pm – Richard Sadowski excused himself from the meeting.

3:49pm – John Diodati excused himself from the meeting and Bill Woodson took over chairing the meeting.

The public comment period was opened, seeing none, the public comment period was closed.

MOTION:

Mary Garelick moved to approve Item C-1 to include the following: Barbara Spagnola's invoice recommendations, insure that Black & Veatch along with staff are clear on change orders, have clarification as to the role and participation of this Board and to incorporate the Engineering Sub-Committee in the process. The motion was seconded by Barbara Spagnola and carried unanimously 7-0.

D. COMMITTEE MEMBER CLOSING COMMENTS

<https://youtu.be/kEBY1jWPgaE?t=1h5m57s>

The public comment period was opened, seeing none, the public comment period was closed.

ADJOURNMENT

The meeting adjourned at 4:12 p.m.



AGENDA NO: A-2

MEETING DATE: August 5, 2015

Staff Report

DATE: July 30, 2015

TO: Water Reclamation Facility Citizens Advisory Committee

FROM: Rob Livick, PE/PLS - Public Services Director/City Engineer

SUBJECT: Water Reclamation Facility (WRF) Project Update

RECOMMENDATION

Staff recommends the Council review the information regarding the current status and the proposed next steps regarding the development of a WRF project proposal for the Rancho Colina site and for the Council to provide any further direction as necessary.

ALTERNATIVES

No alternatives are recommended.

FISCAL IMPACT

Attachment 2 is a summary of the existing contract with consultants used to assist in the WRF project.

DISCUSSION

Staff provides this report as a monthly update to the progress made to date on the new WRF project. With the denial of the permit for the WWTP project in its current location, the City has embarked on a process for a WRF. This staff report provides a review of what has occurred to date. See Attachment 1 for a brief review of dates, status and accomplishments on the WRF facility project. Note the shaded information has been added since your last review.

ATTACHMENTS

1. Timeline of WRF events January 2013 to present
2. Summary of Project Expenses and Estimated Costs

Prepared By: ___RL___

Dept Review: ___RL___

City Manager Review: _____

City Attorney Review: _____

WRF Project Timeline
January 2013 - Present

Date	Action
August 17, 2015	Scheduled: City Council Workshop (3:30 - 5:00 pm) "WRF Construction 101" - How to build a WRF in less than five years
August 11, 2015	Scheduled: City Council Award of PM Contract
August 5, 2015	Scheduled: WRFCAC Meeting - Review of scope of work, fees and schedule for MKN as WRF PM consultant
July 29, 2015	City staff met with representatives from Rancho Colina to discuss the terms of the MOU for the potential property Purchase.
July 28, 2015	Interview with the PM team of MKN/Rickenbach. Committee recommends selection of MKN as PM
July 22, 2015	PM selection Team met to discuss one proposal received for PM and recommend that they interview the one proposer
July 21, 2015	Environmental Review Selection Committee met to review the six SOQs submitted. The Committee Recommends the City Interview four teams: Dudek, ESA, Rincon, AMEC
July 15, 2015	Kick off Meeting with Black and Veatch FMP Consultant
July 14, 2015	Proposals due for Program Management Services
July 14, 2015	SOQ due for Environmental Review Services
July 14, 2015	City Council Meeting - Award of FMP Contract
July 8, 2015	WRFCAC Meeting - Recommend for B&V as FMP consultant
July 1, 2015	New water and Wastewater Rates in effect
June 30, 2015	Staff Review of Black and Veatch Final Scope of Work
June 22, 2015	Discussions with Black and Veatch regarding Scope of Work
June 19, 2015	Pre Proposal Meeting for Project Management RFP
June 19, 2015	Pre SOQ Meeting for Environmental Review SOQ
June 18, 2015	The CSD BOD approved the FY 15/16 WWTP operating budget
June 17, 2015	Presentation to the Realtor group regarding project status
June 16, 2015	Prospective FMP consultant interviews -Carollo Engineers and Black and Veatch. Selection Committee unanimously recommends Black and Veatch
June 11, 2015	Joint Meeting with the Cayucos Sanitary District for Budget Approval and Audit results - Canceled
June 9, 2015	City Council adopted Resolution 31-15, approving the FY 15/16 Budget including wastewater
June 1, 2015	Meeting with WRFCAC subcommittee for initial review of FMP proposals
May 29, 2015	Released RFP for Environmental Review (CEQA/NEPA) for the new WRF
May 26, 2015	Public Hearing for Increases in Water and Sewer Rates held. Received 933/2707 required protests. City Council adopted resolution 30-15 setting new water and sewer rates for the next five years
May 12, 2015	City Council adopted Resolution 25-15 providing direction to staff.
May 12, 2015	Proposal received from Black and Veatch and Carollo responding to Facilities Master Plan RFP
May 7, 2015	Special WRFCAC Meeting to discuss recommendations to the City Council regarding moving forward with the project.
May 4, 2015	Morro Bay Staff issued an addendum to the WRF FMP RFP, eliminating the CSD from the review process and establishing a two party contract.
April 30, 2015	Joint Meeting of the CSD Board of Directors and Morro Bay City Council for continued discussion regarding the MOU for the New WRF. CSD Presented Resolution 2015-1 suspending participation with Morro Bay on a New WRF at the Rancho Colina Site
April 8, 2015	Rate Notices to be Mailed out to all City property owners and residents
April 8, 2015	WRFCAC Meeting to appoint members to WRF FMP review committee

New items are indicated by shading.

WRF Project Timeline
January 2013 - Present

Date	Action
March 24, 2015	City Council Approves Proposition 218 Notice for Water and Sewer Rate Adjustments and Schedules Public Hearing for May 26, 2015
March 19, 2015	Issued Contract to KMA for Preliminary Biological Assessment of Rancho Colina site and pipeline corridor.
March 19, 2015	Release RFP for WRF Facilities Master Planning
March 11, 2015	Joint Meeting of Morro Bay City Council and Cayucos Sanitary District Board of Directors in Cayucos
February 25, 2015	JFR Contract Amendment #4 for \$44,279.00 to assist with fatal flaw analysis
February 25, 2015	Facilities Master Plan RFP Completed for internal staff review
February 23, 2015	CSD Legal Council transmitted CSD DRAFT MOU to City
February 19, 2015	Letter from Ken Harris, RWQCB regarding the New WRF project and deadline for operations.
February 19, 2015	Public Works Advisory Board – Second Water and Sewer Rate Study Workshop
February 11, 2015	WRFCAC Meeting to review MOU for Now
February 11, 2015	Scheduled Joint Meeting of Morro Bay City Council and Cayucos Sanitary District Board of Directors in Cayucos was canceled
February 5, 2015	Meeting between Morro Bay Council Subcommittee and Cayucos Sanitary District Board Sub Committee to Discuss the MOU for Now
January 29, 2015	Public Works Advisory Board – Water and Sewer Rate Study Workshop
January 26, 2015	Meeting with between Morro Bay and Cayucos Staff to discuss next steps and "MOU for Now"
January 26, 2015	Meeting with between Morro Bay Staff, JFR/MKN and City Council sub-committee to discuss next steps and "MOU for Now"
January 13, 2015	City Council to review "Next-Steps" and provide direction to Staff.
January 8, 2015	Staff presentation of the "Next-Steps" to the City Council and CSD Board
December 11, 2014	Staff presented to the City Council and the CSD Board of Directors the Final JFR report, including the CMC evaluation by Carollo Engineers. The CSD Board of Directors concurred that based on the information presented that the Rancho Colina site appeared the most viable and cost effective.
December 9, 2014	City Council meets to review the Final JFR report, including the CMC evaluation by Carollo Engineers. The City Council expresses their preference for Rancho Colina as their preferred site for the New WRF. The cost estimates indicated that the CMC site was nearly double that of the Rancho Colina site.
December 8, 2014	Carollo Engineers releases their Technical Memorandum regarding CMC WWTP capacity and necessary facility expansion to accommodate increase flows from City and CSD.
December 8, 2014	Meeting between MBNEP and City staff to discuss concerns regarding the siting of the WRF at CMC and increased pollutant loads to Chorro Creek.
December 8, 2014	Meeting between City staff and the WRF Technical Committee (Irons/Smukler) to review the project status.
December 1, 2014	Tour of the existing CMC facility with representatives from CDCR, CSD and the City.
November 19, 2014	Conference call between CDCR, CSD and Morro Bay staff regarding the logistics of siting at the CMC location.
November 18, 2014	Meeting between City and California Coastal Commission staff regarding a variety of projects in Morro Bay including the WRF siting.
November 13, 2014	Staff presented to the City Council and the CSD Board of Directors the status of the CMC Capacity Analysis and also updated the CSD Board on the City Council meeting of November 12, 2014

New items are indicated by shading.

Date	Action
November 12, 2014	The City Council reviewed the draft report from John Rickenbach Consulting regarding final site preference. As the result of the report being incomplete, without the Carollo CMC engineering analysis including comparable cost estimates, the City Council choose to delay their decision on final site preference until such time that the report is complete and the WRFAC has had a chance to review and make a recommendation.
November 5, 2014	The WRFAC met and reviewed the draft report from John Rickenbach Consulting regarding final site preference. As the result of the report being incomplete, without the Carollo CMC engineering analysis including comparable cost estimates, the WRFAC moved to recommend to City Council to delay their decision on final site preference until such time that the report is complete and the WRFAC has had a chance to review and make a recommendation to the City Council.
October 28, 2014	Cleath-Harris and Associates presented the Hydrogeological Technical Memoranda regarding the relative benefits of a Creek discharge in the Chorro Valley and In-Lieu recharge in the Morro Valley to the City Council at their regular meeting.
October 22, 2014	Meeting of the WRFAC where they reviewed the Hydrogeological Technical Memoranda by Cleath-Harris and Associates and toured the Rancho Colina site.
October 20, 2014	A conference call between Morro Bay, CSD, CMC, Regional Board and CDCR was held to discuss the viability and timing of a regional facility at CMC. At that meeting CDCR authorized the release of WWTP data to Carollo for their process modeling.
October 10, 2014	A project kick off meeting was held at the City's Public Services offices for the Carollo CMC work, City and CSD staff along with the City's consultants were in attendance.
October 9, 2014	Meeting between the Morro Bay City Council and the Cayucos Sanitary District Board of Directors Meeting in Cayucos. City Council directed, by motion, City staff to work cooperatively with Cayucos Sanitary District staff.
October 8, 2014	Meeting of the WRFAC where they reviewed the LWA report regarding permitting constraints, Kestrel Consulting report regarding financing and grants and they formed three technical subcommittees.
October 2, 2014	Meeting of the Morro Bay City Council Technical/Executive Committee and the Cayucos Sanitary District Board of Directors in Morro Bay
September 30, 2014	The Public Services director executed a contract with Carollo Engineers for the study of capacity and expansion capability at the CMC site.
September 26, 2014	Meeting with Bartle Wells (Sewer and Water Rate Consultant) regarding hearing schedule and additional data needs
September 25, 2014	Received final scope and estimated fee (\$101,945) from Carollo Engineers for the evaluation of the CMC option, Carollo requested changes to the standard City contract which are being reviewed by the City Attorney
September 23, 2014	City Council Special Meeting reviewed the Report by Larry Walker and Associates regarding the Water Quality permitting implications at each of the two final proposed sites. Council also discussed the potential of joint City Council/WRFAC meetings and status of the CMC evaluation
September 11, 2014	Joint meeting of the Morro Bay City Council and the Cayucos Sanitary District Board of Directors Meeting in Morro Bay.
September 10, 2014	First Meeting of the WRFAC
August 12, 2014	City Council confirmed Citizen Appointments to the WRFAC
July 16, 2014	Kick off meeting with Larry Walker Associates regarding discharge permit requirements for various disposal/reuse options for the new WRF project.
July 10, 2014	Meeting with Cayucos Sanitary District staff to discuss the scope of work for the proposed Carollo Engineers CMC capacity evaluation study.
July 9, 2014	City Council conducted interviews for positions on the WRF Citizens Advisory Committee (WRFAC). City Council appointed seven members to the WRFAC.

New items are indicated by shading.

Date	Action
June 30, 2014	Staff met internally to gather preliminary information for Bartle Wells Rate Study. Staff will have all info to Bartle Wells by the end of July.
June 27, 2014	Kick off meeting with Kestrel Consulting to discuss funding strategies for the new WRF project.
June 27, 2014	Meeting with Cleath-Harris to review draft Chorro Creek discharge study and effect on City water supply. Authorized Cleath-Harris to perform a similar study for the Morro Valley.
June 25, 2014	Meeting with John Rickenbach and Mike Nunley to discuss project schedule for the WRF project
June 20, 2014	City executed a contract with Larry Walker Associates in the amount of \$24,970 to advise the City regarding discharge permit requirements for various disposal/reuse options for the new WRF project.
June 15, 2014	City executed a contract with Kestrel Consulting in the amount of \$20,530 to develop funding strategies for the new WRF project.
June 14, 2014	Staff has met with a variety of alternative project delivery method firms to explore the requirements for this process, firm include: Carollo, CDMSmith; and Black and Veatch.
May 27, 2014	City Council adopted Resolution 34-14 that provides direction to staff regarding the "Rancho Colina" site, continuing parallel path discussion regarding the CMC site, and forming a Citizen's Advisory Committee.
May 23, 2014	Selected Bartle Wells as Water and Sewer Rate Study consultant. The estimated fee for the study is not to exceed \$67,440.
May 22, 2014	The City Clerk posted the notice of the formation of a new, limited term and scope, i.e. Water Reclamation Facility Citizen's Advisory Committee. Applications are due to the Clerk by Friday, June 13, 2014.
May 13, 2014	Council Approved New Water Reclamation Facility Project Report on Reclamation and Council Selection of a WRF Site and provided direction to staff to return to Council with a resolution that captured the motions made.
May 8, 2014	May JPA Meeting cancelled.
May 1, 2014	Scheduled site visit at Giannini site with WRF Subcommittee, JRF Consulting and Property Owner.
April 23, 2014	Meeting to review the "Rancho Colina" site with the Morro Bay and CSD Sub-Committees along with Water Board staff.
April 21, 2014	"Rancho Colina" site visit with staff and Council persons Leage and N. Johnson.
April 18, 2014	Letter sent to property owners of potential WRF sites, inviting a discussion regarding siting potential
April 11, 2014	"Rancho Colina" site visit with staff and Council person C. Johnson.
April 10, 2014	April JPA Meeting cancelled
March 21, 2014	Meeting between City of Morro Bay (Irons/Smukler) and CSD (Enns/Lloyd) Sub-Committees along with Morro Bay and CSD County and Water Board Staff to discuss overall project status and the CMC option.
March 20, 2014	WRF Sub-Committee meeting along with staff and property owner at the "Rancho Colina" Morro Valley site to get an overview of the potential for it as a project location.
March 10, 2014	March JPA Meeting cancelled.
March 6, 2014	Scheduled WRF Subcommittee meeting with staff to discuss grant opportunities and schedules.
February 28, 2014	Received a revised scope of work for a contract amendment received from Rickenbach recognizing the accelerated time schedule for the WRF. Estimated fees not to exceed \$76,129.

New items are indicated by shading.

WRF Project Timeline
January 2013 - Present

Date	Action
February 25, 2014	City Council received a status update on the New WRF and adopted Resolution 17-14 prescribing a 5-year time frame for the construction of the New WRF.
February 24, 2014	City Council Discussion of Eater and Sewer Rates at special Workshop and Council discussion and direction regarding City DRAFT MOU and CSD DRAFT MOU.
February 13, 2014	WRF Sub-Committee meeting to discuss the 5 year time schedule and grant opportunities.
February 13, 2014	February JPA Meeting held.
February 11, 2014	Mid-year Budget adjustment to include additional funding for WRF alternative site analyses. \$100,000 was approved.
January 31, 2014	Status report preparation assigned to Public Services Director.
January 29, 2014	Received proposal from Rickenbach for a contract amendment to perform due diligence on alternative WRF sites for final site selection. Estimated fees not to exceed \$63,806.
January 23, 2014	Onsite staff meeting with property owner at Rancho Colina to tour a potential location.
January 23, 2014	Telephone discussion with City's Water Attorney regarding water rights to creek discharge of wastewater.
January 20, 2014	Received proposal from Cleath-Harris to study Chorro Creek discharge and effect on City water supply. Estimated fees not to exceed \$7,500.
January 16, 2014	January JPA Meeting canceled.
December 19, 2013	December JPA Meeting held – Verbal update by both CMB and CSD.
December 10, 2013	Presentation of Options Report to City Council.
November 19, 2013	Meeting with RWCQB Staff regarding project Status and Permit Renewal.
November 14, 2013	November 2013 JPA Meeting Cancelled.

599-8312-6105 P0234-8312	Contract Amount (1)	Amount Paid (2)	Remaining Contract
SITE ALTERNATIVES ANALYSIS - SITE PREFERENCE SELECTION			
JFR Consulting – Site Selection/Project Management Assistance			
Original Contract	\$ 117,256		
Amendment #1	\$ 76,129		
Amendment #2	\$ 91,336		
Amendment #3	\$ 23,147		
Amendment #4	\$ 44,279		
Total Contract + Direct Reimbursable Costs	\$ 352,147	\$ 352,288	\$ (141)
Kestrel Consulting – Assessment Funding			
Total Contract + Direct Costs	\$ 20,530	\$ 8,380	\$ 12,150
Larry Walker and Associates – Permitting Constraints			
Original Contract	\$ 24,970		
Amendment #1	\$ 5,100		
Total Contract + Direct Costs	\$ 30,070	\$ 30,151	\$ (81)
Cleath-Harris Associates – Stream Flow Augmentation			
Contract Amount	\$ 7,500		
Amendment #1	\$ 6,500		
Amendment #2	\$ 4,000		
Total Contract + Direct Costs	\$ 18,000	\$ 18,348	\$ (348)
Carollo Engineers – CMC Capacity, Siting Evaluation and Cost Estimate			
Total Contract + Direct Costs	\$ 101,945	\$ 87,361	
(Proposed to be Reimbursed by RWQCB using SEP Funds)		\$ (87,361)	
Net Amount	\$ 101,945	\$ -	\$ 14,584
Outside Legal - Water Rights		\$ 7,880	
Appraisal - Righetti Site		\$ 5,500	
Total Site Selection	\$ 522,692	\$ 409,167	\$ 26,164
FATAL FLAWS			
Kevin Merk Associates – Preliminary Bio Assessment			
Total Contract + Direct Costs	\$ 12,835	\$ 3,245	\$ 9,590
Fugro - Hydrogeological			
Total Contract + Direct Costs	\$ 38,600	\$ 1,618	\$ 36,983
Farwestern Archeological			
Total Contract + Direct Costs	\$ 12,000		
Larry Walker Associates - Pretreatment (Salt) Assessment			
Total Contract + Direct Costs	\$ 23,640	\$ 3,470	\$ 20,170
Total Fatal Flaws	\$ 87,075	\$ 8,333	\$ 66,743
FACILITIES MASTER PLAN			
Black and Veatch			
Total Contract + Direct Costs	\$ 710,123	\$ -	\$ 710,123
ENVIRONMENTAL REVIEW (CEQA/NEPA Compliance)			
Consultant to be Determined			
PROGRAM MANAGEMENT			
MKN Associates			
Total Contract Year One +	\$ 902,808	\$ -	\$ 902,808
Estimated Amount for Eight Years - Including Construction Management	\$10.5Million		
Kestrel Consulting - SRF and Prop 1 Support/Applications	\$ 65,752	\$ -	\$ 65,752
Total Consultant Contract Amount (to date)	\$ 2,288,450	\$ 417,500	\$ 1,705,837

Notes:

- Does not include reimbursible costs, ie copies, travel and other direct expenses
- Includes reimbursible costs, ie copies, travel and other direct expenses



AGENDA NO: C-1

MEETING DATE: August 5, 2015

Staff Report

DATE: July 31, 2015

TO: Water Reclamation Citizens' Advisory Committee (WRFCAC)

FROM: Rob Livick, PE/PLS - Public Works Director/City Engineer

SUBJECT: Consideration of Program Management Services Proposal and the Selection Committee's Recommendation for Contract Award to MKN & Associates

RECOMMENDATION

Staff recommends the WRFCAC:

1. Receive the report and staff presentation
2. Review the recommendation from staff and WRFCAC selection subcommittee and recommend that the City Council award a multi-year contract to MKN Associates for Program Management for the development and construction management of a New WRF
3. Recommend the City Council authorize the Public Works Director to execute an agreement for the amount of \$1,012,889, including a 10-percent (\$92,081) contingency.
4. Recommend contract review be conducted in six to eight months to allow staff to review scope and provide budgetary estimates for the next 12-month period and to sync it with the City's budgeting process, until project completion.

ALTERNATIVE

Review the proposed scope, budget, and schedule and provide any direction to staff for revision that will be forwarded to City Council.

FISCAL IMPACT

A typical program management budget is approximately 3 to 4% of total program costs. For a \$102 million program, that includes both the wastewater treatment and water reclamation components such as the one we have embarked upon for Morro Bay, costs could range from \$3 to \$4.1 million – with annual program management expenses that are often higher during design and planning phases of the project, then a little lower during construction and startup. The costs for items such as design-build contract documents, design services, the Master Reclamation Plan, and comprehensive public outreach are not be included in that assumption, but the costs for these tasks along with the standard program management items are detailed in the budget.

Construction management can vary from 6 to 8% of the construction costs. Assuming construction

Prepared By: RL

Dept Review: RS/BK

costs vary between \$80 and \$100M for both phases of the program, a range of \$4.8 to \$8 million would be expected.

Integrating the program management and construction management activities will reduce duplication of effort and cost for both types of services, ensure a high level of quality control throughout design and construction, and ensure consistency among the different Phase I (wastewater treatment) and Phase II (fully implemented water reclamation) program elements.

MKN proposes to complete all work under the Program Management contract on a time and materials basis with a budget per task order that will not be exceeded without receiving written authorization from the City.

The first task order for 12 months of the WRF project program management for Task Groups 100-300 up to task 304 is estimated at \$920,808; staff is recommending a ten-percent contingency be included in the authorization, for a total FMP authorization of \$1,012,889.

BACKGROUND/DISCUSSION

The Program Management team has a critical role in determining the necessary facilities and establishing a project budget for a new WRF that will meet the community's goals adopted by City Council. Successful Program Management will insure that no items on the critical path fail to be completed without a complete understanding of any delays to insure completion of a new WRF within five years, as directed by Council.

On June 1, 2015, the City of Morro Bay released a Request for Proposal (RFP) for a Program Management for the new Water Reclamation Facility. In general the RFP requested the potential Program Management teams address the following:

Program Management services are required to ensure the successful completion of the new WRF on time and on budget. The Consultant will be accountable to the Public Works Director for overall program schedule, budget, and quality. It will be important the project proceeds in a smooth and integrated fashion, in accordance with all provisions listed in this RFP.

It is anticipated that the services furnished by the Program Manager to the City will be performed under a series of task orders defining the specific services to be performed and the estimated cost for each phase of services.

The City considers a Program Manager and a Project Manager different in that a Program Manager will spend significant time and effort integrating the various complex activities and sub-projects associated with the new WRF, communicating to stakeholders, and negotiating plan changes related to the work. There may be a project manager (or managers) who will be assigned to various tasks required by the project, who will report to the Program Manager. Fundamentally, the Program Manager will be involved with all aspects of the new WRF project from the Facilities Master

Planning to project close out and ensure all of these efforts are integrated.

Consultant shall furnish Program Management personnel, including a dedicated person or persons to provide full-time Program Manager Services as required for the new WRF project. The Program Manager shall be responsible for all matters related to this project and shall complete liaison activities among the City, the Contractor, Construction Management Consultants, and Citizens, such that the impact of the project on regular City operations is minimized.

The new WRF will be a long term project that has the major phases as follows:

- *Facility Master Planning*
- *Permitting and Environmental Review (Including Annexation)*
- *Development of Bridging Documents*
- *Design/Build*
- *Construction Management*
- *Project Close-out*

Additionally the program manager will maximize efforts to bring on the reclaimed water delivery phase of the program either concurrently with construction of the WRF or as a follow-on project.

The Program Manager shall be required to have significant experience in large project oversight and implementation with alternative delivery methods, which includes that of a Water Reclamation Facility (WRF) or similar facility. Additionally, while it is desired that the Program Manager be a licensed Civil Engineer, registered in the State of California, appropriate professionals in other closely related disciplines will be seriously considered. The Program Manager shall possess clear and effective verbal and written communication skills and have the interest and ability to work in a team-oriented, collaborative work environment. They should expect to work closely with and must demonstrate proficiency in communicating effectively with Council, Advisory Bodies, City staff and the public.

The following summarizes the timeline for the Program Management selection process:

- The RFP was released on June 1, 2015.
- WRFCAC reviewed the RFP and selected three members, Ginny Garelick, Barbara Spagnola and Bill Woodson, on June 10, 2015 to serve on the proposal review and selection committee.
- A mandatory preproposal meeting was advertised in the RFP and sponsored by the City on June 19, 2015 and was attended by representatives from eight consulting firms.
- One proposal was received on July 14, 2015 from MKN & Associates.
- On July 22, 2015 the Program Management review and selection team met to discuss the proposal and any questions that the team might want MKN to address during the interview process. Unfortunately Mr. Woodson was unable to attend both the pre-interview meeting and the interview, but was able to provide the selection team with questions regarding

- maintaining the project schedule and schedule details.
- An interview of MKN & Associates was held on July 28, 2015.

The proposal and interview of MKN & Associates were evaluated based on the following criteria:

- Understanding of the scope of work
- Past performance and related experience of the firm
- Expertise of technical and professional team members assigned to the project
- Proposed project approach
- Recent experience in successfully performing similar services in the Coastal Zone
- Demonstrated ability to conform to City requirements

MKN & Associates submitted thorough and responsive proposals demonstrating they were fully capable of performing the work. MKN & Associates was selected unanimously by the selection committee, which consisted of Rob Livick, Bruce Keogh, Rick Sauerwein, Barbara Spagnola, and Ginny Garelick. Their review team offered the following commentary:

- *The diversity and depth of their staff is impressive,*
- *The team to date has demonstrated good communication skills (the sub consultant) MNS brings value through being on board early*
- *Excellent team with relevant experience and proven ability to manage large budget projects and deliver projects on time and within budget*
- *Even knowing they were the only firm being interviewed, MKN put forth a complete effort in their presentation and interview. They were thoughtful and engaging throughout the process.*

One concern expressed by the review team was regarding back-up should key team members become incapacitated. MKN assured us that with JFR as deputy project manager and MKN's senior staff being fully engaged, the Program Management would continue seamlessly should an unforeseen circumstance occur.

City staff has spent the past few days reviewing and negotiating a scope, budget, and schedule with MKN & Associates. These items are attached to this staff report. The primary areas of negotiation included the following:

- Prior to these formal workshops, there will be three (3) less formal educational workshops at the outset of the program, focused on the long-term program overview, with anticipated follow ups focusing on possible delivery systems and the appropriate timing and application of technologies in the process, the latter aimed at industry outreach. These will be led by MKN and JFR, and are in addition to the City Council and Planning Commission meetings and WRFCAC meetings (which are shown as separate tasks). The first workshop is anticipated to be a City Council work session focused on the full work plan and major decision points for the WRF Program.
- Modifications to Task 301 to include the following work under this task:

- Hydraulic modeling of the outfall to evaluate performance under various flow regimes (wet weather flow, wet weather and brine, and brine only if groundwater recharge is pursued to reduce wet weather flows)
- Preliminary layout of connection to the outfall
- Review of legal or permitting constraints associated with continuing use of the outfall under different management strategies. It is assumed City legal counsel will provide an analysis of ownership and other legal constraints.
- Development of a technical memorandum summarizing the work described herein.

The City typically develops professional services authorizations with a 10% contingency to cover additional, unforeseen services that may be required as a project proceeds. The base fee requested by MKN & Associates for this first year is \$920,808. With 10% contingency, the total authorization would be \$1,012,889.

Staff additionally recommends the contract review be conducted in six to eight months. This will allow staff to review scope and provide budgetary estimates for the next 12-month period and to sync it with the City's budgeting process.

The next steps in the process include development of a draft contract between the City and MKN & Associates based on the City's standard agreement format; review of the draft scope & budget by City Council at the August 11, 2015 Council Meeting; determination by Council whether to proceed with MKN & Associates and authorize an agreement at that meeting.

CONCLUSION

The PM review and selection committee recommend award of the contract for the program management to the MKN & Associates team based on the solicitation and review process that took place over the past two months.

ATTACHMENTS

1. Proposed Scope and Budget from MKN & Associates for Program Management
2. Proposal From MKN & Associates

PROJECT UNDERSTANDING

PROJECT OVERVIEW

Morro Bay's new Water Reclamation Facility (WRF) project is proposed to be constructed on an approximately 10 to 15-acre portion of a 187-acre property approximately one mile east of the Morro Bay City limits, on the north side of Highway 41, known as the Rancho Colina site. The project will require collection system modifications and a new force main to convey the raw wastewater to the site. The new WRF is proposed to be owned and operated by the City of Morro Bay, and will serve residents of the City as well as any customers under contract with the City.

The ultimate goal for the WRF is to produce the maximum amount of reclaimed water feasible to supplement the City of Morro Bay's water supply. The ultimate use of the reclaimed water is unknown at this time, but potentially includes groundwater recharge, agricultural offsets, and/or indirect or direct potable use to augment existing City water supplies.

A few key components of the project description and history are addressed here in further detail.

PROJECT COMPONENTS

The Morro Bay Water Reclamation Facility is part of a two-phase program for a complete reclaimed water processing and transmission system. Phase I of the program includes the following components:

- Development of the new WRF at the Rancho Colina site
- Lift station and pipelines needed to connect the facility with existing wastewater infrastructure within the area it will serve
- Pipelines and/or other facilities needed to reclaim and distribute treated wastewater for reuse in accordance with the Facility Master Plan and reclamation planning efforts currently underway
- Support facilities required for the operation of the New WRF; i.e., water main extension along with miscellaneous dry utilities
- Possible co-location of other City facilities at Rancho Colina, including a City corporation yard, community park, education center, or other facilities
- Actions needed to transfer wastewater treatment service from the current WWTP to the new facility.
- Decommissioning of the existing WWTP

The specific project components will be further refined in the Facility Master Plan, but conceptually, the project will replace the existing wastewater treatment plant (WWTP), and will be sized to accommodate future buildout under the General Plan/Local Coastal Plan in the City, including potential customers.

The new WRF will also be designed to disinfect tertiary treatment standards in order to facilitate water reclamation, and Phase II of the program will include the infrastructure necessary to distribute this reclaimed water offsite. It is not yet known what facilities will be needed to achieve this, but it can be assumed there will likely be a pipeline network and on- or off-site storage facilities, which may include surface or subsurface systems. These concepts will be further refined in both the Facility Master Plan and Master Reclamation Plan for the project. It is expected that the CEQA/NEPA analysis will

commence once the Facility Master Plan has been completed to a sufficient level of detail, in order to more fully understand the nature of the likely project components.

The City anticipates pursuing planning, design, and construction funds from various sources including the Clean Water State Revolving Fund (SRF), among others.

DETAILED WORK PROGRAM

Program management tasks are grouped by task type. While the program administration task group will occur for the entire duration of the project, the subsequent tasks have defined start and end times within the overall timeline of the project. Task groups are as follows:

- Task Group 100 – Program Administration
- Task Group 200 – Preliminary Planning
- Task Group 300 – Phase I Preliminary Engineering and Procurement
- Task Group 400 – Phase I Project Design
- Task Group 500 – Phase I Project Construction
- Task Group 600 – Phase I Facility Start Up, Testing, Commissioning
- Task Group 700 – Phase I Facility Operation And Project Close Out
- Task Group 800 – Phase II Project Design
- Task Group 900 – Phase II Project Construction
- Task Group 1000 – Phase II Facility Start Up, Testing, and Commissioning
- Task Group 1100 – Phase II Facility Operation and Project Closeout

TASK GROUP 100: PROGRAM ADMINISTRATION

Program administration tasks will extend throughout the entirety of the new WRF project. However, budget authorization for the *first 12 months* is requested at this time. The first 12 months is an approximate duration of the initial program phases detailed in our budget.

Some of these tasks included in the preliminary budget will continue beyond the initial 12 months of program management. Additionally, the Program Management team may want to begin other tasks, originally planned to occur in later phases, earlier in the project process which may not be reflected in the preliminary budget. *It is assumed future authorizations by task order will address the remainder of the program.*

TASK 101 - SCHEDULE TRACKING AND PROGRESS REPORTING. MKN will continue expanding and updating the existing program schedule as the project proceeds. This schedule will encompass and coordinate all phases of the project (identified above as Task Groups 100 through 1100), including:

- Planning
- Permitting
- Preliminary Design
- Design/Build Construction
- Construction
- Startup
- Commissioning

Both a detailed version and a presentation version of the schedule will be maintained. We will provide monthly written progress reports to the City. Monthly reports will include the status of the Program Management budget, work completed during the previous period, identification of any items that require attention from the City, and work planned for the upcoming period. Ten (10) hours per month is the assumed level of effort for this task.

TASK 102 – PROGRAM DOCUMENTATION. MKN will develop and maintain decision logs for all the major program efforts, including the following:

- Facility Master Plan
- Master Reclamation Plan
- Program Funding and Financing
- Public Outreach
- Phase I WRF Procurement
- Influent Lift Station Design
- Transmission Pipeline Design
- CEQA/NEPA Compliance
- Resource and Land Use Agency Permitting

Twelve (12) hours per month is the assumed level of effort for this task.

TASK 103 - MEETINGS. MKN will attend weekly project meetings with City staff, six (6) Public Works Advisory Board meetings per year, twelve (12) WRFCAC meetings per year, and twelve (12) City Council meetings per year.

It is assumed this task will be amended in the future to extend from Phase I of the program through implementation of the Master Reclamation Plan and Phase II Recycled Water Delivery System. The budget includes only the first year (+/-) of meetings.

TASK 104 - PUBLIC OUTREACH.

The program manager will oversee and coordinate all outreach efforts by the Program Management Team. Under the program manager's oversight, JFR will lead the public outreach effort for the entire program, in coordination with RRM Design Group. In general, the outreach effort is related to coordinating the following interrelated efforts and educational workshops to the general public:

- Reclamation Planning (outreach to growers)
- Public Agency outreach
- WRFCAC Coordination
- City Council presentations (JFR and RRM budget)
- Coordination with the GP/LCP Update

Task 104A: Outreach Kickoff/Scoping Meeting

This meeting will occur as soon as possible after the program management contract is in place with the intent of determining the overall project planning process, outreach strategies, and internal timeline of milestones. The Program Management Team will also use this meeting to obtain planning/design guidance from City staff, including initial comments for co-locating of City facilities, and to review

options and initial concepts for education center and park with City staff. This meeting would also include discussion of water reclamation planning and outreach strategies and would result in a list of stakeholders, subsequent workshop topics, workshop logistics (timing, location, advertisement), and any outreach concerns and ideas.

Task 104B: Project Website Development

The MKN team and Konig Media will develop a project-specific website. We will coordinate the design and content of the website with City staff through a series of meetings and provide draft content/outlines for review and approval.

Task 104C: Outreach Program

The MKN team will design and outline the outreach program. JFR will write outreach program memorandum with feedback from RRM. This will be a memo outlining the outreach program and will include elements such as:

- Outreach program master schedule, and detailed schedules for upcoming 12 months
- Strategy for transparency and develop project branding
- Defined outreach focus area topics
- Outline of workshops, workshop exercises, and topics
- List of public education program opportunities

This outreach process will need to be transparent and inclusive. The outreach strategy memo will outline this process and confirm that the City project team agrees on the approach and strategy before the outreach begins.

Task 104D: Stakeholder Outreach

Initial outreach to stakeholders will provide input to the master planning effort and inform the initial water reclamation planning process. The goal of this outreach effort is to obtain and document a clear understanding of the needs/desires of all project stakeholders in regards to project design of both facilities and water reclamation program. This task will build off of the stakeholder feedback received during the WRF Options Report process. The MKN team will conduct one (1) day of 30- to 60-minute interviews with property owners, growers, decision makers, and others with an interest in the project. City staff will be responsible for meeting notification, facility, and logistics. JFR will summarize meeting feedback and RRM will review and edit the summary.

Task 104E: Citizen Advisory Committee (WRFCAC) Coordination and Meetings

Following the kickoff meeting, a coordination schedule will be developed to ensure close working communication between the Program Management Team and the WRFCAC. The program manager will work with the WRFCAC to agendaize current issues for discussion at their regular meetings.

Task 104F (1): Community Outreach Workshops

The MKN team will plan, coordinate and lead two (2) formal community workshops related to the Facilities Master Plan process, which will stem from the public education program developed following the outreach kickoff. These will be led by JFR and RRM. Detailed workshop topics will be developed as the project progresses, but it is anticipated that the initial workshop will include a general overview of the current project status, review of site location selected, and discussion of next steps through the environmental review, permitting requirements, and design processes, as well as providing a forum for

input on the Facility Master Plan. The workshops will be designed to be interactive and informative. Exercises may involve forms of polling participants through the use of tape dots, report cards, handheld remotes or similar methods. The Program Management Team will provide graphics and materials for each workshop (e.g., workshop flyer, nametags, sign-in sheets, agendas, and exhibits).

Prior to these formal workshops, there will be three (3) less formal educational workshops at the outset of the program, focused on the long-term program overview, with anticipated followups focusing on possible delivery systems and the appropriate timing and application of technologies in the process, the latter aimed at industry outreach. These will be led by MKN and JFR, and are in addition to the City Council and Planning Commission meetings and WRFCAC meetings (which are shown as separate tasks). The first workshop is anticipated to be a City Council work session focused on the full work plan and major decision points for the WRF Program.

Task 104F (2): Reclamation Planning Workshops

Our Program Management Team will work closely with the City, regulatory agencies, growers, and general public to address complex issues related to the potential development and use of reclaimed water within the framework of the Master Reclamation Plan. JFR and RRM will lead a robust outreach process to develop consensus on the best course of action. Specific tasks include two workshops focused on reclamation-related issues to address these key questions. We anticipate the workshops would address the following broad topics:

- Workshop #1 – Direct or Indirect Water Supply for the City:
 - Identify state and local requirements regarding reclaimed water use, focused on the customer or recipient of recycled water;
 - Present information we have learned about hydrogeological issues, including the potential for groundwater recharge, streambed recharge in Morro Creek, percolation, and subsurface injection;
 - Describe possible ownership and governance options for delivery and storage of reclaimed water, assuming the City will construct a transmission main but storage and distribution will be handled by the users to reduce the City's costs
- Workshop #2 – Agricultural Reclamation:
 - Identify and recap possible uses of reclaimed water related to agricultural use
 - Engage the growers and community in general about their willingness to participate in the reclamation process, given potential costs and logistics

The MKN team will plan, coordinate and lead these workshops, the results of which will inform our Master Reclamation Plan.

Task 104G: City Council Outreach and Updates

The MKN team will meet with Council on an ongoing basis throughout the duration of the project to discuss key aspects and issues. The first study sessions following the program manager contract execution and initial scoping meeting will review the overall design build process and appropriate timing of milestones and actions to be taken by Council members. The program manager will also provide ongoing monthly project updates to the Council.

104H: Outreach Coordination and Meetings

This task includes the ongoing coordination and meetings with City staff, stakeholders, and team members. Other outreach services, as identified in the initial scoping meeting or during the course of the project, will be executed under staff direction.

104I: General Plan/LCP Coordination

JFR will work with City staff and General Plan/Local Coastal Plan (GP/LCP) consultant team to most efficiently coordinate the outreach programs for this project and for the GP/LCP update process. The two efforts are highly related, since the new WRF must be sized to accommodate the future growth of the City, and the GP/LCP must be mindful of various constraints that development of the new WRF may pose. This task assumes up to three (3) workshops in support of this combined effort, and JFR's attendance and potential presentations at these workshops. The Program Management Team will provide set up materials for the workshop (e.g., workshop flyer, nametags, sign-in sheets, and agendas) and the GP/LCP consultant would provide workshop materials and presentation.

104J: Vendor/Industry Outreach

Members of the City Council have expressed interest in a workshop focused on the interested industry vendors who might have products or technologies that could be used in the new WRF. Although this forum could take many forms, we recommend an approach based on the following outline:

- Educate Council and Public about the FMP and DB processes
- Discuss when and how technology and project components will be selected
- Update schedule and efforts underway
- Invite industry representatives (potential vendors) to listen
- Allow any member of the public to provide input (not just industry)
- Approach is consistent with Council goals and outreach concept

This effort must be managed carefully, because an unfocused effort carries the following risks:

- Could undermine City goals and sidetrack FMP process
- Could derail the alternative delivery process for the new WRF
- Would lead to longer timeframe and likely higher costs

We believe that in order to have a successful outcome to this forum (and to minimize risks), several preparatory steps are needed, particularly with regard to educating the City Council and WRFCAC. These steps could include:

- Meeting one-on-one with Council members and WRFCAC reps
- Educate them on how the FMP and Design Build process work
- Explain how technologies are selected, and how contractors are selected

104K: Logo Design and Graphics

The project team will work closely with the City to develop provide a logo design to brand the project and use on documents, website, and exhibits. The team will also prepare graphics and exhibits throughout the process to put on the website, e-blasts, newsletters, and use during meetings.

104L: E-Blasts, Newsletters, and/or Surveys

The project team will provide e-blasts, newsletters and/or survey to keep the community informed or poll the community as the project progresses. The team will work with staff to draft articles and

information for the e-blasts, newsletters and/or questions for the surveys (using survey monkey or similar program), and will format and brand with the project logo. City will provide emails and addresses.

104M: Visual Preference Survey.

A picture is worth a thousand words. Using photographs, the Visual Preference Survey allows participants to express their preferences on different architectural styles and elements that could be incorporated into the WRF architecture. The Visual Preference Survey can also poll participants on what community-focused elements they prefer to be considered as part of the WRF Site Plan's public realm. Each participant will be given a remote control device and will be asked to vote on projected architectural character images and public realm site features, similar to a PowerPoint presentation. Participants will vote on each image and the results will appear instantaneously. This is an exciting and interactive exercise that will give the team direction for the architecture and Facility Master Plan.

The Visual Preference Survey can be conducted at a community workshop or directed towards a smaller group, such as the WRFCAC or a Council study session.

RRM would prepare the survey from images collected in their image library. This task includes a round of edits to the survey to fine tune it for presentation, conducting the survey, and a summary of results.

TASK 105 - BUDGET TRACKING AND REPORTING. MKN will develop and maintain a budget tracking spreadsheet and s-curve for reporting project status of all team members' efforts throughout the program. A detailed version and a presentation version will be maintained. City will provide account ledgers monthly and all team members will provide a copy of invoices or payment requests to MKN for review and recommendation for payment. Their invoices and City ledgers will be used to update the budget spreadsheets.

MKN will provide a formal program-level budget report and cashflow projection on a quarterly basis. Six (6) hours per month is the assumed level of effort for this task.

TASK 106 – GRANT AND LOAN PURSUIT AND MANAGEMENT. Many issues will affect the City's ability to secure outside funding for the project. Our team, working closely with Kestrel Consulting, will perform the due diligence on the most promising funding leads identified through our team's research to date, so as to better position the City to be competitive for such funding when the time is right to make a formal application for grants and loans.

Based on our experience on the project to date, and on similar efforts, we anticipate the following grants and loans will be the most promising for the City of Morro Bay:

- Proposition 1 / CWSRF Planning and Construction Loans
- Proposition 1 / SWRCB Recycled Water Feasibility Study Grant
- WaterSmart Title XVI Bureau of Reclamation Recycled Water Grants
- Pacific Gas & Electric Energy Efficiency Grants (various)

TASK 107 –TECHNICAL SUPPORT FOR GRANT AND LOAN APPLICATIONS. MKN will provide engineering support for completion of grant and loan applications by Kestrel Consulting. This work is anticipated to

include technical, engineering, environmental, and financial submittals for the State Revolving Loan Fund; application materials for the SWRCB Recycled Water Planning Facilities Grant, and others. A budget allowance of 100 hours is recommended for this task but level of effort will depend on availability of information in the Facility Master Plan and reports by others.

TASK 108 – DEVELOP AND MAINTAIN PROJECT MANAGEMENT SYSTEM. MKN will evaluate alternatives and develop and manage an electronic project management file-sharing and document management system (ex. Procore and Bentley Projectwise). We will also investigate cloud-based systems such as Teamwork and Box.

It is assumed the City will pay any software or license costs for each copy of the system recommended by MKN. As team members are added to the program, MKN will conduct a brief training session with each firm on proper use of the document management system.

An initial estimate of 40 hours to establish the system and monthly estimate of 8 hours per month is assumed for this task.

TASK 109 – ASSIST IN PLANNING AND DEVELOPMENT OF PROGRAM OFFICE. If desired, MKN can develop a scope and budget to assist the City in developing a program management office for co-location of program team members. This could occur during initial planning activities, during design-build execution, or during construction activities.

MKN will assist the City with space planning and coordination of furniture, utilities, signage, and development of protocol for use and security of the space. All costs would be paid by the City for the facilities, including furniture, lease (if required), utilities, and signage.

TASK 110 – DEVELOPMENT AND MAINTENANCE OF PROGRAM MANAGEMENT PLAN. MKN will prepare a Program Management Plan providing detailed planning steps for the upcoming 18 months. The Program Management Plan will include budget, schedule, cashflow projections, roles and responsibilities of program team members, risk registry, confirmation of major decisions or milestones, outreach strategy, and updates or reconfirmation of City Council goals and objective. It will be updated every six months with input from City staff.

Program Management Plan efforts will include tracking project alignment with city goals. On an ongoing basis during Program Management Plan updates, MKN will review the City's goals versus project process, decisions, and activity and confirm that those actions continue to support the City's goals and objectives for compliance, capacity, efficiency, operational flexibility, innovation, community outreach, and sustainability.

An initial effort of 80 hours and two updates at 40 hours each are assumed for this task.

TASK GROUP 200: PRELIMINARY PLANNING

TASK 201 – MASTER RECLAMATION PLAN. This promises to be a complex effort that involves prioritizing the various reclamation opportunities identified in our previous efforts. This Task will involve drilling down on several key questions:

- What are the State and local requirements that end users must follow for recycled water use?
- What approach maximizes the benefit to the City's water supply, either directly or indirectly?

- Is a combination of groundwater recharge along with directly providing access to reclaimed water for growers a good approach?
- If so, what will the growers be willing to pay to help offset costs of providing reclaimed water? Is a subsidy to growers fair to City ratepayers?
- How can reclamation costs be minimized? Should growers be responsible for extending their own reclamation infrastructure? Will onsite storage help?
- Can growers indirectly benefit through groundwater recharge that benefits the City's wellfield?
Among the challenges: 1) What distance would be required between groundwater recharge locations and City wells, based on local hydrogeology? 2) How will increased groundwater pumping by the growers affect the City's wells? 3) Can a framework among the City and growers be established that protects water rights and water supply benefits for all users? 4) How will possible future regulations that relate to direct potable reuse affect this equation? 5) Are there opportunities to use state and federal funding to add a phased, direct potable reuse (DPR) strategy to the reclamation program?

Our management team will work closely with the City, regulatory agencies, growers, and general public to address these complex issues. We believe it will require a robust outreach process to develop consensus on the best course of action, which may take some time to complete.

The format will follow the draft outline provided in the grant application requirements for the SWRCB Recycled Water Feasibility Study Planning Grant Program in order to meet requirements. *If awarded, the grant will pay up to \$75,000 of this effort as long as the state guidelines are followed. MKN has experience performing these studies and will ensure the Master Reclamation Plan meets state requirements.*

Specific tasks include:

- Identify state and local requirements regarding reclaimed water use, focused on the customer or recipient of recycled water (ex. cross-connection requirements and setbacks from potable water facilities)
- Manage the next phases of work by the City's project hydrogeologist, Fugro Consultants, as they assess the potential for groundwater recharge, including streambed recharge in Morro Creek, percolation, and subsurface injection
- Manage work by Larry Walker & Associates (LWA), a consultant to the City, to identify sources of salinity and develop a source control strategy
- Provide schematic layouts, capital cost opinions, and operation/maintenance cost opinions for the recharge alternatives explored by the hydrogeologist (including up to four scenarios)
- Guide evaluation of ownership and governance options for delivery and storage of reclaimed water, assuming the City will construct a transmission main but storage and distribution will be handled by the users to reduce the City's costs
- Conduct outreach to the growers and community in general about their willingness to participate in the reclamation process, given costs and logistics
- Identify and critically evaluate various reclamation strategies, especially with regard to timing, water rights, logistics
- Coordinate with Kestrel Consulting to identify funding opportunities

- Identify the strategy that best benefits the City's potential water supply while protecting property owner water rights
- Develop a phasing strategy for implementation of the recycled water distribution and/or groundwater recharge system
- Prepare a draft and final report summarizing the work described above.

TASK 202 – CEQA/NEPA COORDINATION PROCESS. All project-related activities must be considered in the CEQA/NEPA document for this project. This would include steps ranging from property acquisition, property design, grading, construction and operation. The Facility Master Plan must be sufficiently complete so a meaningful project description can be developed in adequate detail for thorough environmental impact analyses. The tasks below describe our team's approach to managing the CEQA/NEPA process, including the technical studies to support the process and permitting that will be needed (described in Task 203).

Task 202A. CEQA/NEPA Program Coordination. In coordination with the program manager, JFR will take the lead in developing the steps needed to hire and manage a third-party consultant who will prepare the CEQA/NEPA documentation for the proposed project. This task involves the entire process from working with various responsible agencies (including but not limited to the California Department of Fish and Wildlife, Regional Water Quality Control Board, Caltrans, and SLO Air Pollution Control District) developing a scope of work, evaluating consultant proposals, interviewing and providing a recommendation to the City for a selected consultant, and working with the consultant as they prepare the CEQA/NEPA document. We will work with the City's planning staff on these tasks, and coordinate closely throughout the entire CEQA/NEPA process. The specific steps involved in this task include:

- a. Prepare Initial Study
- b. Coordinate with Responsible Agencies to Develop the CEQA/NEPA Work Scope
- c. Evaluate Consultant Proposals/Assist in Consultant Selection
- d. Review Administrative Draft CEQA/NEPA Document
- e. Coordinate with City Staff to Release Draft CEQA/NEPA Document
- f. Coordinate with Staff and CEQA/NEPA Consultant to Respond to Public Input on Draft Document
- g. Review and Coordinate Final CEQA/NEPA Document
- h. Prepare Findings, Evidence and Project Conditions
- i. Prepare Staff Report with City Staff Review
- j. Present Project at Public Hearings (assume 2)
- k. Ongoing Meetings with City Staff (cost assumed as part of Task 103)

Task 202B. Technical Studies Coordination. Several site surveys, studies, and other activities will be needed in support of the various permit applications and CEQA/NEPA process. Some of these, including those related to biological and cultural resources, are already underway. The needed studies include, but may not be limited to:

- Jurisdictional Determination (Waters of the United States and State of California)
- Focused Special-Status Species Surveys
- Biological Assessment
- Prepare Habitat Mitigation and Monitoring Plan (if any)
- Hydrologic and Hydraulic Analysis

- Phase I Archeological Survey (Section 106)
- Phase I / II Site Assessment
- Site Remediation (if necessary as a result of the Phase I/II Site Assessment)
- Air Quality Tech Report
- CDP/CUP Permit Application Review

The Program Manager will coordinate these technical studies with the selected CEQA/NEPA consultant and provide technical support as necessary.

TASK 203 – PERMITTING. This phase of the project includes all resource regulatory agency permitting, as well as any land use permitting that may be needed to support the project. In coordination with the Program Manager, JFR will coordinate these efforts, and work with City staff, others on the Program Management Team, or outside consultants to prepare or complete these processes or permits. Note that during the first 12-month phase of the process, the permitting process will be underway but not completed, so costs should be considered preliminary. The following permitting subtasks are included in this effort:

Task 203A. Resource Regulatory Agency Permitting. The project will require a variety of permits from state and federal resource regulatory agencies. It is not yet known whether the project design can locate the new WRF outside Waters of the United States, Waters of the State of California, and other resources under federal or state regulatory protection. However, if there is any discharge into Morro Creek as part of the reclamation effort, the project will be required to comply with RWQCB Waste Discharge regulations. Depending on the nature of the activity, it may also require a Streambed Alteration Agreement from the State Department of Fish and Wildlife, a Section 404 permit pursuant to the Clean Water Act from the U.S. Army Corps of Engineers, and Section 401 certification from the RWQCB.

Key resource regulatory permitting agencies for this project include:

- U.S. Army Corps of Engineers (pursuant to Section 404 of the Clean Water Act)
- Regional Water Quality Control Board (NPDES permit; meeting Porter-Cologne Act requirements; Section 401 certification)
- California Department of Fish and Wildlife (Streambed Alteration Agreement)
- California Environmental Protection Agency, Department of Toxic Substances Control (Site Assessment / Remedial Action Plan)
- San Luis Obispo County Air Pollution Control District (SLOCAPCD)

These agencies will use the final CEQA document to assist in their permitting processes. The 5-year schedule assumes that regulatory permits can be obtained with 6 months from the end of the CEQA process, which depends on the permit process being initiated during the CEQA evaluation, and assumes that resource agencies engage in a timely review within their permitting processes. *Although the permit process for these actions may be initiated during the CEQA process, their completion will depend to a large extent on agency evaluation and acceptance of the final environmental document.* If there are disagreements between permitting agencies and the City, it may require additional supplemental CEQA studies to satisfy resource permitting agency concerns.

Task 203B. Land Use Permitting. The project will require a variety of permits from state and federal land use permitting agencies, notably the California Coastal Commission among others. Annexation of the project site will also require coordination with San Luis Obispo Local Agency Formation Commission (LAFCo). Coordination with San Luis Obispo County will also be required, because while the facility is allowed at that location under its LCP, a specific alternatives analysis will be required to support that finding. In addition, a Caltrans encroachment permit would be needed if pipelines will be located within the Caltrans right-of-way.

With respect to annexation, JFR, in coordination with the Program Manager, will coordinate with LAFCo staff, putting together the application for annexation, describing the project's service needs relative to LAFCo requirements, and evaluating the project's consistency with LAFCo policies, including those associated with the conversion of agricultural land and the provision of water supply. We understand that the ultimate determination of consistency with LAFCo policies must be made by LAFCo, but in our experience, it is useful to coordinate closely with LAFCo staff throughout the entire process to ensure that the project is on the right track, and that the application process will go in a more timely fashion. In this way, if there are issues to be resolved, then they can be addressed early in the process.

Key land use permitting agencies for this project could include:

- California Coastal Commission / San Luis Obispo County Department of Planning & Building (Local Coastal Plan Amendment)
- LAFCo (annexation to the City)
- City of Morro Bay (consistency with GP/LCP and local land use permits)
- San Luis Obispo County (coordination on LCP consistency)
- California Department of Transportation (Caltrans Encroachment Permit)

As with the resource regulatory permitting, these land use agencies will use the final CEQA document to assist in their permitting processes.

TASK 204 – FACILITY MASTER PLAN COORDINATION. MKN will organize weekly coordination meetings or calls and lead responses to issues that develop during the project. MKN will serve as the main point of contact for the Facility Master Plan team while also maintaining communications between the City and the Facility Master Plan team. MKN will review monthly progress reports submitted by Facility Master Plan team and coordinate formal progress meetings between the Facility Master Plan team and the City.

The Facility Master Plan team also anticipates public workshops. MKN will coordinate and attend all Facility Master Plan workshops. It is assumed the workshops would include the following:

- Initial Public Workshop for Public and City Council Input on Concepts
- Site Plan and Visual Simulation Presentation Workshop
- Treatment Alternatives Workshop

MKN will coordinate City reviews of deliverables and compile comments to provide to the Facility Master Plan consultant. It is assumed that approximately nine (9) draft and final Technical Memoranda and the 33%, 66%, 90%, and final Master Plans will be reviewed.

TASK 205 – DEVELOP PROJECT DELIVERY TECHNICAL MEMORANDUM. MKN will develop a memorandum and presentation for City Council and WRFCAC summarizing the potential project delivery methods for the Phase I project; advantages and disadvantages; recommended approach; and steps required for implementation.

It is assumed the City attorney and/or special legal counsel will provide a legal opinion on the different alternative delivery options. At this time, the methods are anticipated to include design-build, progressive design-build, design-build-operate, design-build-operate-finance, and construction management at risk (CMAR).

TASK 206 – COORDINATION OF SPREADSHEET MODEL DEVELOPMENT AND MODEL RUNS FOR CUSTOMER RATE IMPACTS. MKN will provide guidance to the City's rate consultant in developing a spreadsheet model (by rate consultant). The Program Management Team will run the model to determine impacts of the following on projected customer rates:

- Project financing rate and period
- Grants
- Alternative projects for both the Phase I and Phase II programs (ex. different WRF treatment technologies for the Phase I project or different reclamation facilities for the Phase II program)

It is assumed up to 12 model runs will be performed for public workshops and meetings and results will be summarized in those presentations.

TASK 207 – ALIGNMENT STUDY AND CALTRANS COORDINATION. MKN will identify the likely number and alignment of pipelines to and from the site (ex. recycled water main, City water supply, force main, and/or brine discharge line). We will coordinate with Caltrans to identify constraints associated with the various pipeline crossings. This work will also incorporate the findings of the Facility Master Plan team related to the force main and discharge pipelines.

Regulatory requirements for pipeline separation will have a significant impact on location and alignment of the City waterline and other utilities that are required for Phases I and II of the program, but will not be explored in detail in the Facility Master Plan. Division of Drinking Water will be contacted to discuss installation methods or pipeline design features that may be required if minimum separations cannot be cost effectively maintained.

A Technical Memorandum and preliminary alignment map will be prepared that identifies the number and possible alignments of the various pipelines, taking into account the surveyed base map (by others), environmental constraints, utility conflicts, regulatory requirements, and installation techniques.

TASK 208 – DATA COLLECTION AND ENGINEERING SUPPORT FOR PRELIMINARY PLANNING ACTIVITIES. A budget of 200 hours is recommended for the following activities:

- Market survey of available organic waste for Facility Master Plan
- Collection, organization, and summarization of influent water quality data from the City/CSD WWTP for use during design activities
- Coordination of sampling activities for salinity identification and source control of contaminants
- Other activities as needed

TASK GROUP 300: PHASE I PRELIMINARY ENGINEERING AND PROCUREMENT

TASK 301 – OUTFALL EVALUATION AND MANAGEMENT STRATEGY. MKN proposes performing the following work under this task:

- Hydraulic modeling of the outfall to evaluate performance under various flow regimes (wet weather flow, wet weather and brine, and brine only if groundwater recharge is pursued to reduce wet weather flows)
- Preliminary layout of connection to the outfall
- Review of legal or permitting constraints associated with continuing use of the outfall under different management strategies. It is assumed City legal counsel will provide an analysis of ownership and other legal constraints.
- Development of a technical memorandum summarizing the work described herein.

TASK 302 – PHASE I WRF DESIGN/BUILD PROCUREMENT. It is assumed, for budgeting purposes, that the City will follow a “best-value” design-build process. The City Council will select a delivery method and based on their selection, the budget and scope for this task may require revision. It is anticipated the procurement process will generally follow the steps identified below. The assumed level of effort for each step is also provided. MKN will prepare all deliverables in draft and final form for City review.

- Request Expression of Interest (EOI) from potential design-build proposers (8 hours assumed)
- Prepare and facilitate a 4-hour workshop for respondents to the EOI (8 hours assumed)
- Prepare Request for Qualifications for design-build procurement (24 hours assumed)
- Review Statements of Qualifications from design-build proposers (24 hours assumed)

- Coordinate a review workshop with the City selection committee and prepare a draft response to short-listed teams (16 hours assumed)
 - Prepare DB Procurement Documents, including coordination with contract documents and development of bridging documents. Coordinate with City attorney and/or special legal counsel for preparation of contract documents. It is assumed documents will be based on standard agreements available from Design Build Industry Association (DBIA) and other professional organizations but will be modified as directed by City legal counsel. (100 hours assumed)
 - Meet with potential proposers and coordinate regular communication and outreach protocols documented in the Program Management Plan (40 hours assumed)
 - Develop bridging documents including performance requirements, available geotechnical studies, topographic and boundary survey, and the following preliminary plans for two (2) conceptual treatment alternatives to allow the design-build teams to develop a bid while maximizing opportunities for innovation. At this time a budget cannot be developed for the bridging documents since the level of effort will depend on the treatment process and other site uses identified during the Facility Master Plan. (Level of effort TBD and not included in the budget, depending on the recommendations from the Facility Master Plan.)
 1. 20% Preliminary site plan
 2. Preliminary grading plans
 3. Detailed layouts of site amenities such as community park or corporation yard (if desired by City) to prevent conflicts with the WRF
 4. Process flow diagram
 5. Two (2) site elevation views
 6. Process and instrumentation diagrams
 7. Electrical single-line diagrams
 8. Architectural design standards
 9. Highway 41 access improvements
-
- Prepare Request for Proposals for Design-Build Procurement (40 hours assumed)
 - Review proposals from proposers (60 hours assumed)
 - Coordinate a review workshop with the City selection committee and prepare a recommendation for City Council (12 hours assumed)
 - Coordinate review by City legal counsel (8 hours assumed)
 - Lead final negotiations with the selected proposer (40 hours assumed)

TASK 303 – PROCUREMENT OF INFLUENT LIFT STATION AND TRANSMISSION PIPELINE DESIGN TEAM.

MKN will perform the following services for procurement of a design team:

- Develop Request for Proposals and present to WRFCAC and Council for review and approval (12 hours assumed)
- Coordinate and attend pre-proposal meeting (8 hours assumed)
- Respond to Requests for Information and issue addenda as needed (12 hours assumed)
- Review proposals (12 hours assumed)
- Coordinate City review and interview process (12 hours assumed)
- Negotiate scope and budget with preferred consultant (8 hours assumed)
- Prepare staff report and recommendation for WRFCAC and City Council review (4 hours assumed)
- Meet with potential proposers and coordinate regular communication and outreach protocols documented in the Program Management Plan (24 hours assumed)

TASK 304 – DATA COLLECTION AND ENGINEERING SUPPORT FOR PRELIMINARY ENGINEERING AND PROCUREMENT ACTIVITIES. A budget of 200 hours is requested for support activities that may be required by the Program Management Team during execution of this phase of the WRF development.

TASK GROUP 400: PHASE I PROJECT DESIGN

TASK 401 - COORDINATION OF PHASE I WRF DESIGN DEVELOPMENT - MKN will organize weekly coordination meetings and lead responses to issues that develop during design development. MKN will serve as the main point of contact for the Design-Build Contractor (DBC) while also maintaining communications between the City and the DBC.

MKN will review the Concept Design Report and coordinate response from City. It is assumed that MKN will also coordinate up to six (6) design workshops with City staff to review progress of design development.

TASK 402 - COORDINATION OF INFLUENT LIFT STATION AND TRANSMISSION PIPELINES DESIGN DEVELOPMENT - MKN will organize weekly coordination meetings and lead responses to issues that develop during design development. MKN will serve as the main point of contact for the Design Team while also maintaining communications between the City and the Design Team.

MKN will review draft deliverables including up to four (4) Technical Memoranda, the Concept Design Report; 30% Design Plans and Estimates; 60% Design Plans; Draft Final Plans and Specifications; and Final Plans, Specifications, and Estimates.

TASK 403 – VALUE ENGINEERING REVIEWS – Based on the process and design alternatives selected for the WRF and lift station, MKN will assemble a value engineering team consisting of a qualified Value Engineering facilitator (per SRF requirements) and technical experts.

Our subconsultant, Value Management Strategies, Inc, will serve as the facilitator. It is assumed value engineering will be performed at the following milestones:

- Phase I WRF –30% Value Engineering Review
- Influent Lift Station and Transmission Pipelines - 30% Value Engineering Review
- Influent Lift Station and Transmission Pipelines – 60% Value Engineering Review

In our experience, the procurement process for engineering services is a good way to identify experts in various disciplines who can serve as members of the Value Engineering team. The technical experts will be identified after technologies are selected for the Phase I WRF.

TASK 404 - REPORT OF WASTE DISCHARGE – MKN will prepare a Report of Waste Discharge (ROWD) for the Phase I WRF to request Waste Discharge Requirement Orders and a National Pollutant Discharge Elimination System (NPDES) permit and submit the ROWD to Regional Water Quality Control Board (RWQCB).

It is assumed an administrative draft, draft and final ROWD will be prepared. Draft documents will be reviewed by the Design-Build team and City prior to submittal to RWQCB. The ROWD will include a summary of water supply (quality and source), wastewater flows and characteristics, treatment process components, monitoring and alarms, reliability features, solids handling, and the treated effluent reuse strategy.

TASK 405 - TITLE 22 REPORT FOR DDW – MKN will prepare a Title 22 Report for Division of Drinking Water review. It is assumed the Title 22 Report will include the Phase I WRF and initial reclamation opportunities that are identified in the Master Reclamation Plan. The report will include recycled water project design criteria; responsible parties for production, delivery, and use; Phase I WRF description, reliability features, monitoring program, transmission system components, use area and type, setbacks, signage, training, and a contingency plan.

TASK GROUP 500: PHASE I PROJECT CONSTRUCTION

MKN will mobilize the field staff to the project site as soon as MKN receives authorization to proceed and construction is ready to begin. The Resident Engineer (RE) and the field staff will maintain field offices (for both the Phase I WRF and influent lift station and transmission pipelines) provided by the Phase I WRF contractors (see task 3000). The Project Management Team will implement the record-keeping documentation, and contract administration systems. MKN will be the City's focal point (agent) for correspondence related to the construction phase of the project.

TASK 501 – CONSTRUCTION ADMINISTRATION PROCEDURES MANUAL. Compile a Construction Administration Procedures Manual for each of the two projects. The manual will define project administration team responsibilities and assignments and to what degree and frequency the tasks will be executed. Emergency contacts and action plans will be compiled. The primary purpose of this manual is to define the appropriate level of project administration, coordination, and communication. As part of this task, MKN will work closely with City staff to develop a plan for how resident and business inquiries will be handled during construction activities. The plan, which will be approved by the City, will be incorporated into the manual as an Appendix.

TASK 502 – PRE-CONSTRUCTION CONFERENCE. Conduct a pre-construction conference with the City, City's consultants, involved agencies, utilities, and the Contractor's team as they prepare to mobilize for each project. The RE will review plans and specifications with the Contractor in an effort to facilitate the Contractor's understanding of the project. The RE will review the Contractor's construction schedule for the project, including equipment, labor, and supervision planning. The RE will review appropriate protocols and procedures detailed in the Construction Administration Procedures Manual. The RE will

apprise the Contractor of contract requirements regarding security matters such as fences, lighting, and posting of signs. MKN will prepare meeting minutes for the pre-construction meeting.

TASK 503 – WEEKLY PROGRESS MEETINGS. Conduct weekly progress meetings at the City’s wastewater treatment plant with the Contractors, permit agencies (if applicable), and the City’s design representatives. The principal purpose of the project coordination meetings will be to:

- Review progress and quality and work planned for the next week
- Progress of critical path schedule items and task critical to project success (e.g., status of long lead time items)
- Review submittal and RFI logs.
- Notify the attendees of any construction deficiencies.
- Discuss labor, material, and equipment related to upcoming work.
- Address team coordination matters.
- Review maintenance of “as-built” drawings throughout construction.

MKN will prepare for these meetings (i.e., review the most current schedule ahead of the meeting), chair these meetings, and conduct each meeting according to a published agenda and have meeting summaries prepared and promptly distributed. Meeting summaries will detail action items, the discussions that ensued, and announce the time and date of the next meeting.

TASK 504 –WEB BASED CENTRALIZED DOCUMENT AND CHANGE MANAGEMENT SYSTEM. MKN will provide administrative support and management of the Web Based Centralized Document and Change Management System (ex. Primavera) to include regular updates of:

- Correspondence (letters and e-mail)
- Submittals/Shop Drawings
- Requests for Information (RFI)
- Change orders and change order requests
- Meeting Agendas and Minutes
- Daily Reports
- Inspection Reports
- Project Schedules

TASK 505 – RFIS. Review, coordinate (with City and design engineer), and respond to (up to 200) Contractor’s Requests for Information (RFI). When appropriate, recommendations, suggestions and alternatives shall be provided to the Contractor, and/or the City.

TASK 506 – SCHEDULING. Review the Contractor’s schedule on a monthly basis to verify that the project is being executed in general accordance with the requirements of the contract documents. Monitor the Contractor’s compliance with the agreed-upon scheduling requirements.

- MKN’s major task associated with the overall schedule requirements will be to:
- Review the Contractor’s schedule to determine that it is properly prepared, that the milestones dates meet the overall schedule, and that no major conflicts exist.

- Review progress attained against the approved schedule to adequately record work-in-place, detect any potential delays, and review the Contractor's plan for implementation of remedial measures when appropriate, to recover or maintain progress.
- If changes are made to the critical path items review changes in assumptions and logic.
- In conjunction with the City, negotiate schedule adjustments with the Contractor, which may be required due to weather, change orders, or other impacts requiring schedule adjustments

TASK 507 – COMPLIANCE. Review Contractor's safety program for compliance with the contract documents. MKN shall not be responsible for Contractor's implementation of or compliance with its safety program or for initiating, maintaining, monitoring or supervising the implementation of such programs or the procedures and precautions associated therewith, or for the coordination of any of the above with the Contractor.

TASK 508 – CONSTRUCTION ADMINISTRATION. Maintain a set of contract files per the procedures identified in the Construction Administration Procedures Manual. If resident/business inquiries are received MKN will log them and work with the City staff to implement a response based on the procedures outlined in the Construction Administration Procedures Manual.

TASK 509 – MONTHLY PROGRESS PAYMENTS. Review Contractor's monthly progress payment requests, and construction contract records and reports specified to be submitted, for compliance with contract documents. Compile recommendations and forward to the City.

TASK 510 – CHANGE ORDERS. Investigate proposed change orders and RFIs submitted by the Contractor or requested by the City. Change order submittals will include supporting records. MKN's investigation will include the impacts on the project schedule and budget, and will include a recommendation for approval or disapproval. MKN will:

- Assemble documentation to include such items as inspection reports, test reports, drawings, sketches, photographs, and other materials as required.
- Review change order estimates compiled by the City's Design Consultants consisting of a cost estimate conforming to the City's procedures and forms; assess the impacts of the proposed change on the Contractor's schedule and operations; and prepare a written report summarizing the impact of the proposed change in terms of extra cost, cost savings, schedule, and effect on Contractor's obligations.
- Evaluate the Contractor's price proposals for reasonableness and accuracy of construction quantities, rates and unit prices, and time and schedule impacts.
- Maintain a change order log as a means to tracking change order proposals through the review and approval process. MKN will establish files for potential change orders or claims such as to accumulate documentation should the issues result in a change order or claim.

TASK 511 – SUBMITTALS. Receive from Contractor specified submittals and O & M manuals. Transmit these to design engineer for review, if appropriate (Influent Lift Station and Transmission Pipelines only). Maintain a log (Web Based) and manage shop drawings and sample/submittal review process to determine the following:

- All short-term look-ahead schedules contain critical submittal dates, and the logs reflect the same.
- Submittals are reviewed in a timely fashion and returned to the Contractor to minimize lost production time.
- Logs are updated on a regular basis.
- Shop drawings have been reviewed and returned before associated work has begun.
- A copy of all submittals is maintained in the file.
- Subsequent to the review, return submittal to the Contractor and forward a copy to the City.

MKN shall conduct an administrative review of worker safety protection/excavation plans and dewatering plans prepared by the Contractor's registered civil or structural engineer to assist the City with the acceptance of detailed plans developed by the Contractor for the design of excavation, bracing, sloping or other provisions necessary for the protection of existing facilities and for the protection of workers from the hazard of caving ground during the excavation of any trench 5 feet or more in depth (hereinafter referred to as "Excavation Plan").

MKN's review does not include an independent review of the Contractor's calculations or of the materials used by the Contractor. Nothing contained in the Scope of Work shall be construed as relieving the Contractor of the full responsibility for providing an Excavation Plan(s) that is adequate for worker protection, nor for the liability resulting from the failure to do so.

TASK 512 – PERMIT COORDINATION. Act as liaison (for communications) between the City and representatives of permitting agencies. Assist the City with finalizing permit coordination. All permit fees are to be paid by Contractor and/or City.

TASK 513 – FIELD OBSERVATION. Implement observation guidelines for monitoring the quality of the Contractor's work. Conduct field observation and prepare documentation (daily reports) of construction tasks including but not limited to construction staging, utility coordination, process, mechanical, electrical, instrumentation, traffic access, pedestrian access, drainage, NPDES requirements, concrete, grading, pipeline, building construction, base and surfacing, lighting, landscaping, and erosion control.

Upon witnessing (and discussing with City) materials, erection or installation process, or levels of quality that do not meet the requirements of the construction contract documents, issue a Non-Conformance Report notifying the Contractor of such deviation and inquire about the Contractor's proposed corrective action. Copies will be forwarded to the City.

The Contractor has sole responsibility for compliance with safety requirements on the construction contract. MKN's staff will monitor the Contractor's general compliance with its safety program and advise the City of observed deficiencies.

Maintain a photographic log of construction activities and provide the City copies of significant photographs.

TASK 514 – PUNCH LIST. Punch lists shall be developed to permit City acceptance of each segment of work to occur after the Contractor attains substantial completion. Conduct a final project review with the City. Submit a recommendation for project acceptance.

TASK 515 – RECORD DRAWING. Collect construction record drawings from Contractor and transmit to design engineer for processing.

TASK 516 – TECHNICAL SUPPORT. MKN will provide technical support with the following disciplines:

- Civil Engineering
- Structural Engineering
- Wastewater Processes
- Instrumentation and Controls
- Electrical

TASK 517 – LABOR COMPLIANCE. MKN and its state-certified subconsultant, Golden State Labor Compliance, will provide a Labor Compliance Program to monitor the Contractor's labor compliance, which includes the following:

- Pre-Job Conference. Conduct a pre-job conference with the Contractor and subcontractors listed in the bid before commencement of the work. Labor compliance requirements will be discussed and copies of the suggested reporting forms furnished. Records of the conferences will be kept on file.
- Monthly Audit of Contractor Certified Payroll. Review certified payrolls submitted by the Contractor and his subcontractors to verify compliance with the requirements of prevailing wage. Monitor that Apprenticeship requirements are being met.
- Monthly On-Site Interview. Conduct random on-site Contractor employee interviews on a monthly basis as required by the Labor Compliance Program.
- Violation Enforcement and Recommendations. Communicate potential violations to City and provide recommended action.
- Annual Reporting to the Department of Industrial Relations (DIR). Compile and submit a summary report to the DIR. The report will be submitted annually during construction and at the conclusion of the project.

TASK GROUP 600: PHASE I FACILITY START UP, TESTING, AND COMMISSIONING

TASK 601 – STARTUP AND COMMISSIONING COORDINATION. MKN will serve as the start-up and commissioning liaison coordinating the services of the design consultant and contractor for the Influent Lift Station and Transmission Pipelines; and contractor for the Phase I WRF (as well as the contractor's subconsultants and suppliers) to develop and implement both start-up and commissioning plans. .

It is assumed the contract documents will require the Design-Build Contractor for the Phase I WRF and the contractor for the Influent Lift Station to provide startup services, such as demonstrations of proper system operation, adjustments to the equipment as needed to meet requirements in the contract documents, warranty support and service, vendor training, operations & maintenance manual(s), and required guarantees. These requirements will be evaluated during constructability review of the contract documents for each project component. It is further assumed that the respective design engineers will provide technical assistance and overall system review.

It is assumed the contract documents will also require the Contractor to submit an acceptance test plan and protocol that defines the following:

- Specific measurements that will be made, including identification of permanent and temporary measurement devices
- Calibration procedures for measuring devices
- Redundancy of any measuring device to demonstrate accuracy
- Organization of the testing team, including responsibilities
- Testing schedule
- Operations and maintenance schedule during the testing period (if not in the Operations Plan discussed below)
- Specific detailed sampling protocols to be used in conducting the acceptance test

It is also assumed the Design-Build Contractor will provide an Operations Plan for the Phase I WRF, and the Plan will identify the schedule and steps for startup and commissioning of each system component.

MKN will perform the following tasks:

- Coordinate Contractors' startup and commissioning activities and compare to contract document requirements, Operations Plan and Acceptance Plan. Advise City of nonconformance issues. MKN will coordinate with City staff, Contractor(s), design team(s), systems integrator, and Construction Management team startup specialists.
- Review Operations Plan and Acceptance Plan and advise the City as to status of the scheduled tasks
- Coordinate Contractor/Client meetings to review startup status
- Coordinate vendor training sessions for attendance by appropriate City staff, design team, and Contractors. Provide input during training sessions regarding design and operation of equipment based on startup team's experience

TASK 602 –TRAINING. MKN will prepare and deliver supplemental on-site and classroom instructional training sessions on equipment and process systems. The training will be relative to the process operation of the facility. The content of the session shall be mutually agreed upon by both MKN and the City. Instruction will be performed at a location approved by City. Prior to training, equipment and systems preparation and checkout will be completed and demonstrated to the satisfaction of an MKN representative.

Training instruction sessions for the Client's personnel will include maintenance and operation personnel.

TASK GROUP 700: PHASE I FACILITY OPERATION AND PROJECT CLOSE OUT

TASK 701 – FINAL PROJECT REVIEW. For each of the construction projects, conduct final project review with the City and Design Engineers and submit a recommendation for project acceptance.

TASK 702 – FINAL REPORT. For each of the construction projects, prepare final report, with testing records, and submit to City.

TASK 703 – FINAL SUBMITTAL PACKAGE. For each of the construction projects, compile a final submittal package (field records) and submit to City.

TASK 704 – TECHNICAL SUPPORT DURING OPTIMIZATION. MKN will provide engineering and process support on an as-needed basis during commissioning and optimization of the WRF, Influent Lift Station, and conveyance pipelines.

Task Groups 800 through 1100 address the planning and design of the Phase II Reclamation System. A detailed scope and budget for these task groups will be provided as the Master Reclamation Plan is developed and implemented. The MKN team is committed to provide the same high level of program management throughout the development, implementation, and startup of all phases of the City's Water Reclamation Program.

TASK GROUP 800: PHASE II PROJECT PRELIMINARY AND FINAL DESIGN

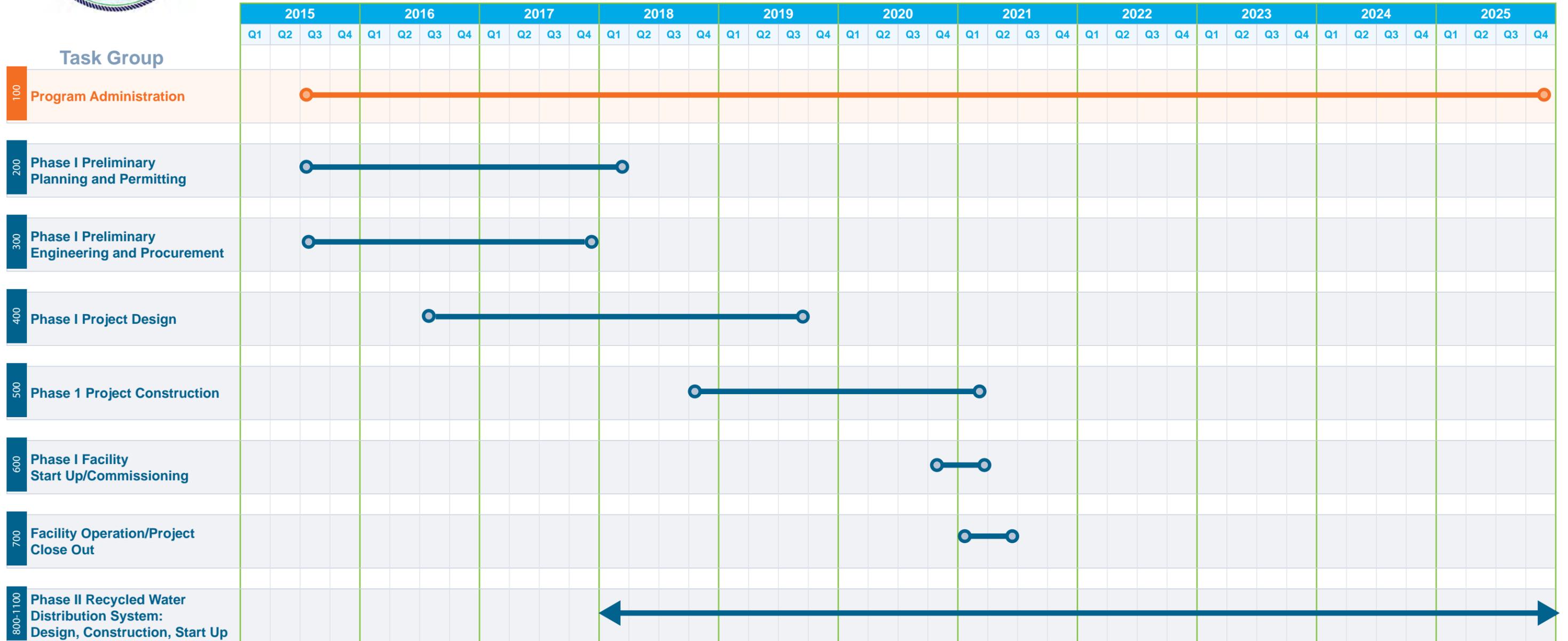
TASK GROUP 900: PHASE II PROJECT CONSTRUCTION

TASK GROUP 1000: PHASE II FACILITY START UP, TESTING, AND COMMISSIONING

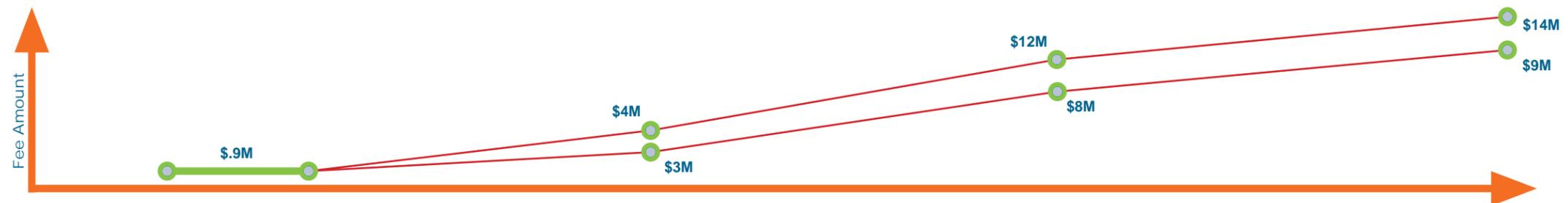
TASK GROUP 1100: PHASE II FACILITY OPERATION AND PROJECT CLOSE OUT



Morro Bay WRF Program Schedule



Program Management Possible Range of Fees



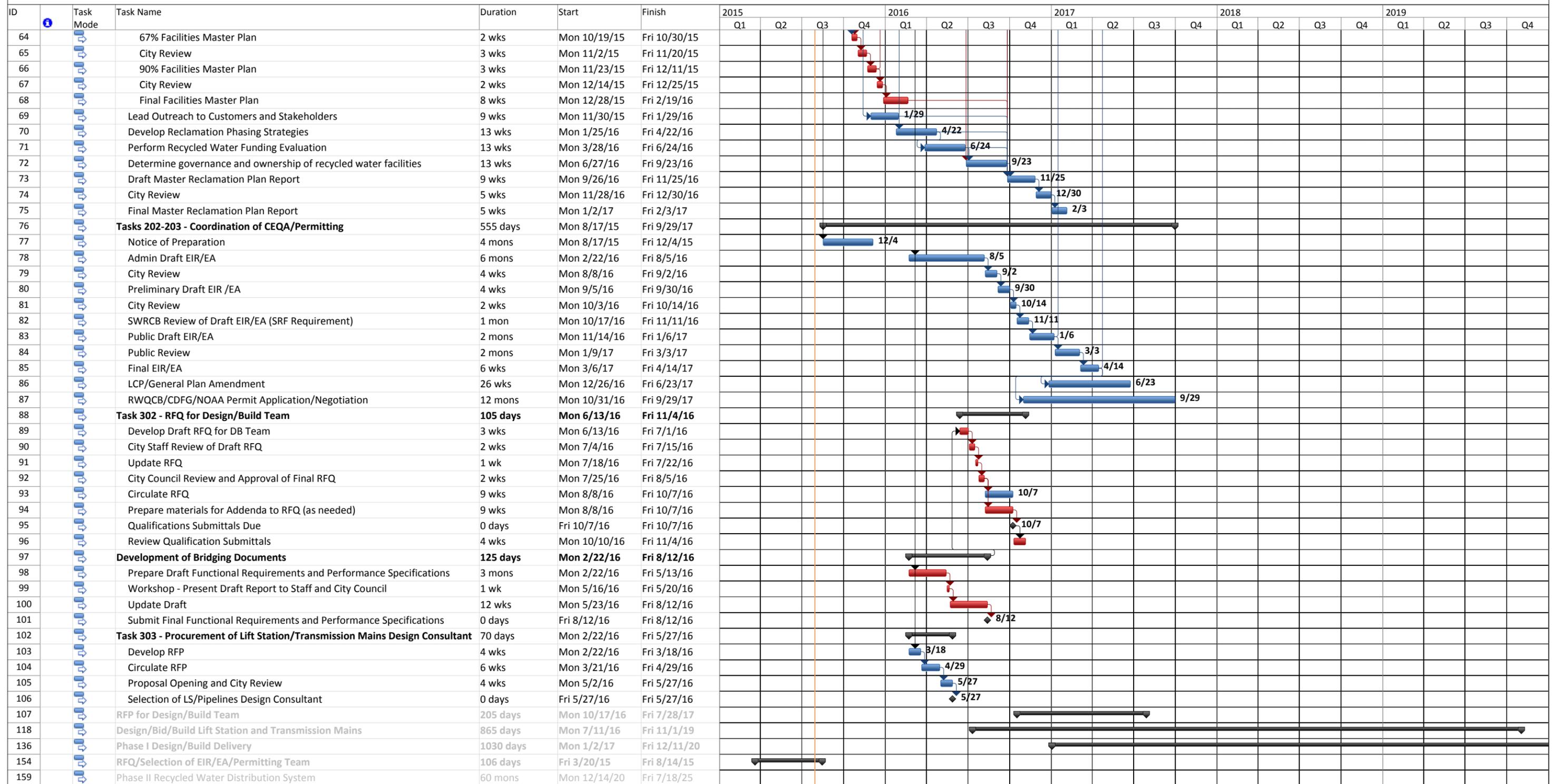
Morro Bay Water Reclamation Program Schedule - Task Groups 100 through 300

ID	Task Mode	Task Name	Duration	Start	Finish	2015				2016				2017				2018				2019			
						Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	✓	Preliminary Project Planning/Site Studies	269 days	Tue 12/10/13	Fri 12/19/14																				
15	📅	City Council Decision on WRF Site	0 days	Tue 12/9/14	Tue 12/9/14	12/9																			
16	📅	Property Negotiation and Development of MOU with Owner	12 mons	Thu 11/13/14	Wed 10/14/15				10/14																
17	📅	RFP/Selection of Program Management Consultant	20.4 wks	Mon 3/23/15	Tue 8/11/15																				
18	📅	Task 101 - Schedule Tracking and Progress Reporting	262 days	Wed 8/12/15	Thu 8/11/16																				
19	📅	Task 102, 103 - Meeting and Documentation	262 days	Wed 8/12/15	Thu 8/11/16																				
20	📅	Task 104 - Public Outreach	262 days	Wed 8/12/15	Thu 8/11/16																				
21	📅	Task 105 - Budget Tracking and Reporting	262 days	Wed 8/12/15	Thu 8/11/16																				
22	📅	Task 106 - Grant and Loan Pursuit and Management	650 days	Mon 7/13/15	Fri 1/5/18																				
23	📅	Review of Proposition 1 / SWRCB Planning Grant/Funding Opportunities	1 mon	Wed 8/12/15	Tue 9/8/15																				
24	📅	Preparation and Coordination of SWRCB Recycled Water Planning Grant Application	5 mons	Mon 7/13/15	Fri 11/27/15																				
25	📅	Preparation and Coordination of Clean Water SRF Design/Planning Loan - SWRCB Division of Financial Assistance	3 mons	Wed 8/26/15	Tue 11/17/15																				
26	📅	Clean Water SRF Construction Loan - SWRCB Division of Financial Assistance	628 days	Wed 8/12/15	Fri 1/5/18																				
27	📅	Complete General Information Package	5 days	Wed 8/12/15	Tue 8/18/15																				
28	📅	SWRCB CWSRF Project Manager Assigned	0 days	Tue 8/25/15	Tue 8/25/15																				
29	📅	Coordinate document reviews with CWSRF PM	5 days	Mon 9/14/15	Fri 9/18/15																				
30	📅	Phase I Project Report	90 days	Mon 12/14/15	Fri 4/15/16																				
31	📅	Review Draft FMP and Recommend Project Alternative	4 wks	Mon 12/14/15	Fri 1/8/16																				
32	📅	Prepare Draft Project Report	9 wks	Mon 1/11/16	Fri 3/11/16																				
33	📅	City Review	3 wks	Mon 3/14/16	Fri 4/1/16																				
34	📅	Prepare Final Project Report	2 wks	Mon 4/4/16	Fri 4/15/16																				
35	📅	Complete and submit draft Financial Security Package	10 days	Mon 4/18/16	Fri 4/29/16																				
36	📅	Complete and submit draft Environmental Package	10 days	Mon 1/9/17	Fri 1/20/17																				
37	📅	Complete and submit Final Technical Package	10 days	Mon 4/18/16	Fri 4/29/16																				
38	📅	Complete and submit Final Financial Security Package	10 days	Mon 4/18/16	Fri 4/29/16																				
39	📅	Update General Information Package (as needed)	5 days	Mon 5/2/16	Fri 5/6/16																				
40	📅	Complete and Submit Final Environmental Package	10 days	Mon 4/17/17	Fri 4/28/17																				
41	📅	SWRCB Review of Complete Application Package	9 mons	Mon 5/1/17	Fri 1/5/18																				
42	📅	Task 108 - Develop and Maintain Project Management System	262 days	Wed 8/12/15	Thu 8/11/16																				
43	📅	Task 109 - Assist and Planning and Development of Program Office (Optional)	8 wks	Wed 8/12/15	Tue 10/6/15																				
44	📅	Task 110 - Development of Program Management Plan	5 wks	Wed 8/12/15	Tue 9/15/15																				
45	📅	Task 201 - Master Reclamation Plan	562 days	Thu 12/11/14	Fri 2/3/17																				
46	📅	Preliminary Hydrogeologic Study (Fugro)	8 mons	Mon 5/4/15	Fri 12/11/15																				
47	📅	Salinity Identification and Control Plan	162 days	Fri 5/15/15	Mon 12/28/15																				
48	📅	Salinity Source Identification Study (LWA)	53 days	Fri 5/15/15	Tue 7/28/15																				
49	📅	Draft Salinity Source Control Plan (LWA)	78 days	Wed 7/29/15	Fri 11/13/15																				
50	📅	City Review	10 days	Mon 11/16/15	Fri 11/27/15																				
51	📅	Final Salinity Source Control Plan (LWA)	21 days	Mon 11/30/15	Mon 12/28/15																				
52	📅	Development of Recharge Alternatives	3 mons	Mon 11/2/15	Fri 1/22/16																				
53	📅	Confirmation of Reuse Quality Requirements for Facility Master Plan	1 mon	Mon 9/21/15	Fri 10/16/15																				
54	📅	RFP/Selection of Facilities Master Plan Consultant	155 days	Thu 12/11/14	Wed 7/15/15																				
55	📅	Develop RFP	71 days	Thu 12/11/14	Thu 3/19/15																				
56	📅	Circulate RFP	38 days	Fri 3/20/15	Tue 5/12/15																				
57	📅	Proposal Opening and City Review	23 days	Wed 5/13/15	Fri 6/12/15																				
58	📅	Selection of FMP consultant	0 days	Fri 6/12/15	Fri 6/12/15																				
59	📅	Develop Scope	1 mon	Mon 6/15/15	Fri 7/10/15																				
60	📅	Execute FMP contract	3 days	Mon 7/13/15	Wed 7/15/15																				
61	📅	Task 204 - Facilities Master Plan Coordination	158 days	Wed 7/15/15	Fri 2/19/16																				
62	📅	33% Facilities Master Plan	8 wks	Wed 7/15/15	Tue 9/8/15																				
63	📅	City Review	3 wks	Wed 9/9/15	Tue 9/29/15																				

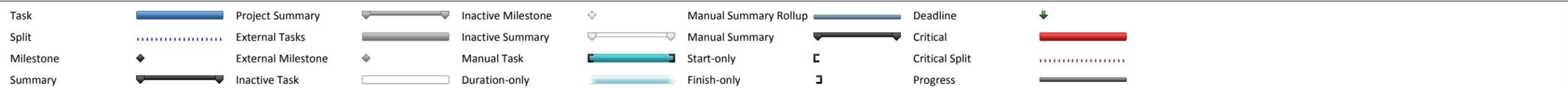
MB Reclamation Program Schedule
Date: Thu 7/30/15

Task		Project Summary		Inactive Milestone		Manual Summary Rollup		Deadline	
Split		External Tasks		Inactive Summary		Manual Summary		Critical	
Milestone		External Milestone		Manual Task		Start-only		Critical Split	
Summary		Inactive Task		Duration-only		Finish-only		Progress	

Morro Bay Water Reclamation Program Schedule - Task Groups 100 through 300



MB Reclamation Program Schedule
Date: Thu 7/30/15



PROPOSAL FOR

PROGRAM MANAGEMENT SERVICES FOR A NEW WATER RECLAMATION FACILITY CITY OF MORRO BAY



July 14, 2015



WATER - WASTEWATER - REUSE



WATER - WASTEWATER - REUSE

MKN & Associates
 PO BOX 1604
 Arroyo Grande, CA 93421
 T 805.904.6530

July 14, 2015

Attention: Rob Livick, PE/PLS
 Public Works Director/City Engineer
 City of Morro Bay
 955 Shasta Avenue
 Morro Bay, CA 93442

Subject: Proposal for Program Management for a New WRF Serving the City of Morro Bay

Dear Mr. Livick,

MKN & Associates, Inc. (MKN) is pleased to submit this Proposal for Program Management Services for the City of Morro Bay’s new Water Reclamation Facility (WRF). Our local presence, detailed knowledge and leadership role in the prior planning phases of this program, and our experience on major wastewater and recycled water efforts (including programs for the City of Oxnard, City of Spokane, Washington, and City/County of Honolulu, Hawaii) make us the best candidate for the role of Program Manager for the full water reclamation program.

Proven Team: MKN has assembled a multidisciplinary team of experts to address project complexities for the duration of this program. The Program Management Team, described in Section 2 of this proposal, builds upon the team currently providing program management services to the City, bringing in additional key personnel who will be ready to address anticipated issues. Our Program Management Team’s track record proves that we are uniquely qualified to successfully meet the aggressive schedule and goals of the WRF, while continuing to maintain established community trust and agency support.

History of Success with Similar Issues: We also have a history of success with similar projects, a detailed work plan that is aligned with the current program schedule (which we helped develop), and no learning curve since we have been performing interim program management services for this program over the past year– we are ready to work on Day One! The following table summarizes major program challenges and our history of successfully addressing similar issues for other agencies.

City WRF Program Challenges	Successful Project with Similar Issues	How MKN Managed Those Challenges	Application of Lessons Learned to MB WRF Program
<i>Schedule Management is Critical</i>	City of Morro Bay Water Treatment Plant – Phase I Improvements	<ul style="list-style-type: none"> City needed to comply with a short design schedule to maintain grant funding. MKN delivered draft plans and specifications within 6 weeks from Notice to Proceed. 	MKN developed the City’s WRF work plan and schedule based on our experience planning, designing, and constructing projects that have aggressive schedules – we are committed to delivering another fast-track project to the City similar to our success at the WTP.
<i>The Client has Limited Staff Resources</i>	City of Guadalupe – Water and Wastewater Engineering (including Master Plans, Pipeline, Well, Booster Station and Tank Designs)	<ul style="list-style-type: none"> MKN has performed as the City’s water and wastewater engineer. We have served as an extension of staff for grant support, planning, design, hydraulic analysis, and construction management. 	MKN’s flexibility, low overhead, and client focus make us the ideal partner for the City of Morro Bay – we can respond quickly to bring in additional staff resources to stay on schedule and will work closely with the City to share tasks and responsibilities to lower cost to ratepayers.



<i>Winning and Maintaining Public Support</i>	Supplemental Water Project, Nipomo Community Services District (NCSD)	<ul style="list-style-type: none"> As Project Manager, Mike Nunley guided the initial studies, planning, and final design and permitting for the Supplemental Water Project. After an assessment vote to fund the project failed to pass, Mike Nunley was appointed non-voting chairman of the Supplemental Water Alternatives Evaluation Committee, a citizens' group formed by Nipomo Community Services District to evaluate project alternatives within a public process. 	<p>Mike Nunley's ability to provide team management and technical leadership on a complicated, multi-agency project that required design innovation (including design-build of a 2800-ft horizontal directional-drilled pipeline across the Santa Maria River) will benefit the Morro Bay WRF.</p> <p>Mike's ability to guide an impartial review of other alternatives to the project allowed members of the committee to develop their own opinion and unanimously select the best option for the community.</p>
<i>City's First Design-Build Project</i>	City of San Luis Obispo Sustainable Solutions Turnkey Project (SST) – Water Resource Recovery Facility Improvements (MKN staff at a previous firm)	<ul style="list-style-type: none"> MKN staff guided the project through the planning and design stages as the City's first design-build wastewater project. Key staff from MKN and our project partners (Pacific Gas & Electric and City of San Luis Obispo) developed a "triple bottom line" environmental, financial, and social metrics for determining project success. 	<p>Over the past 18 months, the MKN/JFR program team has focused our outreach efforts for the Morro Bay WRF on building:</p> <ul style="list-style-type: none"> Trust among project partners Public outreach and Council buy-in

Detailed Work Program: Our Work Program (discussed in Section 3) has been developed with the following objectives:

- EXPERTISE.** Use the right expertise for each phase of the project - MKN has advised the City on selection of all other program team members in order to ensure that the highest level of expertise is provided for each work effort. We will continue to guide the City on the selection of other experts as the project moves forward.
- VALUE.** Eliminate opportunities for redundancy or duplication of effort – MKN will ensure consistency is maintained through all work efforts (ex. project descriptions for Facility Master Plan, CEQA documentation, and loan/grant applications) without multiple consultants performing the same tasks. MKN will manage our own efforts and costs to ensure this small community receives the highest level of service while reducing markups and overhead costs to the City. Where appropriate, we have continually recommended to the City that they contract directly with certain technical experts.
- TRUST.** Our Program Management Team was instrumental in developing a mutual trust among City Council, City Staff, agencies, landowners, growers, and the general public during the initial WRF planning process that will be critical as we continue to move forward as a community. Our Team's efforts in guiding City Council in development of goals, preparing an Options Study, and establishing WRFCAC were instrumental in strengthening trust-based relationships that are essential to this program.

MKN believes that adhering to these principles throughout the entire program will deliver a program that is on time, on budget, and inclusive of public input.

We hope this proposal meets your expectations and we look forward to our continued involvement with the City on this exciting program.

Sincerely,

Michael Nunley, PE
 Principal, MKN & Associates

John Rickenbach, AICP
 Principal, JFR Consulting



805.904.6530



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APPENDIX A. RFP ADDENDA

APPENDIX B. RESUMES

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APPENDIX E. BUDGET



01 Submittal Forms

SUBCONSULTANT LISTING

Subconsultants are a key component of the MKN program management team. Each consultant brings distinct expertise to provide a range of diverse experience.

Subconsultant 1

Company Name	JFR Consulting
Contact Individual	John Rickenbach, AICP
Telephone and Email	805-610-1109, jfrickenbach@aol.com
Street Address	7675 Bella Vista Road
City, State, Zip Code	Atascadero, CA 93422
Description of Services to be Provided	Deputy Program Manager, Public Outreach, CEQA/Permitting

Subconsultant 2

Company Name	RRM Design Group
Contact Individual	Debbie Rudd
Telephone and Email	805-543-1794, dlrudd@rrmdesign.com
Street Address	3765 South Higuera Street, Suite 102
City, State, Zip Code	San Luis Obispo CA 93401
Description of Services to be Provided	Public Outreach, Architecture, Landscape Architecture

Subconsultant 3

Company Name	Konig Media
Contact Individual	Joe Koenig
Telephone and Email	805-550-3685, konigmedia@gmail.com
Street Address	1106 Walnut Street, Suite 120
City, State, Zip Code	San Luis Obispo CA 93401
Description of Services to be Provided	Public Outreach

Subconsultant 4

Company Name	KMA, Kevin Merk Associates, LLC
Contact Individual	Kevin Merk
Telephone and Email	805-748-5837, kmerk@kevinmerkassociates.com
Street Address	P.O. Box 318
City, State, Zip Code	San Luis Obispo, CA 93406
Description of Services to be Provided	CEQA/Permitting



Subconsultant 5	
Company Name	Consulting Engineer
Contact Individual	Mark Laquidara, PE
Telephone and Email	781-588-5025, markjlaq@gmail.com
Street Address	12 Day Hill Road
City, State, Zip Code	Framingham MA 01702
Description of Services to be Provided	Technical Advisory Team – Treatment Process

Subconsultant 6	
Company Name	MNS Engineers, Inc.
Contact Individual	Julia Aranda, PE
Telephone and Email	805-648-4840, jaranda@mnsengineers.com
Street Address	4580 E. Thousand Oaks Blvd, Suite 101
City, State, Zip Code	Westlake Village, CA 91362
Description of Services to be Provided	Technical Advisory Team – Recycled Water Program

Subconsultant 7	
Company Name	MNS Engineers, Inc.
Contact Individual	Wilhelm Nowotny, PE
Telephone and Email	805-648-4840, wnowotny@mnsengineers.com
Street Address	4580 E. Thousand Oaks Blvd, Suite 101
City, State, Zip Code	Westlake Village, CA 91362
Description of Services to be Provided	Resident Engineer/Inspectors

Subconsultant 8	
Company Name	MNS Engineers, Inc.
Contact Individual	Kim Lindbergy, PE,
Telephone and Email	805-648-4840, klindbergy@mnsengineers.com
Street Address	4580 E. Thousand Oaks Blvd, Suite 101
City, State, Zip Code	Westlake Village, CA 91362
Description of Services to be Provided	Survey/Staking

Subconsultant 9	
Company Name	Golden State
Contact Individual	Vic Conklin
Telephone and Email	661-267-0940, clientservices@goldenstatelc.com
Street Address	4580 E. Thousand Oaks Blvd, Suite 101
City, State, Zip Code	Westlake Village, CA 91362
Description of Services to be Provided	Labor Compliance

Subconsultant 10	
Company Name	IRJ Engineers
Contact Individual	Jack Ivers
Telephone and Email	805-642-2355, jivers@irjengineers.com
Street Address	2497 E. Harbor Blvd
City, State, Zip Code	Ventura, CA 93001
Description of Services to be Provided	Electrical Engineering

Subconsultant 11	
Company Name	Smith Structural Group
Contact Individual	Michael Parolini
Telephone and Email	805-439-2110, michael@smithstructural.com
Street Address	811 El Capitan Way, Suite 240
City, State, Zip Code	San Luis Obispo, CA 93401
Description of Services to be Provided	Structural Engineering

Subconsultant 12	
Company Name	TESCO Controls, Inc
Contact Individual	Doug Bloom
Telephone and Email	916-395-8800, dbloom@tescocontrols.com
Street Address	1315-B Dayton St.
City, State, Zip Code	Salinas, CA 93901
Description of Services to be Provided	Instrumentation

Subconsultant 13	
Company Name	Value Management Service, Inc
Contact Individual	Mark Watson
Telephone and Email	760-741-5518, Mark@vms-inc.com
Street Address	900 Canterbury Place, Suite 330
City, State, Zip Code	Escondido, CA 92025
Description of Services to be Provided	Value Engineering Facilitation

REFERENCES

Michael K. Nunley & Associates (MKN) has completed similar wastewater treatment plant master planning projects for clients throughout California and specifically on the central coast.

Number of years engaged in providing the services included within the scope of the consultant services under the present business name: 3 years

Describe the last three contracts performed by your firm that demonstrate your ability to provide the services included with the scope of the consultant services.

Reference 1	
Customer Name	City of Atascadero
Contact Individual	Justin Black, Public Works Operations Manager
Telephone and Email	805-470-3132, jblack@atascadero.org
Street Address	8005 Gabarda Road
City, State, and Zip Code	Atascadero, CA 93422
Description of Services Provided, including contact amount, date of services, and project outcome	<p>2015 Wastewater Collection System and Wastewater Treatment Plant Master Plan: MKN provided a condition assessment and capacity evaluation of the City's wastewater collection, treatment, and disposal systems for existing and future conditions. MKN evaluated expansion of the existing recycled water system, including identification of potential recycled water opportunities. The project also included evaluation of existing and future wastewater flows and loadings; creation of a GIS based hydraulic model; preparation of GIS based system atlas; identification of deficiencies under existing and future conditions; development of Capital Improvements Program (CIP); and cost opinions for recommended improvements. MKN is currently working with the City on supplemental sampling and analyses to examine the interim capacity of the existing pond system.</p> <p>BUDGET: \$125,000 DATE OF SERVICES: 2013-2015 PROJECT OUTCOME: Draft finals submitted. Received budget amendment for additional GIS, still in process.</p> <p>Additional Projects: Sewer System Management Plan Audit, Development of Standard Operating Procedures (SOPs) for Wastewater Department, Headworks Barscreen Project (key staff with previous firm).</p>

Reference 2	
Customer Name	Nipomo Community Services District
Contact Individual	Peter Sevcik, PE, Director of Engineering and Operations
Telephone and Email	805-929-1133, psevcik@ncsd.ca.gov
Street Address	P.O. Box 326
City, State, and Zip Code	Nipomo, CA 93444
Description of Services Provided	<p>Blacklake Wastewater Collection System and Treatment Plant Master Plan (Ongoing): MKN is developing a master plan for a wastewater collection, treatment, and disposal system that serves approximately 500 residences, a golf course, and supporting recreational facilities.</p>

Reference 2

Work includes update of District’s SewerCAD model, hydraulic analysis of collection system and lift stations, development of spreadsheet models to assess treatment plant capacity, condition assessment of lift stations and treatment plant, review of water quality goals and regulations, salts reduction assessment, review of disposal and reuse alternatives, and recommendations for improvements and development of cost opinions.

BUDGET: \$60,000
 DATE OF SERVICES: Ongoing
 PROJECT OUTCOME: Draft finals submitted on schedule.

Additional Projects: Nitrification Monitoring and Control Plan, Blacklake WWTP Headworks Repair/Rehabilitation, Storage Tank Mixing Project; Annual GIS Updates, Water and Wastewater Hydraulic Model Updates; Southland WWTF Master Plan, Southland WWTF Improvements Design, and Preliminary Screening Evaluation of Southland WWTF Effluent Disposal and Reuse Alternatives (key staff with previous firm).

Reference 3

Customer Name	City of Guadalupe
Contact Individual	Andrew Carter, City Manager
Telephone and Email	805-441-1863, acarter@ci.guadalupe.ca.us
Street Address	918 Obispo Street
City, State, and Zip Code	Guadalupe, CA 93434

Description of Services Provided

2014 Water Master Plan Update: MKN provided a condition assessment and capacity evaluation of the City of Guadalupe water system for existing and future conditions. Included evaluation of existing water production, storage, and distribution facilities; creation of a GIS based hydraulic water model; preparation of GIS based system atlas; review of water quality requirements and goals; development of potential future requirements and evaluation of alternatives; identification of deficiencies under existing and future conditions; development of Capital Improvements Program (CIP); and cost opinions for improvements.

BUDGET: \$65,000
 DATE OF SERVICES: 2014
 PROJECT OUTCOME: Successful completion of Collection System and WWTP Master Plan with recommended CIPs to address existing deficiencies and future development.

Additional Projects: Wastewater Collection and Treatment Plant Master Plan, Emergency Truss Pro Railroad Sewer Crossing, Industrial User Impact Analysis.

STATEMENT OF PAST DISQUALIFICATIONS

The consultant shall state whether it or any of its officers or employees who have a proprietary interest in it, has ever been disqualified, removed, or otherwise prevented from proposing on, or completing a federal, state or local government project because of the violation of law, a safety regulation, or for any other reason, including but not limited to financial difficulties, project delays, or disputes regarding work or product quality, and if so explain the circumstances.

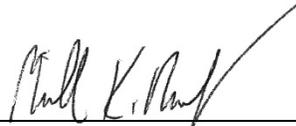
Do you have any disqualification as described in the above paragraph to declare?

Yes No

If yes, explain the circumstances.

None

Executed on July 9, 2015 at Arroyo Grande under penalty of perjury of the laws of the State of California, that the foregoing is true and correct.



Michael K. Nunley, PE

Signature of Authorized/Proposer Representative

DEMONSTRATED ABILITY TO CONFORM TO CITY CONTACT AND RFP REQUIREMENTS

MKN has signed the City's standard agreement and is prepared to execute the standard agreement for this work.

MORRO BAY BUSINESS LICENSE

BUSINESS LICENSE		CITY OF MORRO BAY	
THIS CERTIFIES that the business or individual listed below is hereby licensed to do business within the CITY OF MORRO BAY.		Administrative Services 596 Harbor Street • Morro Bay, CA, 93442 (805) 772-6294 • FAX (805) 772-7329	
Business Name:	Michael K Nunley & Associates, Inc.	BUSINESS LICENSE #:	101352
Business Location:	530 Paulding Circle Ste. B ARROYO GRANDE, CA 93421	SIC NUMBER:	8711001
1st Owner Name:	Michael K. Nunley	Description:	Engineering Consultants
2nd Owner Name:		Effective Date:	June 16, 2015
		Expiration Date:	June 30, 2016
MICHAEL K NUNLEY & ASSOCIATES, INC. PO BOX 1604 ARROYO GRANDE, CA 93421		 DIRECTOR OF FINANCE	
This license is to be displayed conspicuously at the location of business, and is not transferable or assignable.			



02 Qualifications of the Team

FIRM INFORMATION

Michael K. Nunley & Associates (MKN) was formed as a California Corporation (S-Corporation) in 2012 and is a certified Small Business based in Arroyo Grande, CA. After over 18 years of serving as project engineer, project manager, and ultimately as a senior manager and Vice President for a Fortune 500 consulting engineering firm, Michael Nunley started MKN. specializing in water, wastewater, and water reuse engineering for public agencies.

The firm offers water distribution system, wastewater collection system, treatment plant master planning, design, condition assessment, inspection, GIS development and implementation, hydraulic modeling, permitting, and construction support services to public agencies relying upon the staff's professional experience and successful projects across the continental United States and Hawaii. Our primary service areas are Monterey, San Luis Obispo, Santa Barbara, Ventura, and Los Angeles Counties.

MKN has eight staff in the Arroyo Grande office - 2 Principal Engineers; 1 Senior Engineer; 1 Project Engineer; 1 Planner; 1 assistant engineer; 1 Senior GIS Specialist; and clerical support. The firm has 3 licensed civil engineers, 1 licensed mechanical engineer, 1 certified geographic information system professional, and 1 State Water Resources Control Board certified D2 and T2 operator.

RELEVANT PROJECT EXPERIENCE

With specialties in wastewater and water infrastructure planning, design, and construction as well as working knowledge of the project history and established relationships within the Morro Bay community, MKN is uniquely positioned to serve as Program Manager for Morro Bay's Water Reclamation Facility project.

The following table provides a summary of MKN's relevant expertise in management, planning, design and construction of major water/wastewater infrastructure and demonstrates our capabilities to perform program management for Morro Bay's WRF



MKN RELEVANT PROJECTS		
Project Name and Agency	Project Description	Relevant Experience
<p>City of Morro Bay Water Reclamation Facility Program Manager (subconsultant to John F Rickenbach Consulting)</p>	<p>The JFR/MKN team is currently serving as the interim program manager for the WRF. In this capacity MKN has supported Morro Bay staff with preliminary project planning and outreach as well as planning and engineering analysis services.</p>	<ul style="list-style-type: none"> • In depth knowledge and background of WRF project information to date. • Detailed understanding of the City's goals and objectives, including 5-year goal for operational WRF – and a plan for getting there. • Involvement with project planning and siting process leading to decision to utilize Rancho Colina site with understanding of odor, cost, permitting and design issues. • Mike Nunley, John Rickenbach, Debbie Rudd, and the rest of the MKN team participated in a successful public outreach effort that included workshops and presentations to City Council.
<p>City of Morro Bay WWTP MMRP (Major Maintenance and Repair Program)</p>	<p>The MKN team has provided engineering support for the City's Major Maintenance and Repair Program at the existing Wastewater Treatment Plant. The project has rehabilitated several systems and facilities to ensure continued compliance with permitting requirements until the new Water Reclamation Facility project is completed.</p>	<ul style="list-style-type: none"> • Provided City staff with engineering and construction-phase support as an "extension of staff". • As lead consultant, worked with the City and their other consultants and contractors to deliver projects in a cost-effective, collaborative manor.
<p>City of Oxnard GREAT (Groundwater Recovery Enhancement and Treatment) Program - Phase 1 Improvements (at previous firm)</p>	<p>Project work included Program Construction Management and Construction Phase Engineering for the Advanced Water Purification Facility and the Recycled Water Backbone System as part of the GREAT program.</p>	<ul style="list-style-type: none"> • Mike Nunley served as AECOM's Wastewater Treatment Practice Leader and in this role, developed the scope, approach, and team to deliver the first construction phase (approximately \$100M) of this award-winning program. • Involved close collaboration with Kestrel Consulting, Black & Veatch, contractors, and the City in a program management role. • Program was an innovative, multi-phase wastewater treatment and groundwater replenish program similar to Morro Bay's Water Reclamation Facility Program. • Program funding was from multiple sources, requiring detailed understanding of the requirements to ensure compliance with those programs (Bureau of Reclamation Title XVI, State Revolving Loan Funds, American Reinvestment and Recovery Act, and others).

Project Name and Agency	Project Description	Relevant Experience
San Luis Obispo County Nacimiento Water Project (at previous firm)	<p>Mike Nunley worked as both project management support and design engineer in the design of over 45 miles of water conveyance pipeline, storage tanks, and pump stations. This large and complex, multi-year project included assessment of pipeline route alternatives influenced by environmental and permitting issues.</p>	<ul style="list-style-type: none"> • Mike Nunley, as the lead engineer on the Project Management Support Team, guided a complicated, multi-agency water resources project through development of an Environmental Impact Report, preliminary planning, permitting, and then served as a member of the design team. • Nacimiento Water Project was the largest public works project managed by San Luis Obispo County (over \$150M). • Mike Nunley served as an extension of county staff to prepare financial models, manage County consultants, coordinate stakeholder and owner meetings, assist with contract development, and ultimately serve on the design team.
Honolulu City/County Honouliuli Facility Assessment	<p>As Task Manager for the wastewater facility evaluation, Mr. Nunley's responsibilities included analysis, recommendations, and conceptual plan for upgrades to the 40-MGD (130-MGD wet weather flows) wastewater treatment facility. This assessment responded to an USEPA order to discontinue discharge of primary-treated effluent.</p>	<ul style="list-style-type: none"> • Similar to the City of Morro Bay, the City/County of Honolulu had operated their wastewater treatment plants on a 301h waiver from Clean Water Act secondary treatment requirements. • The assessment included development of a capital improvement program through build-out of the sewershed and provided basis for subsequent rate/fee analysis. • The plant discharges to the ocean and has high wet weather flows, similar to the Morro Bay Cayucos Wastewater Treatment Plant. • To address sludge management, an innovative island-wide biosolids management plan incorporating energy recovery and beneficial reuse of biosolids was developed.
Water Reclamation Facility Upgrades/Sustainable Solutions Turnkey Project, City of San Luis Obispo	<p>As a subconsultant to PG&E, MKN identified and evaluated Energy Conservation Measures (ECMs) for the City of San Luis Obispo's water distribution, sewer collection, wastewater treatment, and groundwater production facilities utilizing PG&E's Sustainable Solutions Turnkey (SST) program. Prior to joining MKN, key staff developed design plans for the improvements.</p>	<ul style="list-style-type: none"> • Evaluation and design resulted in \$7M in capital projects for improvements including solids dewatering facility upgrades, headworks screening, primary sludge pumps, RAS and WAS pumping systems, SCADA system, and digester gas cogeneration system replacement. Identified improvements to increase energy efficiency of the plant with energy cost savings used to offset improvement costs. • Project was delivered under the design-build method. Mike Nunley, Jon Hanlon, Eileen Shields, and JJ Reichmuth (MKN staff) all had lead roles in the evaluation, planning, and design of these improvements within the design-build team.
Nipomo CSD Supplemental Water Project	<p>Preliminary planning and final design of a \$20M project to connect the Nipomo CSD distribution system to the City of Santa Maria's system, including storage tank, pump station, chloramination systems design, and related back up power and controls.</p>	<ul style="list-style-type: none"> • As Project Manager at AECOM, and then as Project Manager at MKN, Mike Nunley performed initial planning, coordinated permitting, and developed construction plans for this innovative water resources project. • Mike Nunley led a successful outreach effort by serving as chairman of the Supplemental Water Alternatives Evaluation Committee, a volunteer group of interested citizens and customers who evaluated alternatives to the project after a failed property tax assessment vote.

Project Success

MKN's application of Management Principles ensures successful project outcomes.

MANAGEMENT PRINCIPLES

Michael K. Nunley & Associates, Inc. (MKN) will serve as lead consultant for all program management activities. Mike Nunley will oversee all Task Group efforts described in Section 3. Mike has a close working relationship with the City of Morro Bay and was intimately involved with the site evaluation process through his work on the Site Options Study and subsequent Program Management support. In his role as Program Manager, Mike will be the primary point of contact for City of Morro Bay and will oversee all aspects of the work on Phase I and Phase II of the Water Reclamation Program.

PROGRAM MANAGEMENT QUALIFICATIONS AND EXPERIENCE

Examples of how MKN ensures projects are on time and within budget. To keep projects on time and within budget MKN will apply the following principles:

- Identify challenges or problems early in the process and develop a strategy to solve them
- Develop a detailed project schedule and hold all team members accountable
- Work efficiently so budget is available if unforeseen items arise

An example of our successful application of each principal is provided in the table below:

Key Principles Guiding the MKN Team	Evidence
<i>Identify challenges or problems early in the process and develop a scope and budget that will solve them</i>	When the City identified the need to evaluate the California Men's Colony as a regional treatment facility for Morro Bay and Cayucos, the MKN/JFR team developed an innovative approach that incorporated the following tactics: <ul style="list-style-type: none"> • Compare the cost of an equivalent facility to the CMC treatment system at Rancho Colina using the unit costs developed by an independent consultant. • Engage California Department of Corrections and Rehabilitation (CDCR) staff in identifying the implementation steps and developing a project schedule for a regional facility at CMC. • Develop a water supply benefit analysis and delivered water cost opinion to quantify the water supply and associated costs for reuse of water from both project alternatives.
<i>Develop a detailed project schedule and hold all team members accountable</i>	The MKN/JFR team delivered the Rancho Colina vs. CMC Evaluation in 6 months from Notice to Proceed, requiring aggressive management of City consultants, quick review of technical deliverables, and clear synthesis and summaries for presentation to the City and public. We will apply the same level of expertise and leadership to manage the full program.
<i>Work efficiently so budget is available if unforeseen items arise</i>	On the Major Maintenance and Repair Program, MKN has worked with City staff to efficiently share tasks and advised shifting budget between tasks to address surprises during design or field assignments.

Vision for Interactions with City and Agency Staff, being both collaborative but ensuring independent analysis of issues. The key to a successful project is efficient and effective project management. We know, for example, that insufficient project management—either in terms of allocated hours, or in terms of expertise—is the main reason why projects go over budget, or are not completed on time.

Our team has developed an internal approach to ensure that goals are clearly articulated and met, on time, and within budget. It is based on clear and open lines of communication throughout the process, but also includes our approach to technical direction and control, cost control, schedule control, project reporting, editorial review, quality control, and management of subcontractors. The general principles of our project management program are described below.

The most important program management elements associated with this assignment will be adherence to schedule, quality control, and communication. Close communication will be needed between the Program Manager, our staff working on the project, and especially with City staff.

Program Manager's Responsibilities

Specifically, our Program Manager Mike Nunley and Deputy Program Manager John Rickenbach will be responsible for the following major activities:



- Regular Communication. Includes regular emails, calls, and working sessions with City staff regarding the overall progress of the study.
- Contract Compliance. Systematic review of the contract to make certain that the individual provisions and commitments are being met.
- Progress Reporting. Includes preparation of the monthly status reports, which will contain information on the technical progress as well as the project expenditures.
- Budget Tracking. Includes monitoring expenditures and regularly reporting this information.
- Internal Staff Coordination. Involves coordinating team staff and standardized presentation of information within our products.
- Staffing Adequacy. Ensures that key staff are available when their input and participation are required.
- Management of Subcontractors. Includes establishing contractual agreements, as well as tracking deliverables and billing, to assure the coordination of subcontractor activities.
- Quality Control. Includes the review of all quality assurance guidelines and will provide a quality control function when preparing technical documents.
- Report Production Control. Includes the organization of production requirements for any draft and final report deliverables.

Quality is a top priority for all the work that we do. To that end, Quality Assurance/Quality Control (QA/QC) procedures are developed for each of our projects. For the program, Technical Advisory Team (described further on page 16) will perform independent review of all critical deliverables.

Program Management Plan

For major programs, MKN develops a Program Management Plan that addresses the following issues:

- Work Scope
- Staffing
- Schedule
- Budgeting
- Communication
- Quality Assurance
- Risk Registry

Once developed, the plan serves as a communication tool for the client and the program management team. The document is also used to track the progress of the project and the expenditures on a regular basis.

Monthly Status Reviews

Monthly status reviews with City staff provide a continuing forum for mutual discussion and peer review of the quality of our work, leading to ongoing improvements in performance and efficiency as the project progresses.

Problem Anticipation and Management

We recognize problem anticipation and management as an integral part of project management. Unanticipated problems can occur despite the best planning and intentions of the contractor and agency personnel. On task orders, we recognize our obligation to anticipate, identify, and resolve all problems—technical, managerial and financial—as early as possible. Problems can most often be avoided by thoroughly planning the program; realistically budgeting time, labor and costs; clearly communicating with agency staff; and closely monitoring the actual performance of staff and associated subcontractors.

Cost and Schedule Control

The most typical sources of “cost and schedule creep” either arise from poor internal project management procedures, a poorly defined project description, or poor tracking procedures relative to performing tasks that are out of scope. Our project management system addresses these issues directly, to minimize the possibility of their occurrence. That said, we realize that sometimes delays are inevitable and out of the control of both the consultant and City staff. We are committed to working closely with City staff to anticipate and identify potential sources of future schedule and cost overruns, so they can be avoided at the outset. If delays are anticipated to occur during the course of the project, we will discuss the situation with City staff and apply corrective actions to recover and maintain the schedule.

Communications Procedures

Communication is the most important role of the project manager. Formal communication will focus on the deliverables agreed upon for each task assigned. In addition, we expect very close informal communication on a day-to-day basis, mostly by telephone or email. We also will prepare monthly progress reports identifying the work completed during the previous period, any issues encountered, and plans for the upcoming month. Our project management communication procedures are designed to accomplish the following objectives:

- Establish a formal protocol of communication between the team and City staff;
- Specify the documentation procedures to be used by all the team members;
- Assure that appropriate information is available to all team members; and

- Assure that the document is internally consistent, communicates clearly to the public and decision makers, and is as clearly written and concise as possible.

Management to achieve cost-effectiveness, on budget, efficient, inclusive of public input, resulting in documents that are understandable by City and public. The Work Plan (discussed in detail in Section 3) for Program Management has been developed with the following objectives:

- **EXPERTISE.** Use the right expertise for each phase of the project - MKN has advised the City on selection of all other program team members in order to ensure the highest level of expertise is provided for each work effort. We will continue to guide the City on the selection of other experts as the project moves forward.
- **VALUE.** Eliminate opportunities for redundancy or duplication of effort – MKN will ensure consistency is maintained through all work efforts (ex. project descriptions for Facility Master Plan, CEQA documentation, and loan/grant applications) without multiple consultants performing the same tasks.
- **EFFICIENCY.** Manage our own efforts and costs to ensure this small community receives the highest level of service, expertise, quality, and value in our services – MKN has streamlined our program management team to reduce markups and overhead costs to the City. Where appropriate, we have continually recommended to the City that they contract directly with certain technical experts. We will continue to apply this approach as the program proceeds.

MKN believes that adhering to these principles during the entire program management process will maintain the program managers focus on delivery of a project that is on time, on budget, inclusive of public input, and results in professional and understandable project documents.

Past projects challenges: how they were addressed and how they apply to Morro Bay's WRF project. Challenges of some degree occur on most projects. MKN believes that strong program managers learn from the challenges they face and know that those experiences can actually benefit their ability to manage larger and more complex projects in the future.

Examples of challenges faced, solutions applied, and application to Morro Bay's project provided in the table below:

Challenge	Project	Solutions	Application of Lessons Learned to MB WRF Project
Schedule Management is Critical	City of Morro Bay Water Treatment Plant – Phase I Improvements	<ul style="list-style-type: none"> City needed to comply with a short design schedule to maintain grant funding. MKN delivered draft plans and specifications within 6 weeks from Notice to Proceed. 	MKN developed the City's WRF work plan and schedule based on our experience planning, designing, and constructing projects that have aggressive schedules – we are committed to delivering another fast-track project to the City similar to our success at the WTP.
The client has limited staff resources	City of Guadalupe – Water and Wastewater Engineering (including Master Plans, Pipeline, Well, Booster Station and Tank Designs)	<ul style="list-style-type: none"> MKN has served as the City's water and wastewater engineer We have performed as an extension of staff for grant support, planning, design, hydraulic analysis, and construction management. 	MKN's flexibility, low overhead, and client focus make us the ideal partner for the City of Morro Bay – we can respond quickly to bring in additional staff resources to stay on schedule and will work closely with the City to share tasks and responsibilities to lower cost to ratepayers.
Winning and Maintaining Public Support	Supplemental Water Project, Nipomo Community Services District (NCSD)	<ul style="list-style-type: none"> As Project Manager, Mike Nunley guided the initial studies, planning, and final design and permitting for the Supplemental Water Project. After an assessment vote to fund the project failed to pass, Mike Nunley was appointed non-voting chairman of the Supplemental Water Alternatives Evaluation Committee, a citizens' group formed by Nipomo Community Services District to evaluate project alternatives within a public process. 	<p>Mike Nunley's ability to provide team management and technical leadership on a complicated, multi-agency project that required design innovation (including design-build of a 2800-ft horizontal directional-drilled pipeline across the Santa Maria River) will benefit the Morro Bay WRF.</p> <p>Mike's ability to guide an impartial review of other alternatives to the project, allowed members of the committee to develop their own opinion and unanimously select it as the best option for the community.</p>
City's First Design-Build Project	City of San Luis Obispo Sustainable Solutions Turnkey Project – Water Resource Recovery Facility Improvements (MKN staff at a previous firm)	<ul style="list-style-type: none"> MKN staff guided the project through the planning and design stages as the City's first design-build wastewater project. Key staff from MKN and our project partners (Pacific Gas & Electric and City of San Luis Obispo) developed a "triple bottom line" environmental, financial, and social metrics for determining project success. 	<p>Over the past 18 months, the MKN/JFR program team has focused our outreach efforts for the Morro Bay WRF on building:</p> <ul style="list-style-type: none"> Trust among project partners Public outreach and Council buy-in

Program Managers Specific Experience. The following table lists a few projects that Mike Nunley performed on his own, or at a previous firm, that specifically demonstrate his experience applying each of the following project management skills: schedule and budget tracking, agency collaboration, cost effective management, and preparation of readable documents:

CLIENT	PROJECT	On Time & On Budget	Collaboration with City & Agency Staff, While Providing Independent Analysis and Leadership	Cost-effective Management of Public Process and Development of Readable Documents
<i>City of Morro Bay</i>	<i>New WRF Options Report</i>	✓	✓	✓
<i>City of Morro Bay</i>	<i>Rancho Colina vs. CMC Evaluation</i>	✓	✓	✓
<i>Nipomo Community Services District</i>	<i>Supplemental Water Project Planning; Design; Permitting; and Alternatives Evaluation Committee Chairmanship</i>	✓	✓	✓
<i>Nipomo Community Services District</i>	<i>Southland WWTF Master Plan; Phase I Design; and Effluent Disposal and Reuse Screening Study</i>	✓	✓	✓
<i>County of San Luis Obispo</i>	<i>Nacimiento Water Project EIR; Planning; Permitting; Stakeholder Outreach; Contract Development; and Preliminary Design</i>	✓	✓	✓
<i>City of San Luis Obispo</i>	<i>Water Reclamation Facility Improvements – Sustainable Solutions Turnkey Program (PG&E-Funded Design Build Program)</i>	✓	✓	✓

Expert Team

MKN's team will provide expert support to the program manager for all work efforts.

MKN PROGRAM MANAGEMENT TEAM

The MKN Program Management Team is depicted on the following organization chart.



Morro Bay WRF Program Management Team



MORRO BAY RESIDENTS

City Council
 Jamie Irons - Mayor
 John Headding
 Christine Johnson
 Matt Makowetski
 Noah Smukler

"It has been an honor and pleasure to serve the City for the past 15 years. I understand the City's vision and am dedicated to successfully bring your carefully planned goals to fruition."

—Mike Nunley

**WATER RECLAMATION FACILITY
 CITIZEN ADVISORY COMMITTEE**

PUBLIC WORKS DIRECTOR—Rob Livick

PUBLIC WORKS ADVISORY BOARD (PWAB)

WRF PROGRAM MANAGEMENT
Program Manager
 Mike Nunley, PE
Deputy Program Manager
 John F Rickenbach, AICP

**EFFLUENT PERMITTING/
 SOURCE CONTROL**
 LWA
**FUNDING STRATEGY AND
 GRANT MANAGEMENT**
 Kestrel
**GEOLOGIST/GEOTECH/
 MATERIALS TESTING**
 Fugro

Technical Advisory Team (TAT)
Treatment Process
 Mark Laquidara, PE
Recycled Water Program
 Julia Aranda, PE
Construction Program
 Wilhelm Nowotny, PMP

TECHNICAL SUPPORT

PUBLIC OUTREACH		CEQA/PERMITTING	ENGINEERING SUPPORT				CONSTRUCTION SUPPORT	
John Rickenbach	Konig Media	John Rickenbach	Lead Engineer Jon Hanlon, PE	Engineers Eileen Shields, PE Joseph Reichmuth, PE Rob Lepore, GISP Luke Philbert, EIT	Electrical Engineer Jack Ivers, PE	Instrumentation Doug Bloom	Resident Engineer Kim Lindbery, PE Joseph Reichmuth, PE	Inspectors Donald Spates Craig Caballero
Debbie Rudd		Kevin Merk			Structural Engineer Michael Parolini	Value Engineering Facilitation Mark Watson	Survey Staking Mark Reinhardt, PLS	Labor Compliance Golden State Labor Compliance

SUBCONSULTANTS

The following subconsultants are a key component of the MKN program management team, selected to support and supplement specific tasks identified in Section 3.

Subconsultant Firm	Contact Name	Supporting Role
JFR Consulting	John F. Rickenbach	<i>Deputy Project Manager, Public Outreach, CEQA/Permitting</i>
RRM	Debbie Rudd	<i>Public Outreach, Architecture, Landscape Design</i>
Konig Media	Joe Koenig	<i>Public Outreach</i>
KMA	Kevin Merk	<i>CEQA/Permitting</i>
MNS Engineers	Kim Lindbery Donald Spates Craig Caballero Mark Reinhardt	<i>Construction Support Services including survey/staking, resident engineer, and inspectors</i>
IRJ Engineers	Jack Ivers	<i>Preparation of Bridging Documents and Review of Design Deliverables: Electrical Engineering</i>
Smith Structural Group	Michael Parolini	<i>Preparation of Bridging Documents and Review of Design Deliverables: Structural Engineering</i>
Tesco	Doug Bloom	<i>Preparation of Bridging Documents and Review of Design Deliverables: Instrumentation</i>
Value Management Strategies, Inc	Mark Watson	<i>Value Engineering Facilitation</i>
Golden State Labor Compliance	Vic Conklin	<i>Labor Compliance Services</i>



John F. Rickenbach (JFR) Consulting. JFR is a land use planning and environmental consulting firm based in Atascadero, California. John Rickenbach is an acknowledged expert in California State Planning law, as well as the application of CEQA, NEPA, and other state and federal environmental laws, particularly with regard to Program EIRs for long-range planning efforts. With over 25 years working throughout the State of California, John has unparalleled experience with a variety of complex assignments requiring exceptional communication skills. He specializes in General Plans, Specific Plans, and comparative site analysis. John was the project manager for the City of Paso Robles APA award-winning 2003 General Plan Update. John has a very broad background on a variety of project types, including:

- Policy Planning and CEQA/NEPA Compliance
- Constraints Studies
- Public Utilities and Infrastructure Projects
- Projects in the Coastal Zone

RRM. RRM's planning group has taken planning into the realm of successful project implementation. RRM's professionals utilize a thorough understanding of the multi-faceted processes necessary to foster sensitive and responsive planning. RRM's project experience ranges from small-scale land planning projects to the preparation of multiple-ownership specific plans and urban design projects. The depth of experience in our planning group staff promotes an exceptional effectiveness in creative project solutions, establishing consensus, client relationships and public representation, which is evidenced through their numerous implemented projects across the state.

Konig Media. Konig Media has been providing premium design and development services for web, print and identity projects for over 15 years. Konig Media's graphic design services include complete identity packages and various print media, from business cards to billboards. Web services include customized design concepts, interface design, advanced flash design, expert wordpress design and development, e-commerce and content management systems.

Kevin Merk Associates, LLC (KMA). KMA is an environmental consulting firm providing a diverse range of services. KMA is a small business founded in 2011 with the objective of providing the best available solution-oriented environmental services for public and private sector clients. While entrenched in natural resources consulting, permitting and regulatory compliance support, KMA also provides environmental planning services such as California Environmental Quality Act and National Environment Policy Act documentation. KMA has a wealth of experience working in the Coastal Zone, and regularly interfaces with the California Coastal Commission providing technical expertise for development projects for both public and private sector clients. KMA's areas of expertise include the following:

- Biological Resources Investigations and Constraints Analysis, including Rare, Threatened and Endangered Plant and Animal Surveys (California Red Legged Frog, California Tiger Salamander, San Joaquin kit fox, American badger, nesting birds/raptors, and Monarch butterfly)
- Wetland Delineations (both U.S. Army Corps of Engineers and California Coastal Commission)
- Vegetation Classification and Mapping
- Regulatory Compliance Permitting (Clean Water Act Sections 404, 401, California Fish and Game Code 1602) and Mitigation Planning
- Endangered Species Act Section 7 Consultations and Section 10 Habitat Conservation Planning
- California Endangered Species Act Permitting and Natural Community Conservation Planning
- Open Space Resource Management and Mitigation Plan Development and Implementation
- Coastal Development and Grading Permit Acquisition Assistance
- Construction and Mitigation Monitoring and Compliance Reporting

MNS Engineers, Inc. (MNS). MNS provides quality infrastructure consulting services to the water resources, transportation, federal, and government service markets throughout California. MNS' reputation is built on clear and direct communication and top-notch and quality services. These factors are just some of the reasons why MNS has been an industry leader for over 50 years. MNS specializes in the core services of civil engineering, construction management, and land surveying. MNS understands the technical, environmental, and regulatory aspects that may be required for any project. Headquartered in Santa Barbara, California, MNS has additional offices in Westlake Village, Buellton, and San Luis Obispo.

Construction Management Expertise. MNS has managed construction and inspection for a number of large-scale water and wastewater projects, including treatment facility upgrades, new facility construction, sewer pipeline systems, and associated roadway and drainage improvements. MNS' construction management expertise includes:

- Complete construction project management
- Construction inspection and administration
- Utility relocation and coordination
- Funding administration: local, state, and federal
- Multi-party and contractor coordination
- Regulatory agency coordination
- Constructability review
- Construction phase surveying and staking
- Permitting

Recycled Water Experience. MNS Water Resources Supervising Engineer, Julia Aranda, PE, has provided engineering services with various recycled water projects. Julia's experience includes:

- Recycled Water Master Plan, City of Oxnard
- Recycled Water Pipeline Extension Phase 1B-1, Castaic Lake Water Agency
- Recycled Water Phase 2 Preliminary Design Report, Castaic Lake Water Agency
- Recycled Water Pump Station PS-1 Upgrades, City of Burbank Water & Power
- Valhalla Recycled Water Main Extension, City of Burbank Water & Power
- Recycled Water Master Plan, City of Santa Paula

IRJ Engineers, Inc. (IRJ) IRJ is a mechanical & electrical engineering firm that, along with its predecessor firm ASEA, has been providing consulting design and construction support services on the Central Coast for more than 50 years. Many of the projects successfully completed by IRJ have included infrastructure for water and wastewater facilities including booster pump stations, well pumps, water treatment facilities, wastewater lift stations, wastewater plants, reclaimed water turnouts, and storm water lift stations.

Smith Structural Group. (SSG) SSG is a structural engineering firm located in San Luis Obispo, CA. Its partners have been practicing on the Central Coast since 1985. Michael Parolini is a noted Structural Engineer in California, having published papers on the use of non-conventional structural systems and rain induced roof collapses. His work as a lecturer at California Polytechnic State University, San Luis Obispo has allowed him to bridge the gap between practicing engineers and the academic community. As engineers on the Central Coast, they are well versed with working on Design Teams with Coastal Zone Projects. The firm employs 7 licensed engineers with 10 total employees. Their work in the municipal field includes structures for public safety, utilities, parks, transportation and administration.

TESCO. TESCO Controls Inc. has been involved in the design, integration and implementation of Industrial, Water and Wastewater Systems for over 40 years. During this time TESCO has been involved with the design and implementation of over 500 SCADA, telemetry and computer integrated control systems, many of which have been in operation for more than twenty years. TESCO’s business is designing, building, and integrating electrical and electronic systems for the control of water distribution and wastewater collection projects. TESCO’s design methodology and current SCADA system knowledgebase allows for innovative solutions which take into account RTU/PLC communications topology, LAN and WAN configuration, state-of-the-art hardware technologies, and currently available and widely supported operating system and application software platforms.

Value Management Strategies, Inc. (VMS) is a small business Value Management (VM) and Risk Management (RM) consulting firm incorporated in California in 1990. The entire organization of VMS is structured to address the value management [value analysis (VA), value engineering (VE)] and risk management needs of our clients. VMS organizes, manages, plans, coordinates, conducts, and documents value and risk studies. VMS specializes in the integration of VM and RM, the application of value management at the early design phase, and use the methodology to develop the program concept, business plans, processes, and procedures, as well as facilitate traditional VAVE studies.

Although a small business, VMS is the largest and most experienced VE firm in the country with 15 employees, 9 of which are Certified Value Specialists (CVS). The VMS role in VE studies is to provide the team leader, a CVS, to plan, coordinate, facilitate, manage, and document the studies. The VMS principal in charge, Robert Stewart, has been working full-time in this field for 25 years and has directed value and risk studies and training workshops on nearly 1,000 construction projects.

TECHNICAL ADVISORY TEAM

QA/QC is a critical component of every project. Therefore, a special component of the MKN subconsultant team will be a Technical Advisory Team (TAT) composed of subconsultants **Mark Laquidara, Julia Aranda (MNS), and Wilhelm Nowotny (MNS)** with extensive experience in treatment process, recycled water, and alternative delivery construction management.

The TAT reviews will identify and address issues and alert the program manager early in the process, keeping the project on schedule. QC reviews will also be performed on program management deliverables (ex. Master Water Reclamation Plan) under the direction of the Program Manager.

TECHNICAL ADVISORY TEAM		
Subconsultant Firm	Contact Name	Technical Advisory Specialty
MNS Engineers	Julia Aranda	<i>Recycled Water</i>
Laquidara Consulting	Mark Laquidara	<i>Treatment Process</i>
MNS Engineers	Wilhelm Novotny	<i>Large Project Construction Management</i>

KEY TEAM MEMBER QUALIFICATIONS

Our team members' roles and relevant qualifications are provided in the table below.

MKN BIOGRAPHIES

Education, Licenses, and Certifications	Summary of Relevant Experience	Brief Project Experience
Michael Nunley, PE – Program Manager, MKN		
<p>MS, Civil & Environmental Engineering, University of California at Berkeley</p> <p>BS, Civil Engineering, Virginia Polytechnic Institute & State University</p> <p>Registration: Professional Civil Engineer, License No. 61801</p>	<p>Mr. Nunley's expertise includes over 20 years of management, planning, and design of water, wastewater, recycled water, and drainage facilities in California, Hawaii, Guam, Washington, North Carolina, Virginia, South Carolina, Tennessee, and Georgia.</p>	<ul style="list-style-type: none"> • Project Engineer (Subconsultant to JFR), Site Options Report and Interim Program Management Support, New Morro Bay WRF • Project Manager for Supplemental Water Project Planning, Permitting, and Design, Nipomo CSD • Project Engineer for Nacimiento Water Project Management Support, Planning, Permitting, and Design, County of San Luis Obispo • Project Manager, Preliminary Screening Evaluation of Southland WWTF Effluent Disposal and Reuse Alternatives, Nipomo CSD • Project Manager for Recycled Water Study Update and Adaptive Integrated Water Resources Plan, City of Paso Robles
Jon Hanlon, PE – Engineering Support Lead, MKN		
<p>BS, Mechanical Engineering, California Polytechnic State University, San Luis Obispo</p> <p>Registration: Professional Mechanical Engineer, CA License No. 33232</p>	<p>Mr. Hanlon has over 21 years of industry experience including design, analysis, and management of municipal projects, as well as serving as the San Luis Obispo Operations Manager for a Fortune 500 engineering company. Project experience includes design and analysis of water and wastewater treatment facilities, pump stations, production wells; and piping and valves; hydraulic analysis; master planning; and environmental permitting.</p>	<ul style="list-style-type: none"> • Project Engineer for Water Reclamation Facility Improvements, City of San Luis Obispo • Project Manager for WWTP Major Maintenance and Repair Program, City of Morro Bay • Principal in Charge for Southland Wastewater Treatment Facility Design, Nipomo Community Services District • Principal in Charge for Wastewater Treatment Facility Expansion, City of Santa Maria

Education, Licenses, and Certifications	Summary of Relevant Experience	Brief Project Experience
Eileen Shields, PE – Engineering Support, MKN		
<p>MS, Civil and Environmental Engineering, California Polytechnic State University, San Luis Obispo</p> <p>BS, Environmental Engineering, California Polytechnic State University, San Luis Obispo</p> <p>Registration: Professional Civil Engineer, CA License No. 74757</p>	<p>Ms. Shields' experience includes planning and preliminary and detailed design of water, wastewater and recycled water facilities. Specific project experience includes hydraulic modeling; site civil design; cost estimation; and bid and construction assistance, including development and administration of prequalification of contractors; planning and design of water supply and conveyance alternatives; wastewater treatment and collection system conceptual planning; process evaluation and wastewater treatment plant design.</p>	<ul style="list-style-type: none"> • Project Engineer, New Water Reclamation Facility Project Planning Services, City of Morro Bay (sub to JFR Consulting) • Project Engineer, Wastewater Treatment Facility Equipment and Process Optimization (sub to Penfield & Smith), City of Oxnard • Project Engineer and Project Manager for Southland WWTF Phase I Facility Improvements, Nipomo CSD • Project Engineer for Blacklake Wastewater System Master Plan, Nipomo CSD • Project Engineer for Wastewater Collection System and WWTP Master Plans, City of Atascadero • Project Engineer for WWTP Major Maintenance and Repair Program, City of Morro Bay
Rob Lepore, GISP – GIS/Engineering Support, MKN		
<p>BS, Environmental Engineering Wentworth Institute of Technology, Boston, MA</p> <p>Registration: Certified Geographic Information System Professional (GISP)</p> <p>SWRCB/CDPH Water Treatment Operator T2</p> <p>SWRCB/CDPH Water Distribution Operator D2</p>	<p>Mr. Lepore has extensive experience with hydraulic model development, data migration & integration, as well as map cartography & onsite GIS software installation & training. Rob is proficient in the use of ESRI ArcGIS 10, Autodesk Civil 3D & Map, Innovyze InfoSWMM & Bentley WaterCAD, SewerCAD, WaterGEMS, SewerGEMS. Rob also has 10 years of engineering design experience on various water and wastewater project for public agencies and private clients.</p>	<ul style="list-style-type: none"> • Project Engineer for New Water Reclamation Facility Project Planning Services, City of Morro Bay (sub to JFR Consulting) • Project Engineer for Wastewater Collection System and WWTP Master Plan, City of Guadalupe • GIS Specialist for Wastewater Collection System and WWTP Master Plan, City of Atascadero • GIS Specialist for Annual Water and Wastewater GIS Updates, Nipomo CSD
Joseph Reichmuth, PE – Engineering Support/Resident Engineer, MKN		
<p>BS, Civil Engineering, California Polytechnic State University, San Luis Obispo, CA</p> <p>Registration: Professional Civil Engineer, CA License No. 63124</p>	<p>Mr. Reichmuth is a Project Engineer specializing in wastewater treatment facilities, lift stations, pipelines, and water facilities. Mr. Reichmuth also has nearly a decade of experience working in the geotechnical engineering discipline specializing in field engineering and construction observation.</p>	<ul style="list-style-type: none"> • Project Engineer for Water Reclamation Facility Upgrades, City of San Luis Obispo • Project Engineer for WWTP Major Maintenance and Repair Program, City of Morro Bay • Project Engineer for Southland WWTF Phase 1 Improvements, Nipomo CSD • Project Engineer for Headworks Bar Screen Project, City of Atascadero

SUBCONSULTANT BIOGRAPHIES

Education, Licenses, and Certifications	Summary of Relevant Experience	Brief Project Experience
John Rickenbach – Public Outreach/CEQA/Permitting, JFR		
<p>M.C.R.P, City and Regional Planning, California Polytechnic State University, San Luis Obispo, CA</p> <p>BS, Physical Geography, University of California, Davis</p> <p>American Institute of Certified Planners</p>	<p>Mr. Rickenbach is an environmental and planning consultant with over 25 years of broad ranging experience serving the public sector. Mr. Rickenbach’s background includes project experience in public outreach and coordination of public input; utilities and public infrastructure projects; Coastal Zone projects; constraints studies; and policy planning and CEQA/NEPA compliance.</p>	<ul style="list-style-type: none"> • Project Manager for New Water Reclamation Facility Project Planning Services, City of Morro Bay • EIR Manager for Wastewater Treatment Plant Expansion, City of Santa Maria • Environmental Consultant for Avila Pier Marine Research Facility IS/MND, Avila Beach • Project Manager/Outreach Program Manager for 2003 General Plan Update and EIR, Paso Robles
Debbie Rudd - Public Outreach, RRM		
<p>BS, Interior Architecture/Space Planning, Kansas State University, Manhattan, KS</p> <p>American Institute of Certified Planners (AICP)</p> <p>LEED Accredited Professional (LEED AP)</p>	<p>A thoughtful leader with a knack for visioning, Debbie joined RRM Design Group in 1990. Debbie has a passion for creating great spaces that are inviting to pedestrians, and integrating “green” principles and concepts into projects. She excels in public outreach, identifying public concerns and preferences and translating them into cutting-edge work able designs and documents that can be easily understood by the public and implemented by the client.</p>	<ul style="list-style-type: none"> • Outreach Manager for New Water Reclamation Facility Project Planning Services, City of Morro Bay • Outreach Manager for the Water Reclamation Facility Upgrade, City of San Luis Obispo • Project Manager for the Port San Luis Master Plan in Avila Beach
Joe Koenig - Public Outreach, Konig Media		
<p>BS, Art and Design, California Polytechnic State University, San Luis Obispo, CA</p>	<p>Mr. Koenig has extensive experience in visual design and website interface design and development.</p>	<ul style="list-style-type: none"> • Webpage designer for Avila Beach CSD, http://avilabeachcsd.org/ • Webpage designer for San Luis Obispo Water Resource Recovery Facility (currently in design process) • Webpage designer for the Meltzer Group, http://meltzer.com/ • Webpage designer for Paso Air Tours, http://www.pasoairtours.com/
Kevin Merk – CEQA/Permitting, KMA		
<p>BA, Biology, University of California, Santa Cruz, CA</p>	<p>With over 20 years of environmental consulting experience, Kevin has directed, managed, and conducted hundreds of natural resource and environmental studies throughout California. His work experience includes general biological and species---specific surveys, U.S. Army Corps of Engineers and California Coastal Commission wetland delineations, as well as permit acquisition and regulatory compliance.</p>	<ul style="list-style-type: none"> • Integrated Waste Management Facility EIR (Biological Resources Sections), City of Santa Maria • Union Valley Parkway EIR/EA (Biological Resources Sections), City of Santa Maria • Mormann Property, mapped/classified vegetation, conducted rare plant surveys, San Luis Obispo County • HWY 46 environmental permit compliance during construction, San Luis Obispo County

Education, Licenses, and Certifications	Summary of Relevant Experience	Brief Project Experience
Mark Laquidara, PE – Technical Advisor: Treatment Process		
<p>PhD, Civil & Environmental Engineering, Northeastern University</p> <p>MS, Civil & Environmental Engineering, University of Lowell</p> <p>BS, Civil Engineering, Lowell Technology Institute</p>	<p>Dr. Laquidara has over 40 years of experience in the public and private sectors, mostly within the wastewater and biosolids/energy recovery arena. Past expertise concentrated on plant engineering, process design and optimization, day-to-day operations, and troubleshooting. He has particular experience in solving plant compliance issues and optimizing processes through engineering investigations resulting in operational changes and capital improvements.</p>	<ul style="list-style-type: none"> • Technical Advisory Team Reviewer, quality control reviewer for over 75 wastewater treatment designs • Wastewater Treatment Process Technical Specialist, expansion and upgrade of wastewater treatment plant, City of Oxnard (and others) • Wastewater Treatment Process Technical Lead, wastewater treatment plant upgrade, City of Honolulu (and others) • Deputy Director of Process Control and Engineering/O&M Technical Lead, Deer Island wastewater treatment plant, Massachusetts Water Resources Authority
Julia Aranda, PE – Technical Advisor: Recycled Water Program, MNS		
<p>BS Engineering, California State University, Northridge, CA</p> <p>Registration: Professional Civil Engineer, CA License No. 56412</p>	<p>Ms. Aranda has over 24 years of experience with water/wastewater infrastructure projects. Julia has served as project manager/engineer for a variety of potable water, recycled water, and wastewater projects, including new construction and rehabilitation projects.</p>	<ul style="list-style-type: none"> • Project Manager for Recycled Water Master Plan, City of Oxnard • Project Manager for Recycled Water Implementation Plan, City of Oxnard • Project Manager, Water Operations Support, City of Oxnard • Project Manager for Recycled Water Master Plan, City of Santa Paula
Wilhelm Nowotny, PE – Technical Advisor: Construction Mgmt., MNS		
<p>M.A. Public Administration, the George Washington University, D.C.</p> <p>B.A. Political Science/Economics, Texas A&M University</p> <p>Certifications: Project Manager Professional (PMP), Project Management Institute, PMI No. 1575372</p>	<p>Mr. Nowotny is a seasoned construction professional with over 32 years of experience leading multidisciplinary teams in the successful completion of over \$3 billion in large complex water and wastewater projects throughout the United States, the Dominican Republic, and Peru. Wilhelm's broad experience includes all aspects of large capital project development processes from design management through project closeout.</p>	<ul style="list-style-type: none"> • Project Executive for Greenfield Wastewater Treatment Plant and Collection System, City of Arequipa, Peru • Project Director for Expansion of Water Recycle Facility, Tallahassee, FL • Project Director for Greenfield Membrane Wastewater Treatment, Regional Wastewater Operating Authority, Greenville, SC • Construction Liason for Executive Risk Committee, Panama Cana Expansion Project, Construction of Third Set of Locks



Education, Licenses, and Certifications	Summary of Relevant Experience	Brief Project Experience
Kim Lindbery, PE – Resident Engineer, MNS		
<p>BS, Civil Engineering, California Polytechnic State University, San Luis Obispo</p> <p>Registration: Professional Civil Engineer, CA License No. 50984</p>	<p>Ms. Lindbery has significant career experience in project management for civil design and construction management, specializing in water resources and wastewater projects. She has more than 15 years of experience in construction management for sewer and wastewater projects.</p>	<ul style="list-style-type: none"> • Construction Manager for Supplemental Water Project, Nipomo, CA • Construction Manager for Southland Wastewater Treatment Plant Upgrade, Nipomo, CA • Resident Engineer/Inspector for Wastewater Treatment Plant Upgrade, City of Paso Robles, CA • Inspector for Southland Wastewater Treatment Plant Upgrade, Nipomo, C
Donald Spates – Inspector, MNS		
<p>Certifications: Structural Masonry Inspector – ICC and DSA</p> <p>Reinforced Concrete Inspector – ICC and ACI</p>	<p>Mr. Spates brings over 25 years of experience in the construction field including project supervision and inspection on water and wastewater facilities and pipelines. Specialty inspection experience also includes masonry, reinforced concrete, structural steel, metal stud framing, and underground piping. He is skilled at interpreting plans and specifications to mitigate cost and schedule risks, ensuring a cost effective and timely work flow.</p>	<p>Construction Inspector for Supplemental Water Project, Nipomo, CA Construction Inspector for Southland Wastewater Treatment Plant Upgrade, Nipomo, CA Construction Inspector for Water Treatment Plant Upgrade, City of San Luis Obispo, CA. General foreman for California Men’s Colony Water Treatment Plant, San Luis Obispo, CA Construction Project Manager for City of San Joaquin Wastewater Plant, City of San Joaquin, CA</p>
Craig Caballero – Inspector, MNS		
<p>Licensing: General Engineering Contractor, CA 962753</p> <p>General Building Contractor, CA 962753</p>	<p>Mr. Caballero has over 29 years of experience in the construction industry as a construction manager, inspector, builder, surveyor, civil design engineer, and estimator for all phases of and public improvement projects, residential, and commercial projects.</p>	<p>Lead Inspector for Los Osos Water Recycling Facility Project, County of San Luis Obispo Resident Project Representative, the lead inspector responsible for project inspection for Los Osos Waste Water Collection System, County of San Luis Obispo Inspector for Black Road Sewer Treatment Plant Expansion, Santa Maria, CA</p>
Mark Reinhardt, PLS – Survey and Staking Team Supervisor, MNS		
<p>BA Geology, University of Montana, Missoula, MT</p> <p>AS Land Surveying, Flathead Valley Community College, Kalispell, MT</p>	<p>Mr. Reinhardt has significant career experience in land surveying and oversees all of the firm’s surveying activities. His responsibilities include reviewing all parcel maps, tract maps, lot line adjustments, and other land development projects. He is also knowledgeable and experienced in preparing resolutions and back up data for roadway vacations and other special projects related to City real estate projects.</p>	<p>Principal Surveyor, Mesa Road/Phelps Road Trunk Sewer. Goleta West Sanitary District, Principal Surveyor, Silver Sands Mobile Home Park, City of Carpinteria Principal Surveyor, Main Street Interchange at US 101, City of Santa Maria, CA Principal Surveyor, North Jameson Lane Widening, Class II Bike Lanes and Bridge, County of Santa Barbara, CA.</p>

Education, Licenses, and Certifications	Summary of Relevant Experience	Brief Project Experience
Jack Ivers – Electrical Engineering, IRJ Engineering		
<p>BSEE, Michigan Technological University, Houghton, MI</p> <p>Professional Electrical Engineer, State of California</p>	<p>Mr. Ivers is an electrical engineer with over 35 years of experience designing electrical systems serving buildings and structures for the commercial, institutional, and industrial sectors. Mr. Ivers has also performed inspection services on water projects designed by others. He has experience on low voltage instrumentation systems and medium voltage power systems up to 4kV for equipment connections and 15kV for service connections.</p>	<ul style="list-style-type: none"> • Electrical Engineer performing design for Hueneme Road Recycled Water Line, City of Oxnard • Electrical Engineer performing design for Tanks at Obispo, City of Guadalupe. • Electrical Engineer performing design and construction support services, Limoneira Co. Santa Paula • Electrical Engineer providing design review and construction inspection services, Cal-Am Water Company, Thousand Oaks
Michael Parolini – Structural Engineering, Smith Structural Group		
<p>BS Architectural Engineering, California Polytechnic State University, San Luis Obispo</p> <p>California Registered Structural Engineer, No. 5405</p> <p>California Registered Professional Civil Engineer, No. 69340</p> <p>LEED Accredited Professional, United States Green Build Council</p> <p>Model Law Structural Engineer, National Council of Examiners for Engineering and Surveying (NCEES), No. 46863</p>	<p>Mr. Parolini is a Civil and Structural Engineer with over 12 years of professional experience. His practice focuses solely on the field of Structural Engineering and includes a wide variety of projects including many for Municipalities related to the Water and Waste Water field. He is adept at working with complete design teams to create defensible and cohesive Construction Documents for any project leading to more efficient bidding and construction.</p>	<ul style="list-style-type: none"> • Los Osos, CA WRF – Multiple Maintenance and Laboratory Buildings for new Recycled Water Facility • Los Osos, CA WWTP – Lift Station Pump Station • Avila Beach, CA WWTP – Rehabilitation of existing concrete digesters and other miscellaneous items • Atascadero, CA WWTP – Headworks RV Dump site • Lake Oswego, OR WWTP – Pump Station design
Doug Bloom - Instrumentation & Control System Engineer, TESCO		
<p>BS, Aeronautical Engineering Embry-Riddle Aeronautical University, Prescott, AZ</p> <p>Registered Professional Engineer (P.E.), Electrical Engineering (CA, CO, FL, HI, LA, NV, NM)</p>	<p>Mr. Bloom is an electrical and control system designer, engineer, and consultant with over 22 years of a diverse range of experience with control system automation in the private and public sectors. Mr. Bloom's experience includes onsite assessments, onsite studies, electrical coordination studies, and industrial instrumentation/control automation for government (federal, local), utilities, public works, private works, and communication/telemetry projects.</p>	<ul style="list-style-type: none"> • Consultant and engineer for City of San Luis Obispo Water Reclamation Facility SST Project. • Design engineer for Yosemite National Park Utilities plant expansion projects. • Integration consultant for Sacramento Suburban Water District expansion and improvement projects. • Project engineer for 6 phase integration project(s) for Mammoth Community Services District GWTP#1 upgrades, including instrumentation systems, PLC process automation controls, and communication system upgrades.

Education, Licenses, and Certifications	Summary of Relevant Experience	Brief Project Experience
Mark Watson – Value Engineering Facilitator, VMS		
BS – Geological Engineering, University of Missouri – Rolla Professional Engineer – Missouri Certified Value Specialist-Life – SAVE International Project Management Professional – Project Management Institute	Mark Watson is a registered Professional Engineer and Certified Value Specialist (CVS). He has an in-depth knowledge of Value Methodology (VM). Mark’s experience includes value studies on a wide array of projects in the construction industry. He has conducted Value Engineering (VE) and value planning studies on roads, bridges, water and wastewater facilities, transit facilities, airport facilities, and drainage facilities.	<ul style="list-style-type: none"> • VE Study Facilitator for Jensen Water Treatment Plant Solids Handling Facility and Lagoon • VE Study Facilitator for Monterey Peninsula Water Supply Project Desalination Plant • VE Study Facilitator for Horseshoe Road Superfund Site, Operable Unit 3 • Has also conducted hundreds of value studies on various project types throughout the world

REDUNDANCY IN STAFF

Michael Nunley will act as Program Manager for the entire duration of the program. John Rickenbach is designated as Deputy Program Manager and will work closely with Mike throughout the program. John and Mike have a long history of project teaming, and work and communicate effectively with each other, ensuring consistent management and progress.

John will be fully informed of all project details at all times. In the event of Mike’s absence John, as Deputy Program Manager will assume responsibility for all program management effort. Further, MKN engineering lead Jon Hanlon and supporting engineer Eileen Shields will also be fully informed of all project details and available to assume leadership responsibilities at any time, as required.

RESUMES

Detailed resumes for key team members and subconsultants are included in Appendix B.

EXPLANATION OF FIRM DISQUALIFICATIONS

Our firm has never been disqualified or removed from past contracts. Please refer to the required signed form in Section 01 of this proposal.

DETAILED LIST OF SERVICES AVAILABLE DIRECTLY FROM MKN

MKN specializes in offering planning, design, and construction support services to public agencies and private clients, including the following types of projects:

- Wastewater collection, treatment and effluent disposal
- Water reuse-related treatment, storage, and distribution
- Condition assessment, repair, and rehabilitation of water and wastewater facilities
- Biosolids management and disposal
- Onsite wastewater system design for residences, including beachfront properties
- Water supply
- Water treatment, distribution, and storage
- Regulatory project management and wastewater review/permitting support
- Permit compliance and personalized problem solving on complex/special wastewater and water reuse projects

BILLING RATES

Rate sheets for MKN and subconsultants are included in Appendix C.

PROXIMITY AND STAFFING LEVEL

MKN's office is located in Arroyo Grande, California, 30 miles from Morro Bay, approximately 35 minutes travel time from our office to Morro Bay City Hall. Subconsultants are located 10-150 miles from Morro Bay.

The following exhibit shows the proximity of the MKN office and majority of subconsultant team's offices in relation to Morro Bay.



03 Work Program

PROJECT UNDERSTANDING

PROJECT OVERVIEW

Morro Bay's new Water Reclamation Facility (WRF) project is proposed to be constructed on an approximately 10 to 15-acre portion of a 187-acre property approximately one mile east of the Morro Bay City limits, on the north side of Highway 41, known as the Rancho Colina site. The project will require collection system modifications and a new force main to convey the raw wastewater to the site. The new WRF is proposed to be owned and operated by the City of Morro Bay, and will serve residents of the City as well as any customers under contract with the City.

The ultimate goal for the WRF is to produce the maximum amount of reclaimed water feasible to supplement the City of Morro Bay's water supply. The ultimate use of the reclaimed water is unknown at this time, but potentially includes groundwater recharge, agricultural offsets, and/or indirect or direct potable use to augment existing City water supplies.

The new WRF has a long and complex history, which is summarized in the City's RFP. Rather than just summarize it again here, *we simply note that the project description and history included in the RFP was originally written by our team's Deputy Program Manager John Rickenbach, who, along with Program Manager Mike Nunley, has been managing the overall WRF process since mid-2013.*

A few key components of the project description and history are addressed here in further detail.

PROJECT COMPONENTS

The Morro Bay Water Reclamation Facility is part of a two-phase program for a complete reclaimed water processing and transmission system. Phase I of the program includes the following components:

- Development of the new WRF at the Rancho Colina site
- Lift station and pipelines needed to connect the facility with existing wastewater infrastructure within the area it will serve
- Pipelines and/or other facilities needed to reclaim and distribute treated wastewater for reuse in accordance with the Facility Master Plan and reclamation planning efforts currently underway
- Support facilities required for the operation of the New WRF; i.e., water main extension along with miscellaneous dry utilities



- Possible co-location of other City facilities at Rancho Colina, including a City corporation yard, community park, education center, or other facilities
- Actions needed to transfer wastewater treatment service from the current WWTP to the new facility.
- Decommissioning of the existing WWTP

The specific project components will be further refined in the Facility Master Plan, but conceptually, the project will replace the existing wastewater treatment plant (WWTP), and will be sized to accommodate future buildout under the General Plan/Local Coastal Plan in the City, including potential customers.

The new WRF will also be designed to disinfected tertiary treatment standards in order to facilitate water reclamation, and Phase II of the program will include the infrastructure necessary to distribute this reclaimed water offsite. It is not yet known what facilities will be needed to achieve this, but it can be assumed there will likely be a pipeline network and on- or off-site storage facilities, which may include surface or subsurface systems. These concepts will be further refined in both the Facility Master Plan and Master Reclamation Plan for the project. It is expected that the CEQA/NEPA analysis will commence once the Facility Master Plan has been completed to a sufficient level of detail, in order to more fully understand the nature of the likely project components.

The City anticipates pursuing planning, design, and construction funds from various sources including the Clean Water State Revolving Fund (SRF), among others.

PROJECT GOALS AND RECENT HISTORY

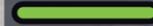
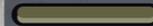
In December 2014, the City Council selected the Rancho Colina site as its preferred location for the new WRF (Resolution 77-14). Figure 1 identifies the location of the proposed site in relationship to the City's major water and wastewater infrastructure. Site selection was based on several constraints studies prepared by our team (MKN and JFR) in 2013 and 2014. The intent of these studies was to examine a wide range of sites for suitability based on a variety of criteria related to cost, environmental, logistical, and engineering issues, prioritized based on a robust public outreach program. Through this process, the original 17 sites were narrowed to 7, then to 4, concluding with Rancho Colina being deemed most suitable. This site was then compared to expanding the existing treatment facility behind Cuesta College that currently serves the California Men's Colony into a regional facility that could serve Morro Bay and Cayucos as well. The resulting comparative study found that the Rancho Colina site would more closely meet the *City's adopted December 2013 goals with respect to this facility*, which include:

- Produce tertiary, disinfected wastewater in accordance with Title 22 requirements for unrestricted urban irrigation in a cost effective manner for all ratepayers.
- Design to be able to produce reclaimed wastewater for potential users, which could include public and private landscape areas, agriculture, or groundwater recharge. A master reclamation plan should include a construction schedule and a plan for bringing on recycled water customers in a cost effective manner.
- Allow for onsite composting
- Design for energy recovery
- Design to treat contaminants of emerging concern in the future
- Design to allow for other possible municipal functions, i.e. City Corporation Yard on site, as well as other uses such as public park and education center
- Ensure compatibility with neighboring land uses

In February 2014, the Morro Bay City Council adopted a further goal, *to have a new WRF operational prior to the expiration of the discharge permit for the existing WWTP, being five years more or less*. A February 2015 letter to the City from the RWQCB affirmed that timing goal, stating that it seeks completion of the new facility by 2021.

WRF Project Overview

LEGEND

-  Urban Reserve Boundary
-  Whale Rock Reservoir System
-  Chorro Valley Pipeline
-  Approximate Limit of Permeable Sediments
-  Morro Valley Well Field
-  City Water Well



As Program Manager, MKN will provide expert guidance to help the City optimize and integrate their entire water resources portfolio through Phases I and II of the City Water Reclamation Program.

We have a detailed understanding of regional water and wastewater resources through our design work at the existing City WTP and City/CSD WWTP; prior work on the City's draft Urban Water Management Plans; and our recent work on the Options Report and Interim Program Management Support.

The City's Program Management Team of MKN and JFR have developed a schedule to meet the timing goals set forth by the City and RWQCB. The short-term critical path items include the development of a Facility Master Plan to examine the programmatic needs of the project design, and a Master Water Reclamation Plan, which is intended to explore the most feasible approach to reclaiming the water for future use to augment (or offset the use of) existing City water supplies. These efforts are ongoing at this time and not yet complete. Once complete, it will be possible to design the full recycled water system.

MOVING THE PROCESS FORWARD

If this assignment were just a technical challenge to manage contractors, review documents, and move the project forward toward completion, there are many qualified firms up to that task. But there are many more issues that must be addressed through a programmatic approach. Among other things, it's about developing community consensus, understanding the Coastal Commission's overarching role that led us to where we are today, working closely with potential partner or regulatory agencies as the process continues to evolve, *and being able to present a vast amount of diverse technical information simply and clearly.*

Mostly, however, it's about establishing and maintaining trust. *Our team's understanding of those subtleties—and not just our ability to summarize what's included in the RFP—is what separates our team from other proposers.*

From the start, our team shared the City's goal to present information clearly, honestly and transparently, and in that way, build grassroots consensus on how to move forward with the project. This would be the only way to change the original culture of distrust that prevailed—through no intention of the City—before our team's involvement began in mid-2013. The transformation in the process since that time has been remarkable on many fronts:

- Early on, the City Council *established clear goals* for the new WRF, and our Program Management Team has remained focused on those goals at every opportunity. This was a critical step. In a sense, these goals became a “charter” from which all activities related to the project have derived, including technical and community outreach.
- *Community consensus has been established* about the direction of the overall process, in large part because our Program Management Team successfully involved the public through a robust outreach program.
- The California Coastal Commission—once antagonistic—has now *expressed support* for the City's change in direction since their January 2013 denial of upgrading the current site. This change came, in our view, because of the clear and open process established since then, along with very clear and logical analysis that accompanied each step toward site selection.
- The WRFCAC has been a huge success. Not only have they guided the process through some key technical and logistical challenges, they have *provided a key bridge* between the public and City Council. Our Program Management Team was instrumental in the WRFCAC's establishment, and has been instrumental in working with WRFCAC along the way, developing a mutual trust that will be critical as we continue to move forward as a community.
- Navigating interagency politics has, and will continue to be, a challenge, but one that our Program Management Team has successfully addressed head on. *We understand the complexities of working with key agencies* affecting the process, notably the Cayucos Sanitary District (CSD) and the Regional Water Quality Control Board. In the case of the CSD, our team established a professional relationship built on our competence, transparency, and fairness, and while that agency did not always agree with the results of our studies, they respected the process. Just as importantly, our work provided the basis for the City to move forward in such a way to potentially leave the door open to CSD's possible return to the process. With respect to the RWQCB, our team worked closely with their staff to understand the differences between their technical and political concerns,



weaving these into the program management process as we explored the CMC site. In the end, the process that led to the selection of the Rancho Colina site was stronger because of the trust-based relationship our team established with RWQCB staff.

- Our Program Management Team has established *a strong degree of trust* with many in the community who may be most immediately affected by the project, including land owners where facilities may be located, growers who need water but aren't sure of the cost and logistics, as well as the community at large, whose rates will go up as a result of the project. As John Rickenbach said at the first workshop in mid-2013, "...we have some hard choices in front of us. You may not all agree with the results, but our goal is for you all to be able to understand the process that got us there, and that this process was fair." Our team has continued to make that goal our priority.
- Our management team and its program management approach have seamlessly adapted to changes in the process over time. In 2013, our primary focus was to build community trust and establish a vision. During 2014, the focus shifted to technical constraints level analysis and building relationship bridges to outside agencies who might be involved. In 2015, the process has moved to a higher level program management role coordinating a variety of engineering, environmental, and technical work. At the same time, our experience on other similar assignments has enabled us to connect the City with other key consultants related to facilities planning, financing and water rights, which are critical components to the project's ultimate success.

Many teams claim to be "uniquely qualified" for assignments on which they propose, citing some tangentially related experience in another community or certain technical capabilities they might have. In this case, however, there is no question about it: *our management team has truly unique qualifications for this assignment, with a track record to prove it.*

DETAILED WORK PROGRAM

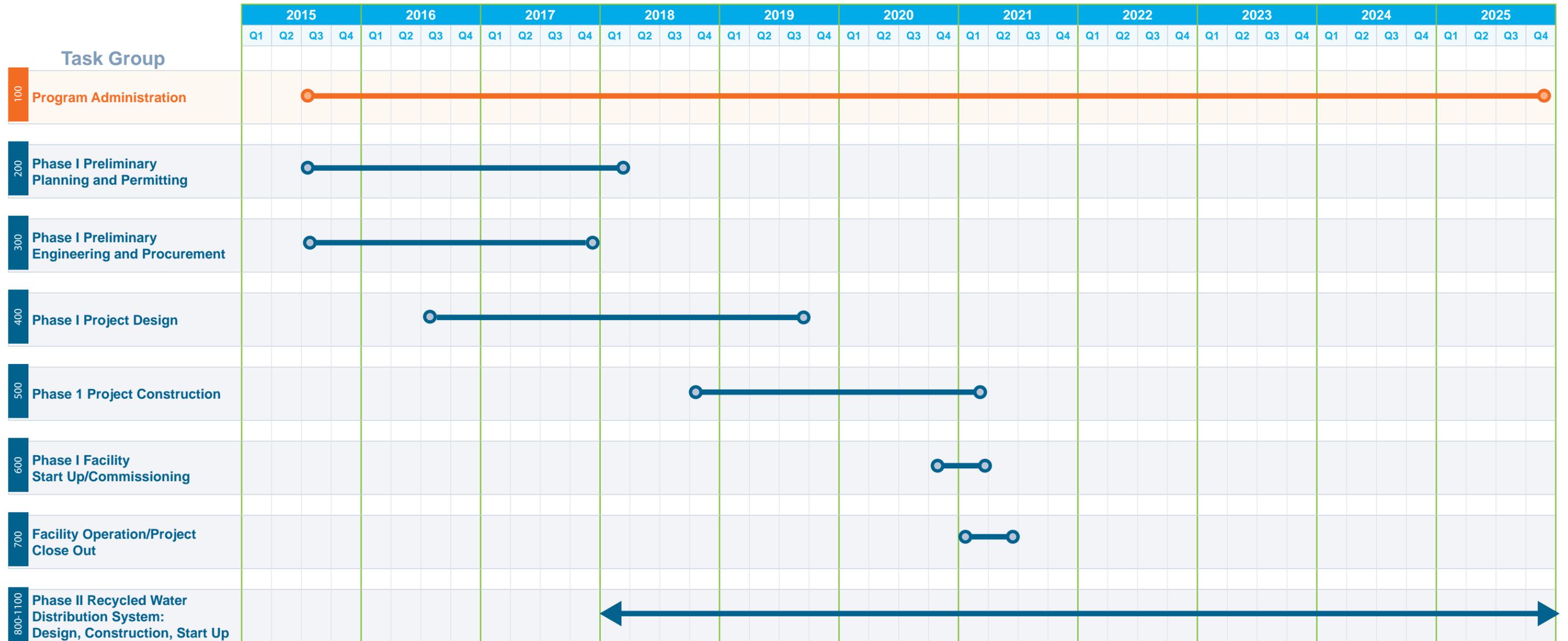
Program management tasks are grouped by task type. While the program administration task group will occur for the entire duration of the project, the subsequent tasks have defined start and end times within the overall timeline of the project. Task groups are as follows:

- Task Group 100 – Program Administration
- Task Group 200 – Preliminary Planning
- Task Group 300 – Phase I Preliminary Engineering and Procurement
- Task Group 400 – Phase I Project Design
- Task Group 500 – Phase I Project Construction
- Task Group 600 – Phase I Facility Start Up, Testing, Commissioning
- Task Group 700 – Phase I Facility Operation And Project Close Out
- Task Group 800 – Phase II Project Design
- Task Group 900 – Phase II Project Construction
- Task Group 1000 – Phase II Facility Start Up, Testing, and Commissioning
- Task Group 1100 – Phase II Facility Operation and Project Closeout

The following graphic provides a simplified timeline showing the relationship of each task group to the overall program. A detailed task schedule for Task Groups 100-300 within the broader program schedule is included in Appendix D.



Morro Bay WRF Program Schedule



TASK GROUP 100: PROGRAM ADMINISTRATION

Program administration tasks will extend throughout the entirety of the new WRF project. However, budget authorization for the *first 12 months* is requested at this time. The first 12 months is an approximate duration of the initial program phases detailed in our budget.

Some of these tasks included in the preliminary budget will continue beyond the initial 12 months of program management. Additionally, the Program Management team may want to begin other tasks, originally planned to occur in later phases, earlier in the project process which may not be reflected in the preliminary budget. *It is assumed future authorizations by task order will address the remainder of the program.*

TASK 101 - SCHEDULE TRACKING AND PROGRESS REPORTING. MKN will continue expanding and updating the existing program schedule as the project proceeds. This schedule will encompass and coordinate all phases of the project (identified above as Task Groups 100 through 1100), including:

- Planning
- Permitting
- Preliminary Design
- Design/Build Construction
- Construction
- Startup
- Commissioning

Both a detailed version and a presentation version of the schedule will be maintained. We will provide monthly written progress reports to the City. Monthly reports will include the status of the Program Management budget, work completed during the previous period, identification of any items that require attention from the City, and work planned for the upcoming period. Ten (10) hours per month is the assumed level of effort for this task.

TASK 102 – PROGRAM DOCUMENTATION. MKN will develop and maintain decision logs for all the major program efforts, including the following:

- Facility Master Plan
- Master Reclamation Plan
- Program Funding and Financing
- Public Outreach
- Phase I WRF Procurement
- Influent Lift Station Design
- Transmission Pipeline Design
- CEQA/NEPA Compliance
- Resource and Land Use Agency Permitting

Twelve (12) hours per month is the assumed level of effort for this task.

TASK 103 - MEETINGS. MKN will attend weekly project meetings with City staff, six (6) Public Works Advisory Board meetings per year, twelve (12) WRFCAC meetings per year, and twelve (12) City Council meetings per year.

It is assumed this task will be amended in the future to extend from Phase I of the program through implementation of the Master Reclamation Plan and Phase II Recycled Water Delivery System. The budget includes only the first year (+/-) of meetings.

TASK 104 - PUBLIC OUTREACH.

The program manager will oversee and coordinate all outreach efforts by the Program Management Team. Under the program manager's oversight, JFR will lead the public outreach effort for the entire program, in coordination with RRM Design Group. In general, the outreach effort is related to coordinating the following interrelated efforts and educational workshops to the general public:

- Reclamation Planning (outreach to growers)
- Public Agency outreach
- WRFCAC Coordination
- City Council presentations (JFR and RRM budget)
- Coordination with the GP/LCP Update



Task 104A: Outreach Kickoff/Scoping Meeting

This meeting will occur as soon as possible after the program management contract is in place with the intent of determining the overall project planning process, outreach strategies, and internal timeline of milestones. The Program Management Team will also use this meeting to obtain planning/design guidance from City staff, including initial comments for co-locating of City facilities, and to review options and initial concepts for education center and park with City staff. This meeting would also include discussion of water reclamation planning and outreach strategies and would result in a list of stakeholders, subsequent workshop topics, workshop logistics (timing, location, advertisement), and any outreach concerns and ideas.

Task 104B: Project Website Development

The MKN team and Konig Media will develop a project-specific website. We will coordinate the design and content of the website with City staff through a series of meetings and provide draft content/outlines for review and approval.

Task 104C: Outreach Program

The MKN team will design and outline the outreach program. JFR will write outreach program memorandum with feedback from RRM. This will be a memo outlining the outreach program and will include elements such as:

- Outreach program master schedule, and detailed schedules for upcoming 12 months
- Strategy for transparency and develop project branding
- Defined outreach focus area topics
- Outline of workshops, workshop exercises, and topics
- List of public education program opportunities

This outreach process will need to be transparent and inclusive. The outreach strategy memo will outline this process and confirm that the City project team agrees on the approach and strategy before the outreach begins.

Task 104D: Stakeholder Outreach

Initial outreach to stakeholders will provide input to the master planning effort and inform the initial water reclamation planning process. The goal of this outreach effort is to obtain and document a clear understanding of the needs/desires of all project stakeholders in regards to project design of both facilities and water reclamation program. This task will build off of the stakeholder feedback received during the WRF Options Report process. The MKN team will conduct one (1) day of 30- to 60-minute interviews with property owners, growers, decision makers, and others with an interest in the project. City staff will be responsible for meeting notification, facility, and logistics. JFR will summarize meeting feedback and RRM will review and edit the summary.



Task 104E: Citizen Advisory Committee (WRFCAC) Coordination and Meetings

Following the kickoff meeting, a coordination schedule will be developed to ensure close working communication between the Program Management Team and the WRFCAC. The program manager will work with the WRFCAC to agendaize current issues for discussion at their regular meetings.

Task 104F (1): Community Outreach Workshops

The MKN team will plan, coordinate and lead several community workshops, which will stem from the public education program developed following the outreach kickoff. Detailed workshop topics will be developed as the project progresses, but it is anticipated that the initial workshop will include a general overview of the current project status, review of site location selected, and discussion of next steps through the environmental review, permitting requirements, and design processes, as well as providing a forum for input on the Facility Master Plan. The workshops will be designed to be interactive and informative. Exercises may involve forms of polling participants through the use of tape dots, report cards, handheld remotes or similar methods. The Program Management Team will provide graphics and materials for each workshop (e.g., workshop flyer, nametags, sign-in sheets, agendas, and exhibits).

It is anticipated there will be two (2) community workshops in addition to the City Council and Planning Commission meetings and WRFCAC meetings (which are shown as separate tasks).

Task 104F (2): Reclamation Planning Workshops

Our Program Management Team will work closely with the City, regulatory agencies, growers, and general public to address complex issues related to the potential development and use of reclaimed water within the framework of the Master Reclamation Plan. JFR and RRM will lead a robust outreach process to develop consensus on the best course of action. Specific tasks include two workshops focused on reclamation-related issues to address these key questions. We anticipate the workshops would address the following broad topics:

- Workshop #1 – Direct or Indirect Water Supply for the City:
 - Identify state and local requirements regarding reclaimed water use, focused on the customer or recipient of recycled water;
 - Present information we have learned about hydrogeological issues, including the potential for groundwater recharge, streambed recharge in Morro Creek, percolation, and subsurface injection;
 - Describe possible ownership and governance options for delivery and storage of reclaimed water, assuming the City will construct a transmission main but storage and distribution will be handled by the users to reduce the City's costs
- Workshop #2 – Agricultural Reclamation:
 - Identify and recap possible uses of reclaimed water related to agricultural use
 - Engage the growers and community in general about their willingness to participate in the reclamation process, given potential costs and logistics

The MKN team will plan, coordinate and lead these workshops, the results of which will inform our Master Reclamation Plan.

Task 104G: City Council Outreach and Updates

The MKN team will meet with Council on an ongoing basis throughout the duration of the project to discuss key aspects and issues. The first study sessions following the program manager contract execution and initial scoping meeting will review the overall design build process and appropriate timing of milestones and actions to be taken by Council members. The program manager will also provide ongoing monthly project updates to the Council.

104H: Outreach Coordination and Meetings

This task includes the ongoing coordination and meetings with City staff, stakeholders, and team members. Other outreach services, as identified in the initial scoping meeting or during the course of the project, will be executed under staff direction.

104I: General Plan/LCP Coordination

JFR will work with City staff and General Plan/Local Coastal Plan (GP/LCP) consultant team to most efficiently coordinate the outreach programs for this project and for the GP/LCP update process. The two efforts are highly related, since the new WRF must be sized to accommodate the future growth of the City, and the GP/LCP must be mindful of various constraints that development of the new WRF may pose. This task assumes up to three (3) workshops in support of this combined effort, and JFR's attendance and potential presentations at these workshops. The Program Management Team will provide set up materials for the workshop (e.g., workshop flyer, nametags, sign-in sheets, and agendas) and the GP/LCP consultant would provide workshop materials and presentation.

104J: Vendor/Industry Outreach

Members of the City Council have expressed interest in a workshop focused on the interested industry vendors who might have products or technologies that could be used in the new WRF. Although this forum could take many forms, we recommend an approach based on the following outline:

- Educate Council and Public about the FMP and DB processes
- Discuss when and how technology and project components will be selected
- Update schedule and efforts underway
- Invite industry representatives (potential vendors) to listen
- Allow any member of the public to provide input (not just industry)
- Approach is consistent with Council goals and outreach concept

This effort must be managed carefully, because an unfocused effort carries the following risks:

- Could undermine City goals and sidetrack FMP process
- Could derail the alternative delivery process for the new WRF
- Would lead to longer timeframe and likely higher costs

We believe that in order to have a successful outcome to this forum (and to minimize risks), several preparatory steps are needed, particularly with regard to educating the City Council and WRFCAC. These steps could include:

- Meeting one-on-one with Council members and WRFCAC reps
- Educate them on how the FMP and Design Build process work
- Explain how technologies are selected, and how contractors are selected

104K: Logo Design and Graphics

The project team will work closely with the City to develop provide a logo design to brand the project and use on documents, website, and exhibits. The team will also prepare graphics and exhibits throughout the process to put on the website, e-blasts, newsletters, and use during meetings.

104L: E-Blasts, Newsletters, and/or Surveys

The project team will provide e-blasts, newsletters and/or survey to keep the community informed or poll the community as the project progresses. The team will work with staff to draft articles and information for the e-blasts, newsletters and/or questions for the surveys (using survey monkey or similar program), and will format and brand with the project logo. City will provide emails and addresses.

104M: Visual Preference Survey.

A picture is worth a thousand words. Using photographs, the Visual Preference Survey allows participants to express their preferences on different architectural styles and elements that could be incorporated into the WRF architecture. The Visual Preference Survey can also poll participants on what community-focused elements they prefer to be considered as part of the WRF Site Plan's public realm. Each participant will be given a remote control device and will be asked to vote on projected architectural character images and public realm site features, similar to a PowerPoint presentation. Participants will vote on each image and the results will appear instantaneously. This is an exciting and interactive exercise that will give the team direction for the architecture and Facility Master Plan.

The Visual Preference Survey can be conducted at a community workshop or directed towards a smaller group, such as the WRFCAC or a Council study session.

RRM would prepare the survey from images collected in their image library. This task includes a round of edits to the survey to fine tune it for presentation, conducting the survey, and a summary of results.

TASK 105 - BUDGET TRACKING AND REPORTING. MKN will develop and maintain a budget tracking spreadsheet and s-curve for reporting project status of all team members' efforts throughout the program. A detailed version and a presentation version will be maintained. City will provide account ledgers monthly and all team members will provide a copy of invoices or payment requests to MKN for review and recommendation for payment. Their invoices and City ledgers will be used to update the budget spreadsheets.

MKN will provide a formal program-level budget report and cashflow projection on a quarterly basis. Six (6) hours per month is the assumed level of effort for this task.

TASK 106 – GRANT AND LOAN PURSUIT AND MANAGEMENT. Many issues will affect the City's ability to secure outside funding for the project. Our team, working closely with Kestrel Consulting, will perform the due diligence on the most promising funding leads identified through our team's research to date, so as to better position the City to be competitive for such funding when the time is right to make a formal application for grants and loans.

Based on our experience on the project to date, and on similar efforts, we anticipate the following grants and loans will be the most promising for the City of Morro Bay:

- Proposition 1 / CWSRF Planning and Construction Loans
- Proposition 1 / SWRCB Recycled Water Feasibility Study Grant
- WaterSmart Title XVI Bureau of Reclamation Recycled Water Grants
- Pacific Gas & Electric Energy Efficiency Grants (various)

TASK 107 –TECHNICAL SUPPORT FOR GRANT AND LOAN APPLICATIONS. MKN will provide engineering support for completion of grant and loan applications by Kestrel Consulting. This work is anticipated to include technical, engineering, environmental, and financial submittals for the State Revolving Loan Fund; application materials for the SWRCB Recycled Water Planning Facilities Grant, and others. A budget allowance of 100 hours is recommended for this task but level of effort will depend on availability of information in the Facility Master Plan and reports by others.

TASK 108 – DEVELOP AND MAINTAIN PROJECT MANAGEMENT SYSTEM. MKN will evaluate alternatives and develop and manage an electronic project management file-sharing and document management system (ex. Procore and Bentley Projectwise). We will also investigate cloud-based systems such as Teamwork and Box.

It is assumed the City will pay any software or license costs for each copy of the system recommended by MKN. As team members are added to the program, MKN will conduct a brief training session with each firm on proper use of the document management system.

An initial estimate of 40 hours to establish the system and monthly estimate of 8 hours per month is assumed for this task.

TASK 109 – ASSIST IN PLANNING AND DEVELOPMENT OF PROGRAM OFFICE. If desired, MKN can develop a scope and budget to assist the City in developing a program management office for co-location of program team members. This could occur during initial planning activities, during design-build execution, or during construction activities.

MKN will assist the City with space planning and coordination of furniture, utilities, signage, and development of protocol for use and security of the space. All costs would be paid by the City for the facilities, including furniture, lease (if required), utilities, and signage.

TASK 110 – DEVELOPMENT AND MAINTENANCE OF PROGRAM MANAGEMENT PLAN. MKN will prepare a Program Management Plan providing detailed planning steps for the upcoming 18 months. The Program Management Plan will include budget, schedule, cashflow projections, roles and responsibilities of program team members, risk registry, confirmation of major decisions or milestones, outreach strategy, and updates or reconfirmation of City Council goals and objective. It will be updated every six months with input from City staff.

Program Management Plan efforts will include tracking project alignment with city goals. On an ongoing basis during Program Management Plan updates, MKN will review the City's goals versus project process, decisions, and activity and confirm that those actions continue to support the City's goals and objectives for compliance, capacity, efficiency, operational flexibility, innovation, community outreach, and sustainability.

An initial effort of 80 hours and two updates at 40 hours each are assumed for this task.

WORK PROGRAM TASK GROUPS

100	Program Administration
200	Phase I Preliminary Planning and Permitting
300	Phase I Preliminary Engineering and Procurement
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TASK GROUP 200: PRELIMINARY PLANNING

TASK 201 – MASTER RECLAMATION PLAN. This promises to be a complex effort that involves prioritizing the various reclamation opportunities identified in our previous efforts. This Task will involve drilling down on several key questions:

- What are the State and local requirements that end users must follow for recycled water use?
- What approach maximizes the benefit to the City’s water supply, either directly or indirectly?
- Is a combination of groundwater recharge along with directly providing access to reclaimed water for growers a good approach?
- If so, what will the growers be willing to pay to help offset costs of providing reclaimed water? Is a subsidy to growers fair to City ratepayers?
- How can reclamation costs be minimized? Should growers be responsible for extending their own reclamation infrastructure? Will onsite storage help?
- Can growers indirectly benefit through groundwater recharge that benefits the City’s wellfield? *Among the challenges:* 1) What distance would be required between groundwater recharge locations and City wells, based on local hydrogeology? 2) How will increased groundwater pumping by the growers affect the City’s wells? 3) Can a framework among the City and growers be established that protects water rights and water supply benefits for all users? 4) How will possible future regulations that relate to direct potable reuse affect this equation? 5) Are there opportunities to use state and federal funding to add a phased, direct potable reuse (DPR) strategy to the reclamation program?

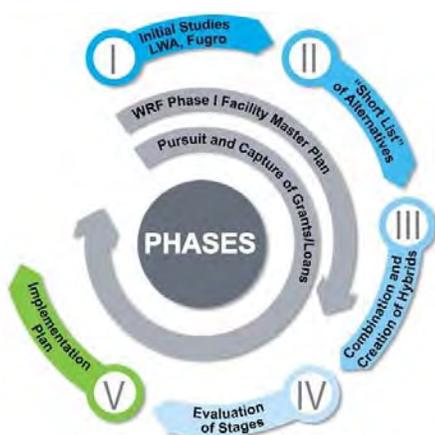
Our management team will work closely with the City, regulatory agencies, growers, and general public to address these complex issues. We believe it will require a robust outreach process to develop consensus on the best course of action, which may take some time to complete.

The format will follow the draft outline provided in the grant application requirements for the SWRCB Recycled Water Feasibility Study Planning Grant Program in order to meet requirements. *If awarded, the grant will pay up to \$75,000 of this effort as long as the state guidelines are followed. MKN has experience performing these studies and will ensure the Master Reclamation Plan meets state requirements.*

Specific tasks include:

- Identify state and local requirements regarding reclaimed water use, focused on the customer or recipient of recycled water (ex. cross-connection requirements and setbacks from potable water facilities)
- Manage the next phases of work by the City’s project hydrogeologist, Fugro Consultants, as they assess the potential for groundwater recharge, including streambed recharge in Morro Creek, percolation, and subsurface injection
- Manage work by Larry Walker & Associates (LWA), a consultant to the City, to identify sources of salinity and develop a source control strategy
- Provide schematic layouts, capital cost opinions, and operation/maintenance cost opinions for the recharge alternatives explored by the hydrogeologist (including up to four scenarios)
- Guide evaluation of ownership and governance options for delivery and storage of reclaimed water, assuming the City will construct a transmission main but storage and distribution will be handled by the users to reduce the City’s costs
- Conduct outreach to the growers and community in general about their willingness to participate in the reclamation process, given costs and logistics
- Identify and critically evaluate various reclamation strategies, especially with regard to timing, water rights, logistics
- Coordinate with Kestrel Consulting to identify funding opportunities
- Identify the strategy that best benefits the City’s potential water supply while protecting property owner water rights

Phases of Master Reclamation Plan Analysis: Facility Master Plan and pursuit of funding opportunities will proceed concurrently.



- Develop a phasing strategy for implementation of the recycled water distribution and/or groundwater recharge system
- Prepare a draft and final report summarizing the work described above.

TASK 202 – CEQA/NEPA COORDINATION PROCESS. All project-related activities must be considered in the CEQA/NEPA document for this project. This would include steps ranging from property acquisition, property design, grading, construction and operation. The Facility Master Plan must be sufficiently complete so a meaningful project description can be developed in adequate detail for thorough environmental impact analyses. The tasks below describe our team’s approach to managing the CEQA/NEPA process, including the technical studies to support the process and permitting that will be needed (described in Task 203).

Task 202A. CEQA/NEPA Program Coordination. In coordination with the program manager, JFR will take the lead in developing the steps needed to hire and manage a third-party consultant who will prepare the CEQA/NEPA documentation for the proposed project. This task involves the entire process from working with various responsible agencies (including but not limited to the California Department of Fish and Wildlife, Regional Water Quality Control Board, Caltrans, and SLO Air Pollution Control District) developing a scope of work, evaluating consultant proposals, interviewing and providing a recommendation to the City for a selected consultant, and working with the consultant as they prepare the CEQA/NEPA document. We will work with the City’s planning staff on these tasks, and coordinate closely throughout the entire CEQA/NEPA process. The specific steps involved in this task include:

- a. Prepare Initial Study
- b. Coordinate with Responsible Agencies to Develop the CEQA/NEPA Work Scope
- c. Evaluate Consultant Proposals/Assist in Consultant Selection
- d. Review Administrative Draft CEQA/NEPA Document
- e. Coordinate with City Staff to Release Draft CEQA/NEPA Document
- f. Coordinate with Staff and CEQA/NEPA Consultant to Respond to Public Input on Draft Document
- g. Review and Coordinate Final CEQA/NEPA Document
- h. Prepare Findings, Evidence and Project Conditions
- i. Prepare Staff Report with City Staff Review
- j. Present Project at Public Hearings (assume 2)
- k. Ongoing Meetings with City Staff (cost assumed as part of Task 103)

Task 202B. Technical Studies Coordination. Several site surveys, studies, and other activities will be needed in support of the various permit applications and CEQA/NEPA process. Some of these, including those related to biological and cultural resources, are already underway. The needed studies include, but may not be limited to:

- Jurisdictional Determination (Waters of the United States and State of California)
- Focused Special-Status Species Surveys
- Biological Assessment
- Prepare Habitat Mitigation and Monitoring Plan (if any)
- Hydrologic and Hydraulic Analysis
- Phase I Archeological Survey (Section 106)
- Phase I / II Site Assessment
- Site Remediation (if necessary as a result of the Phase I/II Site Assessment)
- Air Quality Tech Report
- CDP/CUP Permit Application Review

The Program Manager will coordinate these technical studies with the selected CEQA/NEPA consultant and provide technical support as necessary.

TASK 203 – PERMITTING. This phase of the project includes all resource regulatory agency permitting, as well as any land use permitting that may be needed to support the project. In coordination with the Program Manager, JFR will coordinate these efforts, and work with City staff, others on the Program Management Team, or outside consultants to prepare or complete these processes or permits. Note that during the first 12-month phase of the process, the permitting process will be underway but not completed, so costs should be considered preliminary. The following permitting subtasks are included in this effort:

Task 203A. Resource Regulatory Agency Permitting. The project will require a variety of permits from state and federal resource regulatory agencies. It is not yet known whether the project design can locate the new WRF outside Waters of the United States, Waters of the State of California, and other resources under federal or state regulatory protection. However, if there is any discharge into Morro Creek as part of the reclamation effort, the project will be required to comply with RWQCB Waste Discharge regulations. Depending on the nature of the activity, it may also require a Streambed Alteration Agreement from the State Department of Fish and Wildlife, a Section 404 permit pursuant to the Clean Water Act from the U.S. Army Corps of Engineers, and Section 401 certification from the RWQCB.

Key resource regulatory permitting agencies for this project include:

- U.S. Army Corps of Engineers (pursuant to Section 404 of the Clean Water Act)
- Regional Water Quality Control Board (NPDES permit; meeting Porter-Cologne Act requirements; Section 401 certification)
- California Department of Fish and Wildlife (Streambed Alteration Agreement)
- California Environmental Protection Agency, Department of Toxic Substances Control (Site Assessment / Remedial Action Plan)
- San Luis Obispo County Air Pollution Control District (SLOCAPCD)

These agencies will use the final CEQA document to assist in their permitting processes. The 5-year schedule assumes that regulatory permits can be obtained with 6 months from the end of the CEQA process, which depends on the permit process being initiated during the CEQA evaluation, and assumes that resource agencies engage in a timely review within their permitting processes. *Although the permit process for these actions may be initiated during the CEQA process, their completion will depend to a large extent on agency evaluation and acceptance of the final environmental document.* If there are disagreements between permitting agencies and the City, it may require additional supplemental CEQA studies to satisfy resource permitting agency concerns.

Task 203B. Land Use Permitting. The project will require a variety of permits from state and federal land use permitting agencies, notably the California Coastal Commission among others. Annexation of the project site will also require coordination with San Luis Obispo Local Agency Formation Commission (LAFCo). Coordination with San Luis Obispo County will also be required, because while the facility is allowed at that location under its LCP, a specific alternatives analysis will be required to support that finding. In addition, a Caltrans encroachment permit would be needed if pipelines will be located within the Caltrans right-of-way.

With respect to annexation, JFR, in coordination with the Program Manager, will coordinate with LAFCo staff, putting together the application for annexation, describing the project's service needs relative to LAFCo requirements, and evaluating the project's consistency with LAFCo policies, including those associated with the conversion of agricultural land and the provision of water supply. We understand that the ultimate determination of consistency with LAFCo policies must be made by LAFCo, but in our experience, it is useful to coordinate closely with LAFCo staff throughout the entire process to ensure that the project is on the right track, and that the application process will go in a more timely fashion. In this way, if there are issues to be resolved, then they can be addressed early in the process.

Key land use permitting agencies for this project could include:

- California Coastal Commission / San Luis Obispo County Department of Planning & Building (Local Coastal Plan Amendment)
- LAFCo (annexation to the City)
- City of Morro Bay (consistency with GP/LCP and local land use permits)
- San Luis Obispo County (coordination on LCP consistency)
- California Department of Transportation (Caltrans Encroachment Permit)

As with the resource regulatory permitting, these land use agencies will use the final CEQA document to assist in their permitting processes.

TASK 204 – FACILITY MASTER PLAN COORDINATION. MKN will organize weekly coordination meetings or calls and lead responses to issues that develop during the project. MKN will serve as the main point of contact for the Facility Master Plan team while also maintaining communications between the City and the Facility Master Plan team. MKN will review monthly progress reports submitted by Facility Master Plan team and coordinate formal progress meetings between the Facility Master Plan team and the City.

The Facility Master Plan team also anticipates public workshops. MKN will coordinate and attend all Facility Master Plan workshops. It is assumed the workshops would include the following:

- Initial Public Workshop for Public and City Council Input on Concepts
- Site Plan and Visual Simulation Presentation Workshop
- Treatment Alternatives Workshop

MKN will coordinate City reviews of deliverables and compile comments to provide to the Facility Master Plan consultant. It is assumed that approximately nine (9) draft and final Technical Memoranda and the 33%, 66%, 90%, and final Master Plans will be reviewed.

TASK 205 – DEVELOP PROJECT DELIVERY TECHNICAL MEMORANDUM. MKN will develop a memorandum and presentation for City Council and WRFCAC summarizing the potential project delivery methods for the Phase I project; advantages and disadvantages; recommended approach; and steps required for implementation.

It is assumed the City attorney and/or special legal counsel will provide a legal opinion on the different alternative delivery options. At this time, the methods are anticipated to include design-build, progressive design-build, design-build-operate, design-build-operate-finance, and construction management at risk (CMAR).

TASK 206 – COORDINATION OF SPREADSHEET MODEL DEVELOPMENT AND MODEL RUNS FOR CUSTOMER RATE IMPACTS. MKN will provide guidance to the City's rate consultant in developing a spreadsheet model (by rate consultant). The Program Management Team will run the model to determine impacts of the following on projected customer rates:

- Project financing rate and period
- Grants
- Alternative projects for both the Phase I and Phase II programs (ex. different WRF treatment technologies for the Phase I project or different reclamation facilities for the Phase II program)

It is assumed up to 12 model runs will be performed for public workshops and meetings and results will be summarized in those presentations.

TASK 207 – ALIGNMENT STUDY AND CALTRANS COORDINATION. MKN will identify the likely number and alignment of pipelines to and from the site (ex. recycled water main, City water supply, force main, and/or brine discharge line). We will coordinate with Caltrans to identify constraints associated with the various pipeline crossings. This work will also incorporate the findings of the Facility Master Plan team related to the force main and discharge pipelines.

Regulatory requirements for pipeline separation will have a significant impact on location and alignment of the City waterline and other utilities that are required for Phases I and II of the program, but will not be explored in detail in the Facility Master Plan. Division of Drinking Water will be contacted to discuss installation methods or pipeline design features that may be required if minimum separations cannot be cost effectively maintained.

A Technical Memorandum and preliminary alignment map will be prepared that identifies the number and possible alignments of the various pipelines, taking into account the surveyed base map (by others), environmental constraints, utility conflicts, regulatory requirements, and installation techniques.

TASK 208 – DATA COLLECTION AND ENGINEERING SUPPORT FOR PRELIMINARY PLANNING ACTIVITIES. A budget of 200 hours is recommended for the following activities:

- Market survey of available organic waste for Facility Master Plan
- Collection, organization, and summarization of influent water quality data from the City/CSD WWTP for use during design activities
- Other activities as needed

WORK PROGRAM TASK GROUPS

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TASK GROUP 300: PHASE I PRELIMINARY ENGINEERING AND PROCUREMENT

TASK 301 – OUTFALL ASSESSMENT AND REHABILITATION SUPPORT.

In 2011, the City of Morro Bay hired Ballard Diving and Salvage to complete a condition assessment of the existing ocean outfall. Access for an underwater camera was provided through three insertions and a majority of the 5100 lf outfall pipe was reviewed. Although some debris blocked the path of the camera, the assessment generally concluded that the outfall was functional and no cracks or “out of round” conditions were identified. The major issues were debris accumulation and gaskets that should be realigned or replaced.

Since an outfall inspection is typically conducted by an offshore contractor, due to the need for construction equipment to gain access, MKN recommends preparing a bid package that applies a unit cost methodology for underwater survey, cleaning, and repair.

This is a cost effective approach to updating the detailed condition assessment while making minor repairs. MKN proposes performing the following work under this task:

- Hydraulic modeling of the outfall to evaluate performance under various flow regimes (wet weather flow, wet weather and brine, and brine only if groundwater recharge is pursued to reduce wet weather flows)
- Preliminary layout of connection to the outfall
- Development of bid documents for evaluation and repair of the outfall

TASK 302 – PHASE I WRF DESIGN/BUILD PROCUREMENT.

It is assumed, for budgeting purposes, that the City will follow a “best-value” design-build process. The City Council will select a delivery method and based on their selection, the budget and scope for this task may require revision. It is anticipated the procurement process will generally follow the steps identified below. The assumed level of effort for each step is also provided. MKN will prepare all deliverables in draft and final form for City review.

- Request Expression of Interest (EOI) from potential design-build proposers (8 hours assumed)
- Prepare and facilitate a 4-hour workshop for respondents to the EOI (8 hours assumed)
- Prepare Request for Qualifications for design-build procurement (24 hours assumed)
- Review Statements of Qualifications from design-build proposers (24 hours assumed)
- Coordinate a review workshop with the City selection committee and prepare a draft response to short-listed teams (16 hours assumed)
- Prepare DB Procurement Documents, including coordination with contract documents and development of bridging documents. Coordinate with City attorney and/or special legal counsel for preparation of contract documents. It is assumed documents will be based on standard agreements available from Design Build Industry Association (DBIA) and other professional organizations but will be modified as directed by City legal counsel. (100 hours assumed)
- Meet with potential proposers and coordinate regular communication and outreach protocols documented in the Program Management Plan (40 hours assumed)





- Develop bridging documents including performance requirements, available geotechnical studies, topographic and boundary survey, and the following preliminary plans for two (2) conceptual treatment alternatives to allow the design-build teams to develop a bid while maximizing opportunities for innovation. At this time a budget cannot be developed for the bridging documents since the level of effort will depend on the treatment process and other site uses identified during the Facility Master Plan. (Level of effort TBD and not included in the budget, depending on the recommendations from the Facility Master Plan.)

1. 20% Preliminary site plan
2. Preliminary grading plans
3. Detailed layouts of site amenities such as community park or corporation yard (if desired by City) to prevent conflicts with the WRF
4. Process flow diagram
5. Two (2) site elevation views
6. Process and instrumentation diagrams
7. Electrical single-line diagrams
8. Architectural design standards
9. Highway 41 access improvements

- Prepare Request for Proposals for Design-Build Procurement (40 hours assumed)
- Review proposals from proposers (60 hours assumed)
- Coordinate a review workshop with the City selection committee and prepare a recommendation for City Council (12 hours assumed)
- Coordinate review by City legal counsel (8 hours assumed)
- Lead final negotiations with the selected proposer (40 hours assumed)

TASK 303 – PROCUREMENT OF INFLUENT LIFT STATION AND TRANSMISSION PIPELINE DESIGN TEAM. MKN will perform the following services for procurement of a design team:

- Develop Request for Proposals and present to WRFCAC and Council for review and approval (12 hours assumed)
- Coordinate and attend pre-proposal meeting (8 hours assumed)
- Respond to Requests for Information and issue addenda as needed (12 hours assumed)
- Review proposals (12 hours assumed)
- Coordinate City review and interview process (12 hours assumed)
- Negotiate scope and budget with preferred consultant (8 hours assumed)
- Prepare staff report and recommendation for WRFCAC and City Council review (4 hours assumed)
- Meet with potential proposers and coordinate regular communication and outreach protocols documented in the Program Management Plan (24 hours assumed)

TASK 304 – DATA COLLECTION AND ENGINEERING SUPPORT FOR PRELIMINARY ENGINEERING AND PROCUREMENT ACTIVITIES. A budget of 200 hours is requested for support activities that may be required by the Program Management Team during execution of this phase of the WRF development.

WORK PROGRAM TASK GROUPS

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TASK GROUP 400: PHASE I PROJECT DESIGN

TASK 401 - COORDINATION OF PHASE I WRF DESIGN DEVELOPMENT - MKN will organize weekly coordination meetings and lead responses to issues that develop during design development. MKN will serve as the main point of contact for the Design-Build Contractor (DBC) while also maintaining communications between the City and the DBC.

MKN will review the Concept Design Report and coordinate response from City. It is assumed that MKN will also coordinate up to six (6) design workshops with City staff to review progress of design development.

TASK 402 - COORDINATION OF INFLUENT LIFT STATION AND TRANSMISSION PIPELINES DESIGN DEVELOPMENT - MKN will organize weekly coordination meetings and lead responses to issues that develop during design development. MKN will serve as the main point of contact for the Design Team while also maintaining communications between the City and the Design Team.

MKN will review draft deliverables including up to four (4) Technical Memoranda, the Concept Design Report; 30% Design Plans and Estimates; 60% Design Plans; Draft Final Plans and Specifications; and Final Plans, Specifications, and Estimates.

TASK 403 – VALUE ENGINEERING REVIEWS – Based on the process and design alternatives selected for the WRF and lift station, MKN will assemble a value engineering team consisting of a qualified Value Engineering facilitator (per SRF requirements) and technical experts.

Our subconsultant, Value Management Strategies, Inc, will serve as the facilitator. It is assumed value engineering will be performed at the following milestones:

- Phase I WRF –30% Value Engineering Review
- Influent Lift Station and Transmission Pipelines - 30% Value Engineering Review
- Influent Lift Station and Transmission Pipelines – 60% Value Engineering Review

In our experience, the procurement process for engineering services is a good way to identify experts in various disciplines who can serve as members of the Value Engineering team. The technical experts will be identified after technologies are selected for the Phase I WRF.

TASK 404 - REPORT OF WASTE DISCHARGE – MKN will prepare a Report of Waste Discharge (ROWD) for the Phase I WRF to request Waste Discharge Requirement Orders and a National Pollutant Discharge Elimination System (NPDES) permit and submit the ROWD to Regional Water Quality Control Board (RWQCB).

It is assumed an administrative draft, draft and final ROWD will be prepared. Draft documents will be reviewed by the Design-Build team and City prior to submittal to RWQCB. The ROWD will include a summary of water supply (quality and source), wastewater flows and characteristics, treatment process components, monitoring and alarms, reliability features, solids handling, and the treated effluent reuse strategy.

TASK 405 - TITLE 22 REPORT FOR DDW – MKN will prepare a Title 22 Report for Division of Drinking Water review. It is assumed the Title 22 Report will include the Phase I WRF and initial reclamation opportunities that are identified in the Master Reclamation Plan. The report will include recycled water project design criteria; responsible parties for production, delivery, and use; Phase I WRF description, reliability features, monitoring program, transmission system components, use area and type, setbacks, signage, training, and a contingency plan.

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TASK GROUP 500: PHASE I PROJECT CONSTRUCTION

MKN will mobilize the field staff to the project site as soon as MKN receives authorization to proceed and construction is ready to begin. The Resident Engineer (RE) and the field staff will maintain field offices (for both the Phase I WRF and influent lift station and transmission pipelines) provided by the Phase I WRF contractors (see task 3000). The Project Management Team will implement the record-keeping documentation, and contract administration systems. MKN will be the City’s focal point (agent) for correspondence related to the construction phase of the project.

TASK 501 – CONSTRUCTION ADMINISTRATION PROCEDURES MANUAL. Compile a Construction Administration Procedures Manual for each of the two projects. The manual will define project administration team responsibilities and assignments and to what degree and frequency the tasks will be executed. Emergency contacts and action plans will be compiled. The primary purpose of this manual is to define the appropriate level of project administration, coordination, and communication. As part of this task, MKN will work closely with City staff to develop a plan for how resident and business inquiries will be handled during construction activities. The plan, which will be approved by the City, will be incorporated into the manual as an Appendix.

TASK 502 – PRE-CONSTRUCTION CONFERENCE. Conduct a pre-construction conference with the City, City’s consultants, involved agencies, utilities, and the Contractor’s team as they prepare to mobilize for each project. The RE will review plans and specifications with the Contractor in an effort to facilitate the Contractor’s understanding of the project. The RE will review the Contractor’s construction schedule for the project, including equipment, labor, and supervision planning. The RE will review appropriate protocols and procedures detailed in the Construction Administration Procedures Manual. The RE will apprise the Contractor of contract requirements regarding security matters such as fences, lighting, and posting of signs. MKN will prepare meeting minutes for the pre-construction meeting.

TASK 503 – WEEKLY PROGRESS MEETINGS. Conduct weekly progress meetings at the City’s wastewater treatment plant with the Contractors, permit agencies (if applicable), and the City’s design representatives. The principal purpose of the project coordination meetings will be to:

- Review progress and quality and work planned for the next week
- Progress of critical path schedule items and task critical to project success (e.g., status of long lead time items)
- Review submittal and RFI logs.
- Notify the attendees of any construction deficiencies.
- Discuss labor, material, and equipment related to upcoming work.
- Address team coordination matters.
- Review maintenance of “as-built” drawings throughout construction.

MKN will prepare for these meetings (i.e., review the most current schedule ahead of the meeting), chair these meetings, and conduct each meeting according to a published agenda and have meeting summaries prepared and promptly distributed. Meeting summaries will detail action items, the discussions that ensued, and announce the time and date of the next meeting.

TASK 504 –WEB BASED CENTRALIZED DOCUMENT AND CHANGE MANAGEMENT SYSTEM. MKN will provide administrative support and management of the Web Based Centralized Document and Change Management System (ex. Primavera) to include regular updates of:

- Correspondence (letters and e-mail)
- Submittals/Shop Drawings
- Requests for Information (RFI)
- Change orders and change order requests
- Meeting Agendas and Minutes
- Daily Reports
- Inspection Reports
- Project Schedules

TASK 505 – RFIS. Review, coordinate (with City and design engineer), and respond to (up to 200) Contractor's Requests for Information (RFI). When appropriate, recommendations, suggestions and alternatives shall be provided to the Contractor, and/or the City.

TASK 506 – SCHEDULING. Review the Contractor's schedule on a monthly basis to verify that the project is being executed in general accordance with the requirements of the contract documents. Monitor the Contractor's compliance with the agreed-upon scheduling requirements.

- MKN's major task associated with the overall schedule requirements will be to:
- Review the Contractor's schedule to determine that it is properly prepared, that the milestones dates meet the overall schedule, and that no major conflicts exist.
- Review progress attained against the approved schedule to adequately record work-in-place, detect any potential delays, and review the Contractor's plan for implementation of remedial measures when appropriate, to recover or maintain progress.
- If changes are made to the critical path items review changes in assumptions and logic.
- In conjunction with the City, negotiate schedule adjustments with the Contractor, which may be required due to weather, change orders, or other impacts requiring schedule adjustments

TASK 507 – COMPLIANCE. Review Contractor's safety program for compliance with the contract documents. MKN shall not be responsible for Contractor's implementation of or compliance with its safety program or for initiating, maintaining, monitoring or supervising the implementation of such programs or the procedures and precautions associated therewith, or for the coordination of any of the above with the Contractor.

TASK 508 – CONSTRUCTION ADMINISTRATION. Maintain a set of contract files per the procedures identified in the Construction Administration Procedures Manual. If resident/business inquiries are received MKN will log them and work with the City staff to implement a response based on the procedures outlined in the Construction Administration Procedures Manual.

TASK 509 – MONTHLY PROGRESS PAYMENTS. Review Contractor's monthly progress payment requests, and construction contract records and reports specified to be submitted, for compliance with contract documents. Compile recommendations and forward to the City.

TASK 510 – CHANGE ORDERS. Investigate proposed change orders and RFIs submitted by the Contractor or requested by the City. Change order submittals will include supporting records. MKN's investigation will include the impacts on the project schedule and budget, and will include a recommendation for approval or disapproval. MKN will:

- Assemble documentation to include such items as inspection reports, test reports, drawings, sketches, photographs, and other materials as required.
- Review change order estimates compiled by the City's Design Consultants consisting of a cost estimate conforming to the City's procedures and forms; assess the impacts of the proposed change on the Contractor's schedule and operations; and prepare a written report summarizing the impact of the proposed change in terms of extra cost, cost savings, schedule, and effect on Contractor's obligations.
- Evaluate the Contractor's price proposals for reasonableness and accuracy of construction quantities, rates and unit prices, and time and schedule impacts.
- Maintain a change order log as a means to tracking change order proposals through the review and approval process. MKN will establish files for potential change orders or claims such as to accumulate documentation should the issues result in a change order or claim.

TASK 511 – SUBMITTALS. Receive from Contractor specified submittals and O & M manuals. Transmit these to design engineer for review, if appropriate (Influent Lift Station and Transmission Pipelines only). Maintain a log (Web Based) and manage shop drawings and sample/submittal review process to determine the following:

- All short-term look-ahead schedules contain critical submittal dates, and the logs reflect the same.
- Submittals are reviewed in a timely fashion and returned to the Contractor to minimize lost production time.
- Logs are updated on a regular basis.
- Shop drawings have been reviewed and returned before associated work has begun.
- A copy of all submittals is maintained in the file.
- Subsequent to the review, return submittal to the Contractor and forward a copy to the City.

MKN shall conduct an administrative review of worker safety protection/excavation plans and dewatering plans prepared by the Contractor's registered civil or structural engineer to assist the City with the acceptance of detailed plans developed by the Contractor for the design of excavation, bracing, sloping or other provisions necessary for the protection of existing facilities and for the protection of workers from the hazard of caving ground during the excavation of any trench 5 feet or more in depth (hereinafter referred to as "Excavation Plan").

MKN's review does not include an independent review of the Contractor's calculations or of the materials used by the Contractor. Nothing contained in the Scope of Work shall be construed as relieving the Contractor of the full responsibility for providing an Excavation Plan(s) that is adequate for worker protection, nor for the liability resulting from the failure to do so.

TASK 512 – PERMIT COORDINATION. Act as liaison (for communications) between the City and representatives of permitting agencies. Assist the City with finalizing permit coordination. All permit fees are to be paid by Contractor and/or City.

TASK 513 – FIELD OBSERVATION. Implement observation guidelines for monitoring the quality of the Contractor's work. Conduct field observation and prepare documentation (daily reports) of construction tasks including but not limited to construction staging, utility coordination, process, mechanical, electrical, instrumentation, traffic access, pedestrian access, drainage, NPDES requirements, concrete, grading, pipeline, building construction, base and surfacing, lighting, landscaping, and erosion control.

Upon witnessing (and discussing with City) materials, erection or installation process, or levels of quality that do not meet the requirements of the construction contract documents, issue a Non-Conformance Report notifying the Contractor of such deviation and inquire about the Contractor's proposed corrective action. Copies will be forwarded to the City.

The Contractor has sole responsibility for compliance with safety requirements on the construction contract. MKN's staff will monitor the Contractor's general compliance with its safety program and advise the City of observed deficiencies.

Maintain a photographic log of construction activities and provide the City copies of significant photographs.

TASK 514 – PUNCH LIST. Punch lists shall be developed to permit City acceptance of each segment of work to occur after the Contractor attains substantial completion. Conduct a final project review with the City. Submit a recommendation for project acceptance.

TASK 515 – RECORD DRAWING. Collect construction record drawings from Contractor and transmit to design engineer for processing.

TASK 516 – TECHNICAL SUPPORT. MKN will provide technical support with the following disciplines:

- Civil Engineering
- Structural Engineering
- Wastewater Processes
- Instrumentation and Controls
- Electrical

TASK 517 – LABOR COMPLIANCE. MKN and its state-certified subconsultant, Golden State Labor Compliance, will provide a Labor Compliance Program to monitor the Contractor's labor compliance, which includes the following:

- Pre-Job Conference. Conduct a pre-job conference with the Contractor and subcontractors listed in the bid before commencement of the work. Labor compliance requirements will be discussed and copies of the suggested reporting forms furnished. Records of the conferences will be kept on file.
- Monthly Audit of Contractor Certified Payroll. Review certified payrolls submitted by the Contractor and his subcontractors to verify compliance with the requirements of prevailing wage. Monitor that Apprenticeship requirements are being met.
- Monthly On-Site Interview. Conduct random on-site Contractor employee interviews on a monthly basis as required by the Labor Compliance Program.
- Violation Enforcement and Recommendations. Communicate potential violations to City and provide recommended action.
- Annual Reporting to the Department of Industrial Relations (DIR). Compile and submit a summary report to the DIR. The report will be submitted annually during construction and at the conclusion of the project.



WORK PROGRAM TASK GROUPS

100	Program Administration
200	Phase I Preliminary Planning and Permitting
300	Phase I Preliminary Engineering and Procurement
400	Phase I Project Design
500	Phase 1 Project Construction
600	Phase I Facility Start Up/Commissioning
700	Facility Operation/Project Close Out
800-1100	Phase II Recycled Water Distribution System: Design, Construction, Start Up

TASK GROUP 600: PHASE I FACILITY START UP, TESTING, AND COMMISSIONING

TASK 601 – STARTUP AND COMMISSIONING COORDINATION. MKN will serve as the start-up and commissioning liaison coordinating the services of the design consultant and contractor for the Influent Lift Station and Transmission Pipelines; and contractor for the Phase I WRF (as well as the contractor’s subconsultants and suppliers) to develop and implement both start-up and commissioning plans. .

It is assumed the contract documents will require the Design-Build Contractor for the Phase I WRF and the contractor for the Influent Lift Station to provide startup services, such as demonstrations of proper system operation, adjustments to the equipment as needed to meet requirements in the contract documents, warranty support and service, vendor training, operations & maintenance manual(s), and required guarantees. These requirements will be evaluated during constructability review of the contract documents for each project component. It is further assumed that the respective design engineers will provide technical assistance and overall system review.

It is assumed the contract documents will also require the Contractor to submit an acceptance test plan and protocol that defines the following:

- Specific measurements that will be made, including identification of permanent and temporary measurement devices
- Calibration procedures for measuring devices
- Redundancy of any measuring device to demonstrate accuracy
- Organization of the testing team, including responsibilities
- Testing schedule
- Operations and maintenance schedule during the testing period (if not in the Operations Plan discussed below)
- Specific detailed sampling protocols to be used in conducting the acceptance test

It is also assumed the Design-Build Contractor will provide an Operations Plan for the Phase I WRF, and the Plan will identify the schedule and steps for startup and commissioning of each system component.

MKN will perform the following tasks:

- Coordinate Contractors’ startup and commissioning activities and compare to contract document requirements, Operations Plan and Acceptance Plan. Advise City of nonconformance issues. MKN will coordinate with City staff, Contractor(s), design team(s), systems integrator, and Construction Management team startup specialists.
- Review Operations Plan and Acceptance Plan and advise the City as to status of the scheduled tasks
- Coordinate Contractor/Client meetings to review startup status
- Coordinate vendor training sessions for attendance by appropriate City staff, design team, and Contractors. Provide input during training sessions regarding design and operation of equipment based on startup team’s experience

TASK 602 –TRAINING. MKN will prepare and deliver supplemental on-site and classroom instructional training sessions on equipment and process systems. The training will be relative to the process operation of the facility. The content of the session shall be mutually agreed upon by both MKN and the City. Instruction will be performed at a location approved by City. Prior to training, equipment and systems preparation and checkout will be completed and demonstrated to the satisfaction of an MKN representative.

Training instruction sessions for the Client’s personnel will include maintenance and operation personnel.

WORK PROGRAM TASK GROUPS

100	Program Administration
200	Phase I Preliminary Planning and Permitting
300	Phase I Preliminary Engineering and Procurement
400	Phase I Project Design
500	Phase 1 Project Construction
600	Phase I Facility Start Up/Commissioning
700	Facility Operation/Project Close Out
800-1100	Phase II Recycled Water Distribution System: Design, Construction, Start Up

TASK GROUP 700: PHASE I FACILITY OPERATION AND PROJECT CLOSE OUT

TASK 701 – FINAL PROJECT REVIEW. For each of the construction projects, conduct final project review with the City and Design Engineers and submit a recommendation for project acceptance.

TASK 702 – FINAL REPORT. For each of the construction projects, prepare final report, with testing records, and submit to City.

TASK 703 – FINAL SUBMITTAL PACKAGE. For each of the construction projects, compile a final submittal package (field records) and submit to City.

TASK 704 – TECHNICAL SUPPORT DURING OPTIMIZATION. MKN will provide engineering and process support on an as-needed basis during commissioning and optimization of the WRF, Influent Lift Station, and conveyance pipelines.

WORK PROGRAM TASK GROUPS

100	Program Administration
300	Phase I Preliminary Planning and Permitting
300	Phase I Preliminary Engineering and Procurement
400	Phase I Project Design
500	Phase 1 Project Construction
600	Phase I Facility Start Up/Commissioning
700	Facility Operation/Project Close Out
800-1100	Phase II Recycled Water Distribution System: Design, Construction, Start Up

Task Groups 800 through 1100 address the planning and design of the Phase II Reclamation System. A detailed scope and budget for these task groups will be provided as the Master Reclamation Plan is developed and implemented. The MKN team is committed to provide the same high level of program management throughout the development, implementation, and startup of all phases of the City's Water Reclamation Program.

TASK GROUP 800: PHASE II PROJECT PRELIMINARY AND FINAL DESIGN

TASK GROUP 900: PHASE II PROJECT CONSTRUCTION

TASK GROUP 1000: PHASE II FACILITY START UP, TESTING, AND COMMISSIONING

TASK GROUP 1100: PHASE II FACILITY OPERATION AND PROJECT CLOSE OUT

Morro Bay Water Supply Improvement Program (WSIP)



Wastewater Collection, Recovery, and Reuse



Potable Water Supply



Flood Control



Planning



Program Management

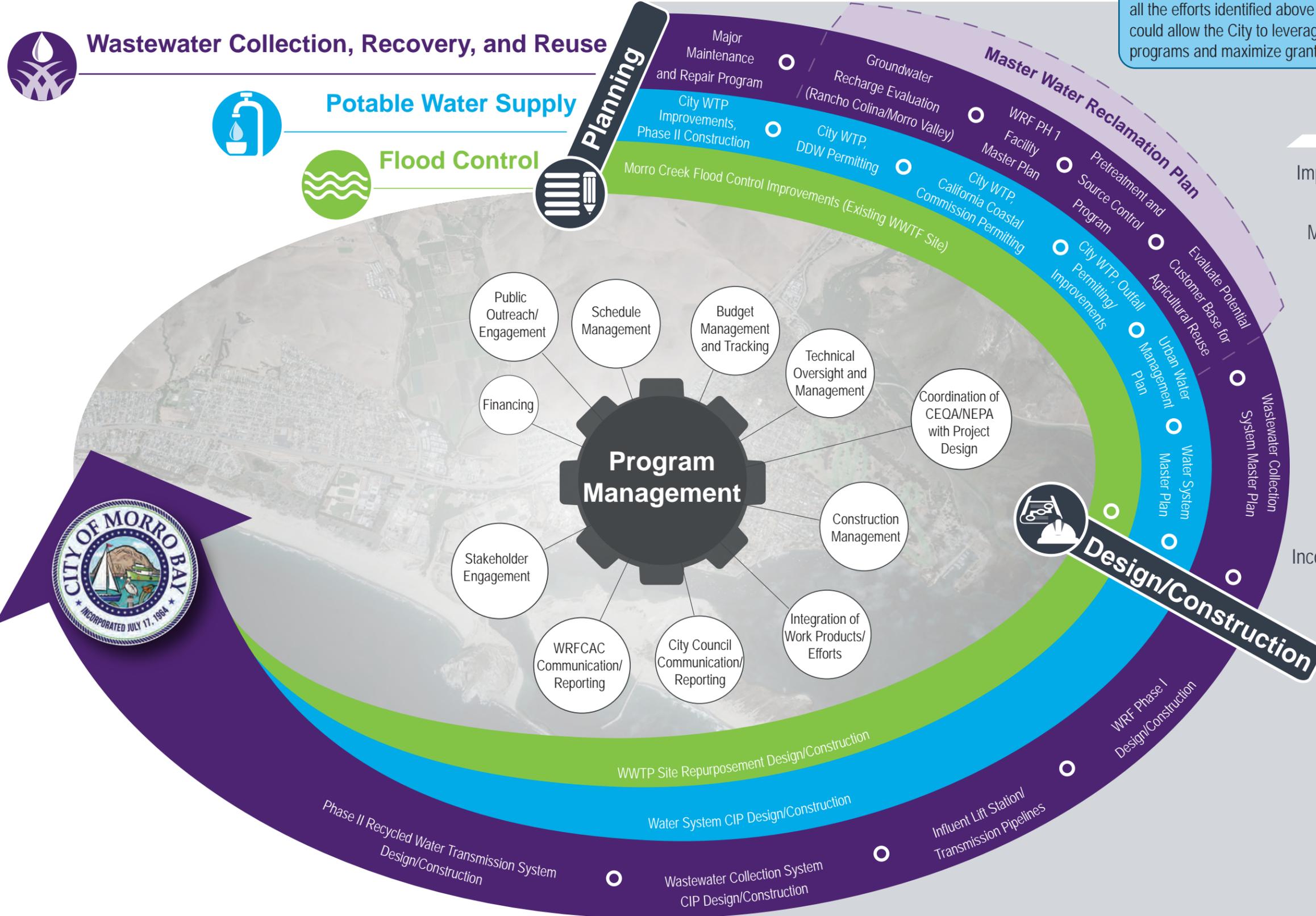
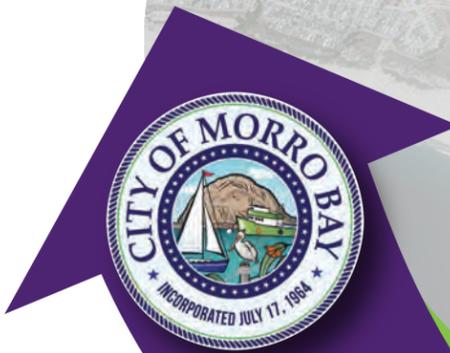


Design/Construction

The MKN Team will implement a Project Management Strategy that will enhance the City's entire water portfolio. We will apply our knowledge of the City's broader water resource goals and Capital Improvement Program to add value. For example, treating all the efforts identified above as elements of one Water Supply Improvement Program could allow the City to leverage flood control, water, wastewater, and other funding programs and maximize grant opportunities.

Objectives

- Implement City Council's goals for WRF functionality
- Meet City Council's five-year goal to be operational
- Sustain the City's existing infrastructure
- Reduce risk to coastal resources
- Optimize the City's position for financial support from state and federal agencies
- Apply innovative project delivery strategies to accelerate schedule and save cost to ratepayers
- Incorporate energy efficiency and green technologies
- Expand the water supply portfolio
- Provide educational opportunities to promote good stewardship of water resources
- Prepare for future potable water reuse
- Enhance groundwater supply and quality in the Morro Valley



Unique Qualifications

Our Program Management team is the right long-term partner for the City, with a track record to prove it.

SERVICES OR DATA ANTICIPATED REQUIRED FROM THE CITY

Given our current involvement in the project, we could not identify any additional information that we need from the City at this time.

OTHER INFORMATION ABOUT MKN FOR MORRO BAY TO CONSIDER

The MKN Program Management Team's experience and in depth knowledge of the project is covered extensively in Section 2 and the Project Understanding portion of Section 3.

PRELIMINARY BUDGET

As the program proceeds and all program elements are identified, MKN is committed to developing detailed, transparent scopes and budgets that will clearly identify the level of effort required for each task. Our objective is to drive program development to deliver all the City's goals with the highest level of quality at minimum long-term cost to ratepayers.

A typical program management budget is approximately 3 to 4% of total program costs. For a \$100 to \$120 million program, for example, costs could range from \$3 to \$4.8 million – with annual program management expenses that are often higher during design and planning phases of the project, then a little lower during construction and startup. The costs for design-build contract documents (including concept design for design-build bidding documents), design services (ex. bid package for outfall repair), Master Reclamation Plan, and aggressive public outreach would not be included in that assumption. Costs for these tasks are detailed in the budget.

Construction management can vary from 6 to 8 % of the construction costs. Assuming construction costs vary between \$80 and \$100M for both phases of the program, a range of \$4.8 to \$8 million would be expected. Integrating the program management and construction management activities will reduce duplication of effort and cost for both types of services, ensure a high level of quality control throughout design and construction, and ensure consistency among the different Phase I and Phase II program elements.

MKN proposes to complete all work under the Program Management contract on a time and materials basis with a budget per task order that will not be exceeded without receiving written authorization from the City. The table in Appendix E summarizes the level of effort anticipated for each phase of Task Groups 100 through 300 with exceptions as noted in Section 3 of the proposal.

Our standard fee schedule, and those of our subconsultants, are included in Appendix C. Please note that MKN typically increases billing rates by no more than 3% annually. The City will be notified in writing prior to MKN applying updated rates, but it is assumed that future task orders will reflect these annual increases.

A preliminary budget is included in Appendix E.

SCHEDULE OF ANTICIPATED TASK ORDERS

A schedule for Task Groups 100-300 is included in Appendix D.



A RFP Addenda

RFP ADDENDA

Signed copies of all RFP addenda are included on the following pages





CITY OF MORRO BAY

Requesting Proposals for Consulting Services: MORRO BAY – WATER RECLAMATION FACILITY
PROGRAM MANAGEMENT SERVICES

ADDENDUM NO. 1

June 9, 2015

Interested parties are hereby informed that the Request for Proposals issued June 1, 2015 for the above project has been amended by the following information. A signed copy of this sheet acknowledging the receipt of this addendum shall be included with proposal.

Addendum Items:

1. Pre-Proposal Meeting: The mandatory pre-proposal meeting is scheduled for June 19 from 1:00 p.m. – 2:30 p.m. in the Morro Bay Veterans Memorial Building, Located at 209 Surf Street Morro Bay.

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Livick
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Rob Livick, PE, Public Works Director/City Engineer

June 9, 2015
Date



Acknowledgement of Addendum #1

July 2, 2015
Date

Printed Name: MICHAEL WILEY

Representing: MKN + ASSOC., INC.



Morro Bay Public Works

REQUEST FOR PROPOSAL - PROGRAM MANAGEMENT FOR A NEW WATER RECLAMATION FACILITY SERVING THE CITY OF MORRO BAY

ADDENDUM NO. 2

July 1, 2015

Interested parties are hereby informed that the Request for Proposals issued June 1, 2015 for the above project has been amended by the following information. A signed copy of this sheet acknowledging the receipt of this addendum shall be included with Proposals.

Answers to Questions:

1. Can you provide additional information to clarify the needed scope of work associated with the outfall condition assessment? (#7, Pg. 9)

This item is to assess the condition and capacity of the existing ocean outfall to serve the proposed WRF for potential brine disposal and peak wet weather flows.

2. Can you clarify any survey needs for the WRF project (#24. Pg 10)

The City will be contracting directly for land surveying services. The role of the Program Manager is to coordinate those efforts and provide the necessary oversight.

3. Can you clarify the relationship of ordinances, engineering reports and legal descriptions? (#36, Pg. 11)

This item is to ensure the Program Manager's understanding of the "Laws" as related to the planning, permitting and construction of the proposed Facility.

Revised 36: Interpret and administer applicable ordinances relating to project requirements.

4. Can you provide additional information regarding the relationship between water supply and property owner water rights? (#45, Pg 11)
The Morro Creek groundwater basin is a flowing underground stream and as such is regulated by the State Water Resources Control Board. The City of Morro Bay has an appropriative right to use a limited amount of water from that basin. If groundwater recharge is the method of water reclamation, the program manager will be expected to have enough knowledge in that area to guide the City through the necessary water rights issues.
5. Since similar sized projects often occur outside the Coastal Zone, will similar projects outside the Coastal Zone be considered equal in the scoring? (#8, Selection Criteria)
The selection committee will evaluate the team's overall experience and make their recommendation for selection based on their own judgement on how well the team's experience relates to the project.
6. How will "Project Manager" members of the team be evaluated in the scoring? (General, Selection Criteria)
As stated in the RFP: Demonstrated competence, professional qualifications of proposed staff within the firm assigned to this project.
7. Will the agreement that was made a part of the RFP be modified to reflect organizational changes, i.e. Public Services is now Public Works?
Yes.
8. Can words like "protect" and "defend" be deleted from the indemnification language of the agreement?
No.


Digitally signed by Rob Livick
Date: 2015.07.01 16:28:01 -07'00'

Rob Livick, PE, Public Works Director/City Engineer

July 1, 2015
Date



Acknowledgement of Addendum #1

July 6, 2015
Date



B Resumes

PROGRAM MANAGEMENT TEAM

MKN program management team resumes are included on the following pages. Each consultant brings distinct expertise to provide a range of diverse experience.

Name	License	Role
Michael Nunley	Professional Civil Engineer, CA 61801	Program Manager
Jon Hanlon	Professional Mechanical Engineer, CA M33232	Engineering Lead
Eileen Shields	Professional Civil Engineer, CA 74757	Project Engineer
Rob Lepore	Certified Geographic Information System Professional	Project Engineer
Joseph Reichmuth	Professional Civil Engineer, CA 63124	Project Engineer
John Rickenbach	M.C.R.P., City & Regional Planning, AICP, APA	CEQA/Permitting
Debbie Rudd	American Institute of Certified Planners LEED Accredited Professional	Public Outreach
Joe Koenig	BS Art & Design, Graphic Design Concentration	Public Outreach
Kevin Merk	BA Biology	CEQA/Permitting
Mark Laquidara	Professional Civil Engineer, MA 33711	Technical Advisor – Treatment Process

Name	License	Role
Julia Aranda	Professional Civil Engineer, CA 56412	Technical Advisor – Recycled Water Program
Wilhelm Nowotny	Project Manager Professional, PMI 1575372	Technical Advisor – Construction Program
Kim Lindbery	Professional Civil Engineer, CA 50984	Resident Engineer
Donald Spates	Structural Masonry Inspector, ICC & DSA Reinforced Concrete Inspector, ICC & ACI	Inspector
Craig Caballero	General Engineering Contractor, CA 962753 General Building Contractor, CA 962753	Inspector
Mark Reinhardt	Professional Land Surveyor, CA 6392	Survey/Staking
Jack Ivers	Professional Electrical Engineer, CA	Preparation of Bridging documents and review of design deliverables: electrical engineering
Michael Parolini	Professional Structural Engineer, CA 5405 Professional Civil Engineer, CA 69340 LEED Accredited Professional National Council of Examiners for Engineering and Surveying (NCEES), No. 46863	Preparation of Bridging documents and review of design deliverables: structural engineering
Doug Bloom	Professional Electrical Engineer, CA	Preparation of Bridging documents and review of design deliverables: instrumentation
Mark Watson	Professional Engineer, Missouri Project Management Professional	Value Engineering

MIKE NUNLEY, PE

Program Manager

Education

MS Civil and Environmental Engineering, University of California at Berkeley, 2002

BS Civil Engineering, Virginia Polytechnic Institute & State University, 1995

Years of Experience

With MKN 2 years
With others 17 years

Registration

Professional Civil Engineer, California (No. 61801)

Affiliations

California Water Environment Association

Water Environment Federation
American Consulting Engineers Council

Environment and Water Resources Institute

American Society of Civil Engineers

American Public Works Association

EXPERIENCE

After over 18 years of serving as project engineer, project manager, branch manager, and ultimately as a senior operations manager and Vice President for a Fortune 500 consulting engineering firm, Michael Nunley started this firm specializing in water, wastewater, and water reuse engineering for public agencies. His expertise includes management, planning, and design of water, wastewater, recycled water, and drainage facilities in California, Hawaii, Guam, Washington, North Carolina, Virginia, South Carolina, Tennessee, and Georgia.

RELEVANT PROJECTS

WWTP Major Maintenance and Repair Program (MMRP), City of Morro Bay California. Project Manager. Project consists of a multi-year, on-demand engineering service agreement to assist in the execution of a Major Maintenance and Repair Program (MMRP). Specific projects include: Preparation of plans and specifications for new headworks screening, washing, and compacting facilities; structural evaluation of three existing anaerobic digesters; Design and construction support for recoating anaerobic digesters; and design and replacement of chain and flight solids management system.

Wastewater Treatment Facility Equipment and Process Optimization (sub to Penfield & Smith), City of Oxnard, California. Project Engineer. Review of existing Wastewater Treatment Facility (WWTF) equipment and processes for 22 MGD plant, including primary sedimentation tanks, biotowers, activated sludge treatment, secondary sedimentation tanks, chlorination/dechlorination, primary sludge treatment, dissolved air flotation, anaerobic digesters, and belt filter presses, for comparison of existing as-constructed technologies in relation to new potential treatment technologies.

Morro Bay WWTP Major Maintenance and Repair Program, City of Morro Bay, California. Lead consultant for evaluation and design of various improvements for plant including rehabilitation of the chlorine contact basin, digesters, and supporting systems; installation of a new headworks; and general recommendations for planning and budgeting improvements over the next 3 to 5 years.

Honolulu Wastewater Treatment Facility Evaluation, City and County of Honolulu, Hawaii. Served as task manager to evaluate treatment plant upgrades for the 40-MGD (130-MGD wet weather flows) wastewater treatment facility as part of the Honolulu Wastewater Facilities Evaluation, which was performed to address an order from USEPA to evaluate options for discontinuing discharge of primary-treated effluent to the Pacific Ocean. Developed cost opinions to upgrade facility for expanded reuse of plant effluent.

Spokane Water Reuse Program, City of Spokane, Washington. Served as technical leader to develop work plan and approach for a Recycled Water Master Plan and conceptual design of reuse program elements to serve golf courses and other users in the vicinity of the Riverside Park Water Reclamation Facility. Project would deliver 5-10 MGD of recycled water.

Nipomo Community Services District Supplemental Water Project, Nipomo Community Services District, California. Served as project manager for the preliminary, concept, and final design of a \$20M waterline connection from the Nipomo CSD distribution system to the City of Santa Maria's system. Components included 2800 lf HDD under the Santa Maria River, 3,000 acre feet per year (AFY) pump station, 0.5 MG reservoir, conversion of four wellhead chlorination systems to chloramination, and over 4 miles of 12" waterlines including pressure reducing valve stations and appurtenances.

Mike Nunley, PE (page 2)

Nacimiento Water Supply Project, Preliminary Engineering Phase, San Luis Obispo County, California. Served as project engineer to provide engineering support to the County Flood Control and Water Conservation District during development of the environmental impact report, cost opinions, delivery contracts, and formation of the Nacimiento Water Project Commission. The project delivers over 9800 acre-feet per year of water from Nacimiento Reservoir to agencies through San Luis Obispo County, along a 50-mile transmission corridor. Project includes three pumping facilities, three reservoir sites, a multipoint lake intake, and pipeline ranging from 12" to 36" in diameter.

Chairman of Supplemental Water Alternatives Evaluation Committee, Nipomo Community Services District, Nipomo, California. As consultant to the District, manage the evaluation of various supplemental water alternatives by a committee of volunteers from various technical backgrounds and from community at large. Coordinate and facilitate meetings, guide evaluation process, and manage schedule for completion of the evaluation by the volunteers. Alternatives include water from the City of Santa Maria, State Water, seawater, surface water, local groundwater, and recycled wastewater from municipal and industrial users. Provide technical support for cost opinion development, hydraulic analysis, and other components as needed.

Morro Shores Water Recycling Facility Preliminary Design and Water System Consulting, Morro Shores LLC, Los Osos, California. Served as Project Manager for development of conceptual design and draft Report of Waste Discharge for a package water recycling facility to treat 7000 gallons per day of wastewater. Reviewed the draft Basin Management Plan and advised client regarding impact to proposed development.

Las Virgenes Municipal Water District Primary Clarifier Rehabilitation/Repair (sub to MNS Engineers), Los Angeles County, California. Project Engineer. Performing condition assessment of five (5) primary clarifiers at Tapia Water Reclamation Facility including mechanical and structural systems. Developing recommendations for improvement as well as construction documents for bidding.

Wastewater Collection System Master Plan Update, City of Atascadero, California. Project Manager for update of collection system GIS, hydraulic model, infiltration/inflow study, lift station analysis, and development of capital improvement plan.

Wastewater Treatment Plant Master Plan Update, City of Atascadero, California. Project Manager for treatment plant capacity evaluation, review of recycled water alternatives, evaluation of sludge handling options, and development of capital improvement plan for 2.3 MGD WWTF.

Wastewater Expansion Study, City of Gonzales, California (sub to Mark Thomas & Company). Performed evaluation of capital costs and potential phasing to upgrade City wastewater treatment and major trunk main facilities in order to serve buildout of the City's industrial park under multiple flow scenarios. Compared cost for centralized 4.5-6.0 MGD City treatment facility to costs for individual treatment/reuse by customers/regional, "industrial-only" facility. Evaluated potential cost per acre under various methods. Analyzed schedule and phasing scheme to accommodate future growth, included costs to meet future Title 22 requirements for reuse of plant effluent.

WWTP Operation & Maintenance Manual Update, City of Santa Maria, California. Updated the operation & maintenance manual for the City's 13.5 MGD secondary treatment system, including screening, grit removal, clarifiers, trickling filters, sludge thickening & digestion and effluent disposal.

Sludge Thickening System Evaluation, City of San Luis Obispo, California (sub to AECOM). Performed thickening system evaluation for primary and secondary sludge at the 4.5 MGD City Water Recycling Facility (WRF) as part of Pacific Gas & Electric's Sustainable Solution Turnkey program. Evaluated power reduction benefit and capital/operating costs for replacing existing dissolved air floatation system with rotary drum or screw-type thickeners.

Pine Street Sewer Repair/Rehabilitation Study, City of Santa Maria, California. Evaluated cost and repair options for the 900 lineal feet of 15-foot deep Pine Street Sewer near downtown Santa Maria. Developed planning-level cost opinions and alternative evaluation for spot repairs, realignment, and pipe bursting.

El Camino Real Sewer Improvements, City of Atascadero, California. Designed replacement of 1300 lineal feet of 12-inch sewer main through a high-traffic shopping area near an intersection with US HWY 101. Site experiences high groundwater and pipe is over 20 feet deep in some areas.

Lift Station Evaluation, City of Pismo Beach, California. Performed evaluation of five sewage lift stations for the City of Pismo Beach, including consideration of mechanical, structural, electrical, controls, instrumentation, and backup/redundancy issues. Developed cost opinions for work at each location.

JON HANLON, PE

Principal Engineer

Education

BS Mechanical Engineering
California Polytechnic State
University, San Luis Obispo

Years of Experience

Joined MKN 2013
With others 17 years

Registration

Professional Mechanical Engineer,
California (M33232)

Affiliations

American Water Works Association

American Society of Mechanical
Engineers

American Public Works Association

EXPERIENCE

Mr. Hanlon's experience includes design, analysis, and management of municipal projects, and serving as the San Luis Obispo Operations Manager for a Fortune 500 engineering company. Mr. Hanlon's responsibilities have included management and resource allocation for complex multi-disciplined projects throughout San Luis Obispo County. Project experience includes water and wastewater treatment facilities, pump stations, production wells, piping and valves, hydraulic analysis, master planning, and environmental permitting.

RELEVANT PROJECTS

Water Reclamation Facility Upgrades, City of San Luis Obispo, California. Project Engineer. As a subconsultant to PGE, Identified and evaluated Energy Conservation Measures (ECMs) for the City of San Luis Obispo's water distribution, sewer collection, wastewater treatment, and groundwater production facilities. ECMs were evaluated to improve energy efficiency and decrease operating costs utilizing PG&E's Sustainable Solutions Turnkey (SST) program. Over \$7M in capital projects were selected for improvements including solids dewatering facility upgrades, headworks screening, primary sludge pumps, RAS and WAS pumping systems, SCADA system, and digester gas cogeneration system replacement.

WWTP Major Maintenance and Repair Program (MMRP), City of Morro Bay California. Project Manager. Project consists of a multi-year, on-demand engineering service agreement to assist in the execution of a Major Maintenance and Repair Program (MMRP). Specific projects include: Preparation of plans and specifications for new headworks screening, washing, and compacting facilities; structural evaluation of three existing anaerobic digesters; Design and construction support for recoating anaerobic digesters; and design and replacement of chain and flight solids management system.

Southland Wastewater Treatment Facility Design, Nipomo Community Services District, California. Principal in Charge. Design of a 0.9-MGD extended aeration treatment facility including new headworks, screening, grit removal, blower/control building, gravity belt thickener, aeration system, secondary clarifiers, process water pumping and distribution, and supporting facilities, and approximately 1-mile of upstream trunk sewer.

Wastewater Treatment Facility Expansion, City of Santa Maria, California. Principal in Charge. Project included constructability review and construction management of \$16+ million WWTF expansion (from 9.5 MGD to 13.5 MGD), including construction of additional screening, grit chamber and screw conveyor, primary clarifier, primary trickling filter, digester, control building, and percolation pond pump station. Project also includes significant modifications to existing facilities.

Design of Grit Removal Facilities, South San Luis Obispo County Sanitation District, Oceano, California. Project Engineer. Project to design and construct new hydrodynamic grit removal facilities for a 5.0 MGD fixed-film reactor wastewater treatment plant to improve plant performance and reduce maintenance requirements. A grit classifier is include in the design to separate and dewater the concentrated grit.

WRRF Influent Pump Replacement Project, City of San Luis Obispo, California. Project Engineer. Prepared construction documents for replacement of two 5.0 MGD dry-pit solids handling pumps at the City's influent lift station. Pumps were oriented in the vertical position to reduce maintenance requirements and increase pump performance.

John Hanlon, PE (page 2)

Digester 1 and 2 Upgrade, City of Morro Bay/Cayucos Sanitary District, California. Project Engineer. As the on-call consultant for the City of Morro Bay and Cayucos Sanitary District's Wastewater Treatment Facility (WWTF), MKN performed a condition assessment and construction plans and specifications for the Digesters No. 1 and 2. Construction included surface preparation and recoating of all concrete and metal interior surfaces, repair of gas injection lances, concrete crack repair, and steel manway repair. MKN also performed construction management of the project.

Wastewater Treatment Plant Audit, City of Atascadero, California. Services included review of City Preliminary Design and subsequent design modification reports.

Clarifier #1 Rehabilitation and Upgrade, City of Santa Maria, California. Project Manager. Project to replace primary clarifier scraper mechanism at City WWTP. Project included preparation of contract documents (plans and specifications), evaluating strategies for procuring scraper assembly, seismic assessment, evaluation of code requirements, and electrical upgrades. Bid and construction phase service were included in the scope of work.

Primary Clarifier Rehabilitation/Repair, Las Virgenes Municipal Water District (sub to MNS Engineers), California. Project Engineer. Performed condition assessment of five (5) primary clarifiers at Tapia Water Reclamation Facility including mechanical and structural systems. Developing recommendations for improvement as well as construction documents for bidding.

Headworks Bar Screen Replacement, City of Paso Robles, California. Principal in Charge. Plans and specifications for replacement of mechanical bar screen with a continuous screen and washer, compacter, and bagger unit. Work included hydraulic analysis and design of weirs to control water surface upstream and downstream of the new barscreen.

Wastewater Treatment Facility Equipment and Process Optimization, City of Oxnard, California. Project Engineer. Reviewed existing Wastewater Treatment Facility (WWTF) equipment and processes for 22 MGD plant, including primary sedimentation tanks, biotowers, activated sludge treatment, secondary sedimentation tanks, chlorination/dechlorination, primary sludge treatment, dissolved air flotation, anaerobic digesters, and belt filter presses.

El Estero Wastewater Treatment Plant Fats, Oils and Grease Receiving Station, City of Santa Barbara, California. Project Manager. Responsible for design, implementation, and construction phase services of a Fats Oil and Grease (FOG) receiving, handling, and injection system at the El Estero Wastewater Treatment Plant (WWTP). Services include plans and technical specifications for the site, piping, pumping, storage vessel, and controls. Recipient of 2014 ASCE Project-of-the Year.

Wastewater Treatment Plant Upgrade, San Simeon CSD, California. Project Manager. Project to evaluate 0.5 MGD facility and make recommendations for process improvements.

Wastewater Treatment Plant Tertiary Upgrade, San Simeon CSD, California. Project Manager. Designed improvements to allow the 0.45 MGD wastewater treatment facility to meet title 22 requirements.

Small Scale Recycled Water Study, San Simeon CSD, California. Principal in Charge. Developed a recycled water project that would qualify for funding using the Districts Supplemental Environmental Project funds. Coordinated with the CDPH, SWRCB, and the District to develop a recycled water project that will treat a portion of wastewater treatment plant effluent for use as irrigation water for near-by hotels and businesses.

Headworks Barscreen Project, City of Atascadero, California. Principal in Charge. Tasks include preliminary engineering and design of new headwork and a septage receiving station for the City's 1.59 MGD WWTP.

EILEEN SHIELDS, PE

Project Engineer

Education

MS Civil and Environmental
Engineering, California Polytechnic
State University, SLO, 2006

BS Environmental Engineering,
California Polytechnic State
University, SLO, 2006

Years of Experience

Joined MKN 2013
With others 7 years

Registration

Professional Civil Engineer,
California (No. 74757)

Affiliations

American Society of Civil Engineers

Engineers Without Borders, USA

Additional Training

Water Distribution Design and
Modeling, featuring Water
CAD/GEMS, Bentley, 2008

EXPERIENCE

Ms. Shields is experienced in a wide range of water, wastewater, and recycled water projects. From utility review for CEQA compliance and master planning, to design of conveyance and treatment facilities and construction phase services, Ms. Shield's experience allows her to effectively develop projects from concept to construction. Ms. Shields' various water and wastewater projects include preliminary and detailed design, permitting, hydraulic modeling, site civil design, and cost estimation; conceptual design of water distribution facilities; pipeline design; bid and construction assistance, including development and administration of prequalification of contractors; planning and design of water supply and conveyance alternatives; wastewater treatment and collection system conceptual planning, process evaluating and wastewater treatment plant design. Ms. Shields has also participated in a number of field projects involving construction observation, and construction administration.

RELEVANT PROJECTS

New Water Reclamation Facility Project Planning Services, City of Morro Bay, California. (sub to JFR Consulting). Project Engineer. Project involves collection of community input, detailed review of existing screening studies and related reports, and guidance through decisions regarding the features and siting of the new Water Reclamation Facility (WRF). Specific responsibilities include identification and descriptions of wastewater treatment alternatives for the new WRF, including a comparison of technologies relative to evaluation criteria that are important to the City, and a review of water quality regulations; identification and descriptions of solids processing and treatment alternatives for the new WRF, including comparison of technologies relative to evaluation criteria that are important to the City; and assessment of engineering and economic considerations for wastewater treatment and conveyance infrastructure, effluent disposal and recycled water feasibility, solids treatment and processing procedures, and site development related to the identified potential new WRF sites.

Wastewater Treatment Facility Equipment and Process Optimization, City of Oxnard, California (sub to Penfield & Smith). Project Engineer. Review of existing Wastewater Treatment Facility (WWTF) equipment and processes for 22 MGD plant, including primary sedimentation tanks, biotowers, activated sludge treatment, secondary sedimentation tanks, chlorination/dechlorination, primary sludge treatment, dissolved air flotation, anaerobic digesters, and belt filter presses, for comparison of existing as-constructed technologies in relation to new potential treatment technologies. Review and recommendations consider condition of existing equipment, energy requirements and operational efficiencies, risk, water quality, and capital cost, operating and maintenance costs, and scheduling and sequencing for replacements.

Southland Wastewater Treatment Facility Improvements Project – Phase 1, Nipomo Community Services District, California. Project Manager. Design of 0.9 MGD Wastewater Treatment Facility improvements including conversion of aerated ponds to extended aeration with secondary clarification, addition of mechanical fine screens and grit removal, influent lift station replacement, sludge thickening system, sludge drying beds, and infiltration basins (bid as alternates). Provided engineer's opinion of cost, and plans and specifications for public bid; development of prequalification package and evaluation of contractor's submittals; bid phase services; and office engineering construction phase services. If HDD under the Santa Maria River, 3,000 acre feet per year (AFY) pump station, 0.5 MG reservoir, conversion of four wellhead chlorination systems to chloramination, and over 4 miles of 12" waterlines including pressure reducing valve stations and appurtenances.

Eileen Shields PE (page 2)

Morro Bay WWTP Major Maintenance and Repair Program, City of Morro Bay, California. Project Engineer. MKN is serving as the lead consultant for evaluation and design of various improvements for plant including rehabilitation of the chlorine contact basin, digesters, and supporting systems; installation of a new headworks; and general recommendations for planning and budgeting improvements over the next 3 to 5 years.

Wastewater Treatment Plant Master Plan Update, City of Atascadero, California. Project Engineer. The Atascadero Wastewater Treatment Plant includes influent flow metering, headworks screens, aerated pond, facultative lagoon, and a polishing pond, followed by post-aeration system and percolation basins. Specific responsibilities included treatment plant capacity evaluation, review of recycled water opportunities and assessment of alternatives, condition assessment of the wastewater treatment plant, evaluation of sludge handling options, and development of capital improvement plan for 2.3 MGD facility.

“Textile Company” Global Finishing Facilities Recycle/Reuse Standards & Guidelines, San Francisco, California. Project Engineer. Developed water reuse standards and guidelines for global textile company contracted global finishing facilities. Work included review of global reuse standards and guidelines, potential reuse applications, and facility effluent water quality; and development of recycle water quality standards and usage guidelines for process water, cooling towers, landscape irrigation, and sanitary toilet flushing for distribution to global contracted finishing facilities.

Wastewater Treatment Facility Biotower Rehabilitation Assessment, City of Oxnard, California. (sub to Penfield & Smith). Project Engineer. Evaluation of two existing biotowers (roughing trickling filters) (140-ft diameter and 100-ft diameter) at a 22 MGD wastewater treatment facility (WWTF). Specific responsibilities included a technologies assessment for several rehabilitation alternatives including do nothing, low cost minimal replacement/repair, and complete biotower process rehabilitation. Another alternative was identified for review during the evaluation – abandon and demo biotowers and utilize enhanced primary sedimentation followed by activated sludge. This option will be further evaluated in the subsequent project effort – WWTF Equipment and Process Optimization.

Calle Joaquin and Laguna Lift Station Replacements, City of San Luis Obispo, California. Project Engineer. Project to replace two City sewer lift Stations, involving a variety of challenges such as a 750 foot horizontal directional drilled river crossing, high groundwater, traffic impacts and the need for temporary operations to maintain continuous service throughout the construction duration. Responsibilities included overseeing pump selection hydraulic analysis, development of civil site layout and coordination of plans and specifications with City purchased equipment, development of plans and specifications for public bid, bid analysis, submittal review, and office engineering during construction.

Headworks Replacement Project, PG&E SST Project, City of San Luis Obispo, California. Project Engineer. Design of screens and grit removal systems to replace existing equipment at the 4.5 MGD City Water Recycling Facility (WRF) as part of Pacific Gas & Electric’s Sustainable Solution Turnkey program. Compiled scope of work, project plans, specifications, and engineering cost opinion used for solicitation of Contractor proposals for Design-Build partnership.

Beale Air Force Base, Wastewater Treatment Plant, Concept Design Planning, Marysville, California. Project Engineer. Concept design planning for a 0.75-MGD WWTP with significantly different seasonal flows. Capacity and condition of existing facilities were reviewed, including influent sewer and lift station, headworks screens and grinders, trickling filters, solids contact basin, secondary clarifiers, UV disinfection, anaerobic digesters, and sludge drying beds. Reviewed existing and future wastewater treatment plant flows and loadings and developed design criteria and capital improvements plan, and determined recommended improvements.

Bar Screen Replacement Project, City of Paso Robles, California. Project Engineer. Design of wastewater mechanical bar screen to handle existing and future flows at WWTP. Work included hydraulic analysis, specifications for procurement, engineer’s cost opinion, and plans and specifications for public bid.

Southland Wastewater Treatment Facility Effluent Disposal Screening Analysis, Nipomo Community Services District, California. Project Engineer. Compiled treated effluent disposal alternatives, developed rating criteria, reviewed available information, and compared disposal/reuse alternatives to assist District identify feasible projects to investigate.

ROB LEPORE, GISP

Senior GIS Specialist

Education

BS Environmental Engineering
Wentworth Institute of Technology
Boston, MA 2001

Years of Experience

Joined MKN 2013
With others 14 years

Registration

Certified Geographic Information
System Professional (GISP)

State of California Water Treatment
Operator Grade T2

State of California Water Distribution
Operator Grade D2

Affiliations

San Luis Obispo Regional GIS
Collaborative (SLORGC)

GIS Certification Institute (GISCI)
Applicant Review Committee

San Luis Obispo GIS Users Group

EXPERIENCE

Robert is a Geographic Information System Professional (GISP) certified by the GIS Certification Institute (GISCI) with a focus on Water Resources. He has worked for a public utility, GIS consulting firm and multiple engineering firms during his career. He has experience with the design, implementation and application of GIS technology for public & private sector clients with a focus on water, wastewater and stormwater infrastructure planning & hydraulic model development. He is involved in every aspect of a GIS project, from initial project concept & project management, database design & development, field investigations & final project delivery. He has extensive experience with hydraulic model development, data migration & integration, map cartography & onsite GIS software installation & training. Rob is proficient in the use of ESRI ArcGIS 10, Autodesk Civil 3D & Map, Innovyze InfoSWMM & Bentley WaterCAD 8.

RELEVANT PROJECTS

New Water Reclamation Facility Project Planning Services, City of Morro Bay, California. (sub to JFR Consulting). GIS Support. Project involves collection of community input, detailed review of existing screening studies and related reports, and guidance through decisions regarding the features and siting of the new Water Reclamation Facility (WRF). Specific responsibilities include map preparation for project evaluation.

Wastewater Collection System and Treatment Plant Master Plan, City of Guadalupe, California. Project consisted of a condition assessment and capacity evaluation of the City of Guadalupe wastewater collection system and treatment plant. Tasks included evaluation of existing wastewater flow conditions, creation of a GIS-based hydraulic SewerCAD model, preparation of GIS-based system atlas, identification of deficiencies under existing and future conditions; development of Capital Improvements Program (CIP) and cost opinions for existing and future improvements.

Wastewater Collection System Master Plan Update, City of Atascadero, California. GIS Specialist for update of collection system GIS, hydraulic model, infiltration/inflow study, lift station analysis, and development of capital improvement plan.

Wastewater Treatment Plant Master Plan Update, City of Atascadero, California. GIS Specialist for treatment plant capacity evaluation, review of recycled water alternatives, evaluation of sludge handling options, and development of capital improvement plan for 2.3 MGD WWTF.

Sanitary Sewer Collection System Master Plan, City of Hollister, California. Developed a sewer master plan and GIS for the City of Hollister, which was utilized for sewer collection system modeling to identify existing and future sewer pipe deficiencies throughout the trunk sewer system. The GIS will be utilized by operations staff for future operation and maintenance of the sewer collection system, which consists of 4 lift stations, over 1,800 manholes and 90 miles of sewer pipe. Services for this project included the following: RTK GPS field survey of trunk sewer manholes totaling 470 survey points, digital photography of the surveyed sewer manholes, review of record plans and existing atlas maps, geodatabase design and data development, cartographic utility atlas mapping, and onsite installation/training of ESRI's ArcGIS software to be used by City staff. CSD distribution system to the City of Santa Maria's system. Components included 2800 lf HDD under the Santa Maria River, 3,000 acre feet per year (AFY) pump station, 0.5 MG reservoir, conversion of four wellhead chlorination systems to chloramination, and over 4 miles of 12" waterlines including pressure reducing valve stations and appurtenances.

Rob Lepore, GISP (page 2)

Preliminary Sewer Master Plan, Seaside County Sanitation District, Monterey, California. Developed a sewer GIS which was utilized for trunk sewer modeling to identify existing and future sewer pipe deficiencies throughout the trunk sewer system. The GIS will also be utilized by operations staff to manage the future operation and maintenance of the sewer collection system, which consists of 4 lift stations, 930 manholes, 475 cleanouts, and 70 miles of sewer pipe. Services for this project included RTK GPS field survey of trunk sewer manholes totaling 240 survey points, digital photography of the surveyed sewer manholes, review of record plans and existing atlas maps, geodatabase design and data development, integration of digital sewer inspection videos, cartographic utility atlas mapping, and onsite installation and training of ESRI's ArcGIS software to be used by SCSO staff.

Pioneer Apartments Capacity Evaluation, City of Guadalupe, California. Provided engineering services to the City of Guadalupe to analyze the existing and future wastewater impacts to the Pioneer Lift Station based on proposed residential development upstream of the lift station. Tasks included projecting existing and future wastewater flows and hydraulic evaluation of the lift station and accompanying force main.

SewerCAD Model Update, Nipomo Community Services District, Nipomo, California. Project involved updating the 2007 wastewater hydraulic model with the District's current wastewater GIS database. Tasks included review of the 2007 hydraulic model, updating the existing model with current GIS network mapping, and setup of model building tools to allow future database changes to be automatically synced between the modeling database and GIS.

Gularte Lift Station Evaluation, City of Guadalupe, California. Provided engineering services to the City of Guadalupe to analyze the existing and future wastewater impacts to the Gularte Lift Station based on proposed residential development upstream of the lift station. Tasks included projecting existing and future wastewater flows and hydraulic evaluation of the lift station and accompanying force main.

Apio, Inc Wastewater Expansion Analysis, City of Guadalupe, California. Provided engineering services to the City of Guadalupe to analyze the existing and future wastewater uses from Apio's production line process and determine the potential impacts to the City's water supply and distribution system under existing and future water demand conditions. Tasks included coordination of infield flow monitoring,

projections of existing and future wastewater flows, and development of a SewerCAD model to simulate a variety of flow conditions.

Truss Pro Emergency Sewer Crossing, City of Guadalupe California. Project to repair and replace a failing sewer pipe crossing under the Union Pacific Railroad tracks. Installation of new sewer line will be installed using by jack and bore construction techniques.

Lopez Recreation Area Wastewater System Condition Assessment, County of San Luis Obispo, California. Performed field review and evaluated capacity of 5 wastewater lift stations and an activated sludge treatment system. Projected future demands and determined if lift station and treatment plant had sufficient hydraulic and treatment capacity to address them.

Wastewater System Analysis, Monterey Regional Water Pollution Control Agency, Salinas, California. Assisted in the development of a technical report for MRWPCA to complete a Wastewater Service Area Study for Toro Park, Las Palmas and Indian Springs in Monterey County. The goals of the Wastewater Service Area Study included establishing the limits of the service area, existing and future build-out flows, and evaluation of various collection system alignments to connect the three communities to MRWPCA's system, and determine if it is economically feasible to connect these three communities to MRWPCA.

Dual Sewer Force Main Design, Fiero Lane Water Company, San Luis Obispo, California. Served as project designer for the preparation of construction documents for 8,000 linear feet of 4-inch PVC pipe for raw and secondary treated effluent for the Fiero Lane Water Company. Responsibilities included coordination with multiple agencies, including the City and County of San Luis Obispo and field and office engineering personnel during the construction phase of the pipeline project.

Sewer System Management Plan (SSMP), City of Taft, California. Developed a GIS database of the City of Taft's wastewater collection system as part of the requirements for the Sanitary Sewer Management Plan (SSMP). The GIS will be utilized by operations staff for future operation and maintenance of the sewer collection system, which consists of 1 lift station, over 500 manholes and 28 miles of sewer pipe. Services for this project included the following: RTK GPS field survey of trunk sewer manholes totaling 2010 survey points, digital photography of the surveyed sewer manholes, review of record plans and existing atlas maps, geodatabase design and data development, and cartographic utility atlas mapping.

Joseph Reichmuth, PE

Project Engineer

Education

BS Civil Engineering, California
Polytechnic State University, San
Luis Obispo, 1999

Years of Experience

Joined MKN & Associates 2014
With others 13 years

Registration

Professional Civil Engineer, CA
(#63124)

Affiliations

American Society of Civil Engineers

EXPERIENCE

Mr. Reichmuth is a Project Engineer with several years of design experience as a project engineer specializing in wastewater treatment facilities, lift stations, pipelines, and water facilities. Mr. Reichmuth also has nearly a decade of experience working in the geotechnical engineering discipline specializing in field engineering and construction observation.

RELEVANT PROJECTS

Water Reclamation Facility Upgrades – City of San Luis Obispo, California. Project Engineer. As a subconsultant to PGE, Identified and evaluated Energy Conservation Measures (ECMs) for the City of San Luis Obispo's water distribution, sewer collection, wastewater treatment, and groundwater treatment facilities. ECMs were evaluated to improve energy efficiency and decrease operating costs utilizing PG&E's Sustainable Solutions Turnkey (SST) program. Over \$7M in capital projects were selected for improvements including solids dewatering facility upgrades, headworks screening, primary sludge pumps, RAS and WAS pumping systems, SCADA system, and digester gas cogeneration system replacement.

WWTP Major Maintenance and Repair Program (MMRP), City of Morro Bay California. Project Engineer. Project consists of a multi-year, on-demand engineering service agreement to assist in the execution of a Major Maintenance and Repair Program (MMRP). Prepared of plans and specifications for replacement of chain and flight solids management system. Also providing construction phase support services including submittal reviews, RFI responses, and construction observations for new headworks screening, washing, and compacting facilities and recoating of anaerobic digesters.

Southland WWTF Upgrade - Phase 1, Nipomo Community Services District, Nipomo, California. Project Engineer. Assisted with the design of 0.9 MGD Wastewater Treatment Facility. Responsibilities included design of the sludge thickening system and drying beds. Provide assistance with engineer's opinion of cost, and plans and specifications for public bid; bid phase services; and office engineering construction phase services. Responsibilities also included review of submittals and responding to RFIs during the construction.

Headworks Bar Screen Project, City of Atascadero, California. Project Engineer. Assisted with the design of a new headworks facility for the WWTP. Responsibilities included assisting in the design of screening facility to handle up to 2.4 MGD. Provided assistance with engineer's opinion of cost, and plans and specifications for public bid; bid phase services; and office engineering construction phase services. Responsibilities also included review of submittals and responding to RFIs during the construction.

Oxnard Concentrate Collection Project, City of Oxnard, California. (sub to Penfield & Smith) Project Engineer. The City of Oxnard Concentrate Collection System (CCS) Project is intended to reduce the flow and the amount of total dissolved solids from City desalters and industrial dischargers from entering the treatment process at the Oxnard Wastewater Treatment Plant (OWTP) and Advanced Water Purification Facility (AWPF). To reduce treatment costs at both facilities, it has been proposed that the concentrate from the City's desalter, as well as certain concentrate and non-organic, non-toxic discharges from other industrial facilities, bypass the OWTP and be connected to the existing ocean outfall. MKN has been tasked with identifying potential customers to the CCS, provide preliminary design of connection facilities, and determine the potential overall energy savings at the WWTP as a result of reduced incoming flows.

Joseph Reichmuth, PE (page 2)

Blacklake WWTP Headworks Rehabilitation, Nipomo Community Services District, California.

Project Engineer. Project consisted of providing plans, specifications, and construction cost opinion to rehabilitate existing headworks structure. Improvements included concrete repair and re-coating of headworks structure and upstream manhole; installation of handrailing, safety gates and safety chain; installation of new slide gates and grit pan; and other miscellaneous improvements to rehabilitate aging structure. Plans and specifications were prepared for public bid.

El Estero Wastewater Treatment Plant Fats, Oils and Grease Receiving Station, City of Santa Barbara.

Project Engineer/Construction Observer. Responsible for design, implementation, and construction phase services of a Fats Oil and Grease (FOG) receiving, handling, and injection system at the El Estero Wastewater Treatment Plant (WWTP). Services include plans and technical specifications for the site, piping, pumping, storage vessel, and controls of a pilot FOG receiving and delivery system.

Las Virgenes Municipal Water District Channel Mixing Improvements Project (sub to MNS Engineers)

Project Engineer. Developing plans and specifications for mixing improvements of five (5) channels at the Tapia Water Reclamation Facility utilizing coarse air diffusers. Also developing recommendations for phasing of work and required bypassing to limit disruptions to the plant processes.

California Men's Colony Wastewater Collection and Treatment Upgrade, San Luis Obispo, California.

Field Engineer. Reviewed documentation of work in progress for compliance with the project Standards and Specifications. Work also included documenting and reporting all laboratory work performed.

Eastside Force Main Project, Templeton Community Services District, Templeton, California.

Project Engineer. Designed and prepared construction documents for two sewage lift stations. The new lift stations diverted flow currently being conveyed to the City of Paso Robles to the District's Meadowbrook WWTP. Design included two lift stations consisting of solids handling submersible pumps and a total combined force main length of over 2.5 miles.

Margarita and Foothill Lift Station Replacements, City of San Luis Obispo, California.

Project Engineer. Project to replace two City sewer lift Stations, involving a variety of challenges such as proximity to residences, constrained site access, traffic

impacts and the need for temporary operations to maintain continuous service throughout the construction duration.

Calle Joaquin and Laguna Lift Station Replacements, City of San Luis Obispo, California.

Project Engineer. Assisted in the design to replace two City sewer lift Stations including 2500 feet of force main. Provide assistance with engineer's opinion of cost, and plans and specifications for public bid; bid phase services; and office engineering construction phase services.

Lift Station # 3 Upgrade, City of Arroyo Grande, California.

Project Manager. Designed and prepared construction documents for retrofitting an existing dry-pit/wet-pit sewage lift station to a duplex submersible pump sewage lift station. The new lift station contains two submersible solids handling pumps on variable frequency drives, capable of pumping a peak flow of 315-gpm.

Blower Improvements, Porterville Wastewater Treatment Plant, City of Porterville, California.

Served as project engineer for design of replacement process air blowers, piping, and air meters for 8.0 MGD WWTP. The existing combustion engines will be replaced with electric turbo blowers to increase the plants efficiency and to provide Operators with increased control of the aeration process. Existing leaking air piping will also be replaced and will include new flow meters connected to the plant SCADA system.

Emergency UPRR Sewer Repair/Replacement Project, City of Guadalupe, California.

Performed construction management services for project to repair and replace a failing sewerline crossing under the Union Pacific Railroad tracks. New sewer line was installed using by jack and bore construction techniques.

Observation Services, Nipomo Community Services District, California.

Performed observation services for NCSD. Field checked water system improvements for conformance to the District's specifications and approved development plans. Provided the District with recommendations regarding compliance of completed work with approved development plans and/or District standards. Prepared daily field reports and other documentation.

Digester Upgrade, City of Morro Bay/Cayucos Sanitary District, California.

Performed construction management for rehabilitation of Anaerobic Digester 2. Construction included surface preparation and recoating of all concrete and metal interior surfaces, repair of gas injection lances, concrete crack repair, and steel manway repair.

JOHN F. RICKENBACH, AICP

7675 Bella Vista Road
 Atascadero, CA 93422
 805/610-1109
 JFRickenbach@aol.com



John Rickenbach is an environmental and planning consultant with over 25 years of broad-ranging experience serving both the public and private sectors.

His experience includes preparing and overseeing a wide range of technical studies, particularly General Plans and Specific Plans, CEQA and NEPA documents, transportation plans, and a variety of constraint studies. He has a strong background in applying GIS technology and database management to many of these projects. In addition, his expertise includes the creative application of the environmental and public participation processes to guide long-range planning efforts, including complicated annexation studies. Mr. Rickenbach also has high-level public sector planning experience, most notably as the contract planning director for the City of Guadalupe.

KEY CAPABILITIES and EXPERTISE

- **General Plans and Public Outreach.** Mr. Rickenbach has prepared a wide range of planning studies, including General Plans, Specific Plans, constraints analyses, and other long-range special studies. His particular expertise is planning within rural communities, and for cities in the process of urbanizing. He is an expert at coordinating public input to produce planning documents based on consensus, and has successfully developed plans for communities with differing needs. In many of these planning efforts, he led many successful public outreach programs.
- **CEQA and NEPA Expertise.** Mr. Rickenbach is an expert in the application of state and federal environmental laws, particularly the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA). He has prepared a wide range of CEQA and NEPA documents for a very wide range of projects, from long-range programmatic planning efforts, to industrial facilities, commercial projects, and residential subdivisions. He has provided expert legal testimony in court cases involving CEQA issues, and regularly provides training at regional and statewide workshops, both for practicing professionals and students.
- **Public Sector Contract Planning.** As a consultant, Mr. Rickenbach developed a successful contract planning service for several public agencies, and applied his expertise to a variety of roles, including that of a contract planning director, staff assistance to process projects, and preparing CEQA studies and staff reports. He has also represented cities to LAFCo boards during complex annexation processes, and has served on a Technical Planning Advisory Committee for a regional planning agency.
- **GIS Planning Applications.** Mr. Rickenbach is technically skilled in a variety of GIS applications, and has successfully used his GIS skills for projects such as general plan updates, groundwater quality studies, transportation studies, and oil pipeline corridor analyses.
- **Award-Winning Special Studies.** Mr. Rickenbach is an authority regarding the concepts surrounding neo-traditional town development. He co-authored an award-winning study that compared the costs and benefits of standard suburban development to the principles of neo-traditional planning, an approach that emphasizes site planning to improve the functionality of development. He also prepared a corridor constraints study that was recognized with a statewide award by the American Planning Association.

EDUCATION, REGISTRATIONS AND AFFILIATIONS

B.S., Physical Geography, University of California, Davis, 1985
 M.C.R.P., City and Regional Planning, California Polytechnic State University, San Luis Obispo, 1991
 American Institute of Certified Planners
 American Planning Association

John F. Rickenbach, AICP

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REPRESENTATIVE PROJECT EXPERIENCE

General Plans, Specific Plans and related CEQA Studies

- General Plan Update and EIR, Cities of Paso Robles, San Luis Obispo, Buellton and Lompoc
- Kings County General Plan Update EIR
- Housing Element Update, City of Solvang
- Housing Element, City of Guadalupe
- Mahoney Ranch, Blosser Southeast and Southwest Specific Plans, City of Santa Maria
- Chandler Ranch Area Specific Plan and EIR, City of Paso Robles
- Downtown Specific Plan EIR, City of Santa Maria
- Marina Downtown Specific Plan and EIR, City of Marina
- Downtown Project EIR, City of Grover Beach
- Scotts Valley Town Center Specific Plan EIR
- River Oaks Specific Plan – Environmental and Demographic Studies

Municipal Contract Planning

- Contract Planning Director, City of Guadalupe (2006-2009)
- Spanish Springs Specific Plan Processing, City of Pismo Beach (2009-present)
- Los Robles Del Mar Specific Plan Processing, City of Pismo Beach (2001-2012)
- Orcutt Area Specific Plan Processing, City of San Luis Obispo (2000-2003)
- Pismo Preserve Project Processing, City of Pismo Beach
- On-Call CEQA and Planning Support, Monterey County

Other Long-Range Planning/CEQA and NEPA Studies

- New Water Reclamation Facility (WRF) Site Analysis, City of Morro Bay
- Avenue of Flags Corridor Study, City of Buellton
- Sphere of Influence and Concurrent Annexation Study and EIR, City of Santa Maria
- Dalidio Marketplace Commercial Annexation Project EIR, City of San Luis Obispo
- Report Comparing Conventional and Neo-Traditional Development, City of Santa Maria
- Santa Barbara County 2003-2008 Housing Element Rezone EIR, Santa Barbara County

Transportation Planning Studies

- Regional Transportation Plan EIRs, Santa Cruz, Kings, San Benito, San Luis Obispo, Santa Barbara Counties
- Pedestrian and Bicycle Master Plan, City of Marina
- Templeton-Atascadero Bicycle Trail Constraints Analysis, San Luis Obispo County
- U.S. Highway 101 Corridor Constraints Study, SLOCOG
- Fulkerth/SR 99 PEAR and CEQA Studies, City of Turlock and Caltrans
- Union Valley Parkway Extension/Interchange Project EIR/EA, City of Santa Maria
- Santa Clara River Bike Trail EIR, City of Santa Clarita

Rural and Agricultural CEQA Studies

- Biddle Ranch Agricultural Cluster Subdivision EIR, San Luis Obispo County
- Paso Robles Agricultural Cluster Subdivision EIR, San Luis Obispo County
- Santa Margarita Ranch Future Development Program EIR, San Luis Obispo County
- Rabbit Ridge Winery CEQA Monitoring, San Luis Obispo County

School District Studies

- Twin Rivers Unified School District New High School SEIR
- Monterey Peninsula Unified School District High School EIR
- Inglewood Unified School District, CEQA and NEPA Processing
- Marysville Joint Unified School District IS/MND
- Ceres Unified School District High School EIR

John F. Rickenbach, AICP

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Other Special Studies

- North County Hydrogeologic Study, GIS Land Use Analysis, Monterey County
- Communitywide Preferences Survey, City of Paso Robles
- Tri-Cities Minor League Stadium Constraints Study, Cities of Ventura, Oxnard and Camarillo

AWARDS

Innovative Project Award, Templeton-Atascadero Corridor Constraints Study, State AEP, 2005

Comprehensive Planning Award, City of Paso Robles General Plan, APA Central Coast, 2004

Technology Award, City of Santa Paula GIS Database, APA Central Coast Chapter, 1995

Comprehensive Planning, Award Santa Maria Sphere of Influence Study, APA Central Coast, 1994

Education Project Award, Report on Neo-Traditional Town Development, APA Central Coast, 1993

PUBLICATIONS

“Monsoon in the Americas: Opportunities and Challenges”, *Geography Compass*, 2009 (co-author, in conjunction with East Carolina University)

“The E-Ticket to Historic Preservation”, *APA Cal Planner*, 1998

TEACHING and TRAINING EXPERIENCE

Cal Poly State University San Luis Obispo, Guest Lecturer, *General Planning and CEQA Classes*

East Carolina University, Guest Lecturer, *Climate and Water Resource Issues in the Western United States*

Association of Environmental Professionals, CEQA Workshop Lecturer and Panelist

Association of Environmental Professionals, Lecturer: Greenhouse Gas Issues, AB 32, SB 97 and SB 375

Curriculum Advisor to Cal Poly City and Regional Planning Department



DEBBIE LAGOMARCINO-RUDD, LEED AP

Education

Bachelor of Science, Interior Architecture/Space Planning, Kansas State University, Manhattan, KS

Affiliations

American Planning Association (APA)

American Institute of Certified Planners (AICP)

Slovene National Benefit Society

LEED-ND Corresponding Committee

Economic Vitality Commission - Building, Design & Construction Cluster Co-Chair

Certifications

Leadership in Energy and Efficient Design Accredited Professional (LEED AP)

Presentations

"Career Path Planning and Beyond," September 2011, CCAPA Conference, Santa Barbara, CA

"The Planner's Guide to Implementing Green Principles," October 2007, CCAPA Conference, San Jose, CA

"Improving Public Perception of Redevelopment through Education and Awareness," CRA Conference, March 2007, Long Beach, CA

"When Your Waterfront is a Brownfield," October 2002, California APA Conference, San Diego, CA

Debbie is a principal with RRM Design Group who brings over 20 years of California waterfront experience, taking projects from the early visioning and policy stages through construction. Debbie is well-versed in Coastal Commission process, sustainable design principles and implementing them on the California coastline. She excels in public outreach, identifying public concerns and preferences and translating them into well supported plans that can be easily understood by the public and implemented by the City and/or District. Debbie brings a fresh unbiased approach to this project and to the community outreach process.

Related Project Experience

San Luis Obispo Water Reclamation Facility Upgrade, San Luis Obispo, CA

Debbie led the community outreach strategy and process for the Water Resource Recovery Facility (WRRF) upgrade program management phase. The process included an outreach strategy memo that outlined the process steps, purpose, and responsibilities; a newsletter; one-on-one stakeholder interviews; a community workshop; and an open house information fair at farmers market. The workshop engaged participants in fun and interactive ways through a brainstorming exercise, prioritization exercise, and a visual preference survey. The outreach strategy included involving a cross-section of the community, in a variety of ways and settings, to get quality feedback.

Morro Bay New Water Reclamation Facility Project Planning, Morro Bay, CA

Debbie teamed with John Rickenbach and MKN & Associates to assist the City of Morro Bay with their New Water Reclamation Facilities project site selection process. Debbie's role focused on community outreach and graphic coordination, translating feedback into a document that the community and the City Council would support. The outreach consisted of stakeholder interviews, community workshops, and City Council hearings.

Additional Related Project Experience

- Avila Beach Front Street Enhancement Plan, Avila Beach, CA
- Capitola Master Plan, Capitola, CA
- Fort Bragg Georgia-Pacific Mill Site Specific Plan, Fort Bragg, CA
- Huntington Beach Downtown Specific Plan, Huntington Beach, CA
- Jennifer Street Bridge Optoinal Location Anaylsis, San Luis Obispo, CA
- Monterey North Fremont Specific Plan Outreach Program, Monterey, CA
- Pismo Beach Promenade IV, Pismo Beach, CA
- Pismo Beach Waterfront Urban Design Plan, Pismo Beach, CA
- Port San Luis Coastal Gateway Interpretive Exhibits, Avila Beach, CA
- Port San Luis Coastal Gateway Project, Avila Beach, CA
- Port San Luis Master Plan and LCP Amendment, San Luis Obispo, CA
- Shell Beach Gateway Vision Poster, Shell Beach, CA
- Venice Beach Oceanfront Walk, Venice Beach, CA



Joe Koenig

805.550.3685

joe@konigmedia.com

805 Aerovista Place, Suite 201

PORTFOLIO: KONIGMEDIA.COM

EXPERIENCE

Konig Media Art Director / Owner

San Luis Obispo, CA, Jan 2005 - Current

Graphic design services include complete identity packages and various print media from business cards, brochures, to billboards.

Web services include customized design concepts, interface design expert wordpress design and development, Php, CSS, e-commerce and content management systems.

California Polytechnic State University Web Design Professor

San Luis Obispo, CA, Sept 2010 - Dec 2010

Created Curriculum for a 10 week course (Beginning Web Design)

Organized 10 CSS and XHTML Projects for Students to use as exercises.

Lectured on general web design concepts

Poorboy USA Art Director

San Luis Obispo, CA, Sept 2003 - Dec 2005

Provided Visual Design and Direction (layout, look and feel) for entire brand.

Providing web site visual style, UI and online marketing design as well as print collateral and trade show graphics. This includes web page UI and typographic layout, spot graphics and illustration.

Supervisory role included managing a small design team with art direction, critique and workflow management.

Researched and analysed creative campaign goals, assuring that the company's image strongly reflects current industry standards and trends.

Working with project management to determine milestones and deliverables, assessing creative needs and coordination of production resources
Initialized and solidified the company's visual image by providing strong creative solutions, concepts and design in both on and offline marketing devices.

Esell Solutions Web Designer

Atascadero, CA, July 2001 - July 2002

Met and corresponded with clients to determine client needs for websites.
Created corporate web sites, portals and small-scale web applications.
Developed and designed new web interfaces, layouts and site graphics.

SKILLS

Expert in Photoshop and Illustrator. Excellent communication, presentation, client liaison and project management abilities.

SOFTWARE

Adobe Creative Suite: Adobe Illustrator, Photoshop, ImageReady, InDesign, Acrobat, Adobe After Effects, Flash, Dreamweaver , Microsoft Office Suite

EDUCATION

California Polytechnic State University San Luis Obispo, CA Bachelor of Science, Art and Design Department, Graphic Design Concentration (2001)

REFERENCES

Upon Request



Kevin Merk Associates, LLC

KEVIN B. MERK

Principal Biologist

Kevin Merk is the founding principal of Kevin Merk Associates, LLC. With over 20 years of environmental consulting experience, Kevin has directed, managed, and conducted hundreds of natural resource and environmental studies throughout California. Mr. Merk has a diverse background in the biological sciences with expertise in plant taxonomy, quantitative vegetation analysis, habitat classification/evaluation procedures, surveys for special status species, habitat restoration and biotechnical erosion control. His work experience includes general biological and species-specific surveys, U.S. Army Corps of Engineers and California Coastal Commission wetland delineations, as well as permit acquisition and regulatory compliance. He has prepared, implemented and monitored Habitat Conservation Plans and habitat mitigation/restoration projects throughout California. Mr. Merk is a well-versed regulatory specialist that provides a balance between rigorous scientific documentation, environmental regulatory requirements and project development goals and objectives.

TECHNICAL CAPABILITIES

- Mr. Merk has an in-depth knowledge of the California flora and protocols for surveying rare, threatened and endangered plant species.
- He has conducted floristic surveys and mapped vegetation communities for private, state and local government clients including California State Parks, California State University System, Fort Ord Reuse Authority, Cities and Counties of Monterey, San Luis Obispo, and Santa Barbara, and Cities of Arroyo Grande, Lompoc, Sand City, Santa Maria and Scotts Valley.
- Mr. Merk has also conducted rare wildlife surveys throughout California for species such as the California tiger salamander, California red-legged frog, western spadefoot toad, legless lizard, horned lizard, burrowing owl and other raptors and nesting birds.
- Mr. Merk has conducted multi-parameter wetland delineations throughout the state including within the Coastal Zone, and is an expert in environmental regulation compliance (e.g., Endangered Species Act, Clean Water Act, Coastal Development Act, California Department of Fish and Game Code, Porter-Cologne Act).

EDUCATION, CERTIFICATIONS, REGISTRATIONS

B.A. Biology (Plant Sciences), University of California, Santa Cruz

40 Hour OSHA HAZWOPER Training and 8 eight-hour annual refresher courses

Hydrogeomorphic Approach to Functional Assessment of Riverine Waters/Wetlands in the South Coast Region of Santa Barbara County

Biology and Handling Trainings for California red-legged frog, California tiger salamander, and Santa Cruz long-toed salamander

U.S. Army Corps of Engineers Wetland Delineation Training

California Native Plant Society

California Botanical Society

California Invasive Plant Council

Society for Ecological Restoration

American Public Works Association

International Erosion Control Association

Wildlife Society, Western Chapter

EMPLOYMENT HISTORY

Kevin Merk Associates, LLC, Founding Principal Biologist (2011 through present)
Rincon Consultants, Inc., Biological Program Manager (2000-2011)
Zander Associates, Senior Botanist/Restoration Ecologist (1995 through 2000)
University of California, Santa Cruz Natural Resource Assessment Group, Botanist (1993-1995)
Greening Associates, Restoration Ecologist (1991-1992)

REPRESENTATIVE PROJECT EXPERIENCE*Conservation Planning*

- North of Playa Habitat Conservation Plan for the Smith's blue butterfly, Sand City.
- Mahoney Ranch Habitat Conservation Plan for the California tiger salamander (CTS) and California red-legged frog (CRLF), Santa Maria.
- Highway 46 Corridor Improvement Section 7 and 2081 Authorization for San Joaquin kit fox, San Luis Obispo County.
- Rancho Larios Subdivision Section 7 Consultation for CRLF, San Benito County.
- Union Valley Parkway Section 7 Consultation for CTS and CRLF on the Union Valley Parkway Project, Santa Maria.
- Salinas Road Interchange Section 7 Consultation for CTS and CRLF on the Salinas Road Interchange Project, Monterey County.
- Silver Creek Valley Country Club Section 7 Consultation for Bay checkerspot butterfly, San Jose.

Biological Resources Assessments

- Coastal Christian School, mapped/classified vegetation, conducted rare plant and CRLF surveys, delineated USACE wetlands and CDFW jurisdictional areas, supported design team during planning and CEQA review process, San Luis Obispo County.
- More Mesa, conducted rare plant surveys, mapped vegetation communities and delineated USACE and Coastal Commission wetlands, Santa Barbara County.
- May Family Trust Property, mapped/classified vegetation, conducted rare plant surveys, delineated USACE wetlands, and assisted design team during planning and CEQA review process, San Luis Obispo County.
- Harmony Ranch, mapped/classified vegetation, conducted rare plant and California red-legged frog surveys, delineated USACE and Coastal Commission wetlands, and assisted design team during development planning process, San Luis Obispo County.
- Mormann Property, mapped/classified vegetation and conducted rare plant surveys, San Luis Obispo County.
- Laetitia Winery Improvement Project, rare plant surveys, CRLF surveys, and USACE wetland delineation, San Luis Obispo County.
- Santa Rosa Creek Trail, rare plant surveys and habitat assessments for California red-legged frog, pond turtle, steelhead and tidewater goby, Cambria.
- Pecho Valley Road Property vegetation classification, rare plant surveys and USFWS protocol Morro shoulderband snail surveys, Los Osos, San Luis Obispo County.

Focused Botanical Surveys

- Bradley Ranch Botanical Inventory and Wetland Delineation, Santa Maria.
- Pismo Lake Ecological Reserve Botanical Inventory, San Luis Obispo County.
- Harmony Headlands Botanical Inventory, California State Parks.
- Sheridan Lane Botanical Inventory, San Luis Obispo County.

- Chevron Estero Marine Terminal Rare Plant Surveys and Wetland Delineation, San Luis Obispo County
- Biddle Ranch Rare Plant Surveys and Wetland Delineation, San Luis Obispo County
- Tract 1998 Rare Plant Surveys (Pismo Clarkia), Arroyo Grande
- James Way Fuel Modification Project Rare Plant Surveys, Arroyo Grande
- Highland Ranch Rare Plant Surveys, San Luis Obispo County
- San Miguel Ranch Rare Plant Surveys and Wetland Delineation, San Luis Obispo County
- Continental Vineyards Rare Plant Surveys and Wetland Delineation, San Luis Obispo County
- Chandler Ranch Rare Plant Surveys, Paso Robles
- Various focused surveys for the rare Morro Manzanita in Los Osos

Focused Animal Surveys

- Salinas Road Interchange Project, Caltrans Designated Biologist conducted California red-legged frog and California tiger salamander aquatic surveys. Captured and relocated over 10,000 life stages of California red-legged frog during construction, Monterey County
- Santa Maria Integrated Waste Management Facility, USFWS protocol Vernal Pool Branchiopod and CTS Surveys (upland and aquatic) on 1,770-acre site, northern Santa Barbara County.
- Mahoney Ranch USFWS protocol California red-legged frog and California tiger salamander surveys, Santa Maria, Santa Barbara County
- Biddle Ranch USFWS CRLF surveys and CTS habitat assessment, San Luis Obispo County
- Union Valley Parkway USFWS CRLF and CTS surveys (upland and aquatic), Santa Maria
- Monarch butterfly annual population censusing surveys in Santa Cruz County, University of California Santa Cruz
- Birch Street Project USFWS CRLF surveys and Monarch butterfly habitat assessment, Coastal Development Permitting, Cayucos, San Luis Obispo County
- San Joaquin Kit Fox Habitat Evaluations and USFWS protocol surveys for numerous projects (winery expansion, residential, telecommunication), northern San Luis Obispo County and southern Monterey County

CEQA and NEPA Compliance Documents (primary author of Biological Resources Sections)

- Ahmanson Ranch General Plan Amendment and Specific Plan EIR, Ventura County
- Rancho Maria Estates EIR Biological Resources Section, Santa Barbara County
- Union Valley Parkway EIR/EA, City of Santa Maria
- Santa Maria Integrated Waste Management Facility EIR, City of Santa Maria
- Santa Maria Airport Specific Plan EIR, City of Santa Maria
- Mahoney Ranch Environmental Assessment (EA), City of Santa Maria
- Tract 1998 Rancho Grande EIR and supplements, City of Arroyo Grande
- Biddle Ranch Agricultural Cluster Subdivision EIR, San Luis Obispo County
- Chevron Estero Marine Terminal Source Removal Project EIR, San Luis Obispo County
- Downtown Specific Plan EIR, City of Scotts Valley, Santa Cruz County

Restoration Ecology, Regulatory Compliance and Construction Monitoring

- Los Angeles International Airport, prepared and implemented Ecological Landscape Plan for Coastal Development Permit to allow street removal and habitat restoration in the northern El Segundo Dunes, Los Angeles World Airports
- Surfer's Point Shoreline Retreat Project, prepared Coastal Dune Habitat Restoration Plan in support of Coastal Development Permit acquisition, City of Ventura

- Cross Creek Bridge Replacement, prepared and implemented riparian habitat restoration plan, monitored construction and restoration activities in support of Coastal Development Permit, Malibu, Los Angeles County
- Cherry Creek Residential Development, conducted USACE wetland delineation, prepared USACE, CDFG, and RWQCB permit applications, monitored construction, Arroyo Grande
- Bach Hotel, conducted USACE wetland delineation, prepared USACE, CDFG, and RWQCB permit applications and habitat mitigation program, City of Buellton
- Highway 46 East Improvement Project, Senior Biologist overseeing environmental permit compliance during construction, Caltrans, San Luis Obispo County
- Union Valley Parkway, prepared EIR/EA, BA, ESA Section 7 Consultation, Designated Biologist overseeing environmental permit compliance during construction, Caltrans/City of Santa Maria Local Assistance Project
- Biddle Ranch Agricultural Cluster Subdivision Project, County of San Luis Obispo designated environmental monitor overseeing construction of roads and infrastructure improvements
- California State University, Channel Islands, biological studies and wetland delineation, prepared habitat mitigation program and USACE, CDFG and RWQCB permit applications, monitored construction, implemented habitat mitigation program and monitored for five years, Ventura County
- Damon Garcia Sports Complex Project, conducted focused studies including California red-legged frog surveys and wetland delineation, prepared habitat mitigation program and USACE, CDFG and RWQCB permit applications, monitored construction and implemented habitat mitigation program, City of San Luis Obispo
- Santa Maria River Mining, CDFG and Department of Conservation permit acquisition, monitoring and annual permit compliance reporting, City of Santa Maria
- Bret Harte Unified High School District Sports Fields Complex, conducted wetland delineation, prepared habitat mitigation program and USACE, CDFG and RWQCB permit applications, Calaveras County

Open Space Management Plans

- Bailey Wetland Area Management Plan, City of Lompoc, Santa Barbara County
- Leffingwell Ranch Open Space Resource Management Plan, Cambria, San Luis Obispo County; prepared in support of Coastal Development Permit acquisition.
- East West Ranch Public Access and Resource Management Plan, Cambria, San Luis Obispo County

Teaching

- Workshop Instructor - California Native Plant Society Rare Plants and Habitats of San Luis Obispo County (separated into coastal and inland sections)
- Workshop Instructor/Field Coordinator - Elkhorn Slough Coastal Training Program's Management and Conservation of Coastal Grasslands
- Guest lecturer - CalPoly San Luis Obispo Natural Resource Management and Landscape Architecture Departments
- Teaching Assistant - Ecology of California Flora, Plant Anatomy, Plant Taxonomy, Plant Physiology, Mycology, and Plants and Human Affairs, University of California, Santa Cruz
- Presenter - Association of Environmental Professionals state and national conferences; Society of Ecological Restoration annual conferences, and International Erosion Control Association conferences

Mark Laquidara

Private Consultant

Education

PhD, Civil & Environmental Engineering,
Northeastern University, 1985
MS, Civil & Environmental Engineering,
University of Lowell, 1978
BS, Civil Engineering, Lowell Technology
Institute, 1976

Registrations

PE, MA, 33711, 1988

Training and Certifications

Certified Wastewater Treatment Plant
Operator, Massachusetts
Class VII 5288, 1992

Professional Associations

Water Environment Federation
New England Water Environment Association

Experience

Private Consultant
2011 to present

AECOM

VP National Wastewater Practice Leader
2005 to 2011

VeoliaWater North America
VP Director of Plant Support
2000 to 2005

Massachusetts Water Resources Authority
Deputy Director Process Control &
Engineering
1987 to 2000

Dynatech R/D Co
Senior Process Engineer
1985 to 1987

Contact Information

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Framingham, MA 01702
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Email: markjlaq@gmail.com

Dr. Laquidara has over 40 years of experience in the public and private sectors, mostly within the wastewater and biosolids/energy recovery arena. Past expertise concentrated on plant engineering, process design and optimization, day-to-day operations, and troubleshooting. He has particular experience in solving plant compliance issues and optimizing processes through engineering investigations both through operations and capital improvements.

Experience

- AECOM - Conducted TAT process quality reviews for over 75 wastewater designs. TAT process reviews included all types of treatment including the wastewater treatment, biosolids processing and energy recovery carried out by AECOM in North America.
- AECOM & PC - Served as wastewater treatment process technical specialist for the expansion and upgrade of wastewater treatment plants in Lee, Massachusetts, Manchester, New Hampshire, Cranston, East Providence and Warrick, RI, Meriden, Bridgeport, and Southington, CT, Moorefield, WV, Western Branch, MD, Oxnard, CA amongst others all involved planning and design services.
- AECOM - Served as wastewater treatment process technical lead for the recent upgrade of wastewater treatment plants in Nashville TN (wet weather treatment), Honolulu, HI, Columbia SC, Portsmouth NH, amongst others all involved planning and conceptual design services.

Operations

- AECOM - Served as technical specialist providing assistance and evaluation of specific technical issues related to ongoing operations at wastewater treatment plants in Meriden, Cheshire, and Bridgeport, Connecticut, and Cranston, Rhode Island, Nashville TN as well as others.
- VWNA - Managed a contract operations firm's central plant support department, which provided technical services for the operation of more than 275 wastewater and 75 water treatment works in North America. Oversaw the development of technical programs involving applied standard process control and plant engineering practices. Worked with plant personnel to conduct margin enhancement efforts and correct process performance and compliance issues. Introduced new technologies and provided general trouble shooting services.
- MWRA - Served as deputy director of process control and engineering at the 350-mgd Deer Island wastewater treatment plant for the Massachusetts Water Resources

Authority. Provided technical direction, budget development and oversight, system turnover and start-up, day-to-day operation, and

work products review for the 25+ technical staff members. Oversaw day-to-day process control including process set-up and evaluation, permit development and daily compliance, reporting, plant engineering, process and energy optimization, control system operation and maintenance, warranty tracking and monetary recovery, and process engineering.

Facility Commissioning

- MWRA - Served as technical lead for Operations and Maintenance at the 350-mgd Deer Island wastewater treatment plant for the Massachusetts Water Resources Authority. Provided technical direction for all engineer and contractor testing, developed and carried-out all owner/operator independent testing, responsible for system acceptance, start-up, optimization and one year certification. This work multi-phased commissioning effort was carried-out over a six year period and involved all treatment and power generation facilities.
- PC - Serving as a commissioning specialist member within the Strategic Process Planning Committee. The SPPC is tasked to provide technical oversight and direction setting for the upcoming commissioning the on-going major improvements occurring at the Blue Plains AWT. There are five major capital improvements involving all aspects of the plant operation totaling over \$700 million.
- PC – Served as an expert witness for the Engineer through the arbitration process in Hooksett, NH.
- PC – Serving as an expert witness for the Engineer through the mitigation process in Turlock, CA.

Nutrient removal

- AECOM - Served as technical advisor for a nutrient reduction cost estimation study for the New Jersey Harbor Dischargers Group, a consortium of ten authorities in northern New Jersey that collectively discharge 750 mgd of treated wastewater to the New York-New Jersey Harbor. Provided advice and guidance in the development of technologies to achieve varying levels of nitrogen and carbon removal in conventional activated sludge plants, pure oxygen activated sludge plants, and trickling filter plants. Reviewed capital and O&M cost estimates and corresponding cost curves for each plant to achieve high, medium, and low levels of additional nitrogen and carbon removal.
- AECOM - Served as a technical advisor for ongoing biological nutrient removal and enhanced nutrient removal programs for the New York City and Long Island Sound and Chesapeake Bay initiatives, which involve the planning and upgrade of existing facilities to achieve BNR and ENR removal goals through plant optimization, retrofits, and additional unit processes. Providing advice on new technologies, improved operation, and process engineering evaluations to define long-term needs.
- AECOM - Served as wastewater process specialist for new and retrofit upgrades of various water pollution control facilities for nitrogen and/or phosphorus removal including Meriden, Cheshire, Jewett City, Bridgeport CT, Keene and Newport, NH, West Warwick, RI, Cranston, RI, Westborough, MA, Moorefield WV, Back River, Patapsco, MD, Blue Plains DC amongst others.
- AECOM - Served as blue ribbon panel member for the City of Spokane, Washington's low phosphorus treatment piloting program.

The City is currently investigating new technologies to achieve very low, < 0.01 mg/L TP.

- AECOM - Served as core team member for the WERF funded Nutrient Challenge Program.
- PC – Providing technical process review and technical advice for an on-going upgrade for EBPR for the Hayden Area Sewer Board. New limits of < 0.05 mg/L TP are being imposed.

Water reuse

- AECOM - Served as program lead for the development of a water reuse plan for the City of Spokane, WA. Considering several membrane reuse treatment options including a membrane filtration for a hard plumbed system for use in close proximity to the WRF, as well as MBR satellite sewer mining options, for management of potentially 10 to 15% of total plant flow. Conducting demonstrations that are geared to obtain public acceptance for this technology.
- VWNA - Developed concept design and a pricing estimate for the addition of up flow sand filters to treat reuse water and discharged effluent at a 13-mgd wastewater treatment plant in Cranston that provides 3 mgd of reuse water to Florida Light & Power.

Membrane Experience

- AECOM - Served as lead technical reviewer for various MBRs treating domestic wastewater including Davies, FL 6 mgd MBR facility, Aramco KAPSARC Sewage Treatment Plant, Saudi Arabia 0.3 mgd MBR facility, LNR Private Development Weymouth MA 0.5 mgd MBR facility and Kukui'ula HI MBR facility.
- AECOM - Served within the technical review team for a specialty MBR Projects, Logan Township, NJ. Project coupled a MBR with Advanced Oxidation and Reverse Osmosis for indirect potable water reuse.
- VWNA - As central support director for contract operations firm, evaluated and corrected operational and warranty issues for operating Cohasset MA MBR facility.

Biosolids

- PC- Served as a technical consultant for new biosolids technology equipment/services provider (EnerTech). Duties include conducting detailed material and energy balancing, managing path to regulatory approval, and advising and assisting technology provider a path forward in establishing a presence in the US market.
- PC- Serving as a Science Board Member for BCR Environmental, Jacksonville, FL.
- PC – Providing technical oversight for a technology provider (BCR Environmental). BCR has an on-going effort to improve expand market share for their physical/chemical processes which produce Class B and Class A biosolids.
- PC – Leading technical program for a technology provider (BCR Environmental). BCR has an on-going effort to expand market share into physical/chemical processes pretreating for enhancing digester gas production in anaerobic digesters.
- PC- Serving as a technical consultant for new biosolids technology equipment provider (THPM). Duties include advising and assisting technology provider a path forward in establishing full-scale demonstration.

- AECOM - Served as a technical advisor for ongoing biosolids master plan for Bridgeport, CT. Bridgeport has two BNR facilities, a 12 mgd and 32 mgd. This master plan addressed biosolids processing needs for both of these facilities
- MWRA - Represented MWRA engineering/operation team during design and start-up of all treatment works. Treatment works included biosolids processing that consisted of the processing of 200 tpd. Facilities consisted of pre and post thickening; anaerobic digestion and digester gas utilization is a co-generation facility.
- MWRA - During first 3 years of post-start-up operation, responsible for developing and carrying-out biosolids processing and energy recovery systems optimization program.
- VWNA - Provided technical services support for over 250 operating wastewater treatment plants operating in North America. Biosolids processing unit processes (thickening, stabilization, dewatering, incineration, energy/product recovery, etc.) were all common issues for these facilities. Solutions were varied, but generally consisted of evaluation and implementation of the most cost effective solutions.

Energy Recovery

- AECOM - Served as technical specialist evaluating digester gas utilization opportunities for Philadelphia Water Department. Provided follow-on technical review for selected utilization improvement scheme; cogeneration application using internal combustion engines for electrical power.
- AECOM - Served as technical review for the Blue Plains biosolids conceptual design. This project evaluated several biosolids stabilization/energy recovery schemes for DCWASA's 370 TPD biosolids stream.
- AECOM - Served as technical lead for providing third party technical review for the Stamford, CT gasification project. This project consists of a mixed 40 TPD biomass (biosolids-wood) gasification-2 MWE electrical generation scheme geared to reduce current WWTP O&M costs.

International

- AECOM - Served as external wastewater process lead for the master planning effort defining upgrade of the Auckland, NZ advanced treatment works.
- AECOM - Served as external wastewater process specialists for AECOM's Hong Kong work associated with the Harbour Area Treatment System (HATS).
- AECOM - Served as external wastewater process specialist for AECOM's Hong Kong work associated with the relocation of the Shatin WWTF.
- AECOM - Served as external wastewater process reviewer for AECOM's United Kingdom work associated with the Beckton Thames Water wastewater treatment improvement project.
- VWNA- Served as VWNA North America R/D treatment lead for coordinating NA research efforts and findings with Rest-of-World (ROW) research efforts. ROW efforts were generally carried-out at VeoliaWater's Maisons-Laffitte research facility located outside Paris, France.

High Rate Anaerobic Treatment Experience

- Master's Thesis – University of Lowell 1978 – Topic “The Treatment of Apple Processing Wastewater by the Anaerobic Filter Process”
- PhD Dissertation – Northeastern University 1985 – Topic “The Anaerobic Rotating Contactor: Process Analysis”
- AECOM – Provided technical review for a feasibility study comparing an anaerobic sludge blanket system to existing aerobic lagoon treatment for a recycle paper mill.
- VWNA - Technical lead for a new design Upflow Flow High Rate reactor for improving sludge treatment. Project goals were to demonstrate reliable performance at relatively short HRTs.
- VWNA - Technical lead for demonstrating methods for enhancing conventional anaerobic sludge digestion. Project goals were geared to demonstrate techniques for enhancing performance, or increasing organic load.
- PC - Team Leader for High Rate Anaerobic Treatment Demonstration Project. Design, constructed and evaluate performance for a 750 gpd anaerobic filter demonstration. Project goals included process confirmation, as well as obtaining management buy-in and provide plant staff training/knowledge for anaerobic treatment. These demonstrations lead to the construction of a full-scale Biothane upflow blanket reactor and aerobic polishing waste treatment system.
- Dynatech – Conducted R/D on Physical/Chemical Treatment of “Hard-to-Degrade” Feed Stocks Followed by Thermophilic High Rate Anaerobic Treatment. Houston Power & Light Funded Research Program investigating and demonstrating the feasibility of converting lignite (soft coal) to methane gas for energy recovery
- Dynatech - Conducted R/D on Physical/Chemical Treatment of Digested Sewage Followed by Thermophilic High Rate Anaerobic Treatment. NYSERDA Funded Research Program investigating and demonstrating the feasibility of lessen sludge disposal costs and additional energy production by “twice” digesting sewerage sludge.
- Dynatech - Conducted R/D on the production of Calcium Magnesium Acetate (CMA) from Waste Materials Using Halophiles. DOT Funded Research Program investigating and demonstrating CMA production from waste products. Research centered on using halophilic organisms to produce 10% acetic acid product.



Julia Aranda, PE Principal Engineer



Firm

- MNS Engineers, Inc.

Areas of Expertise

- Water/wastewater infrastructure rehabilitation, improvements, and new construction
- Program management
- Master plans
- Management of capital projects
- Engineering team management

Years of Experience

- Total: 24
- With MNS: 2 (since 2013)
- Prior to MNS: 22

Licensing

- Professional Civil Engineer, CA No. 56412

Education

- BS Engineering, California State University, Northridge, CA

Affiliations

- American Public Works Association
 - Ventura County Chapter President, 2015
- WaterReuse Association

Ms. Aranda has over 24 years of experience with water/wastewater infrastructure projects. Julia has served as project manager/engineer for a variety of potable water, recycled water, and wastewater projects, including new construction and rehabilitation projects. Specific project experience includes master plans, pipelines and pump stations, electrical system upgrades, and tank improvement projects.

Julia has served as Project Manager for a number of recycled water projects during her employment at a water district, as well as her consulting experience. She has also been actively involved in the WaterReuse Association Los Angeles Chapter for over twenty years.

Julia has also provided program management and managed as-needed engineering support services for water and wastewater utilities, including Cities of Simi Valley, Thousand Oaks, Oxnard, and Santa Barbara; Calleguas Municipal Water District; Castaic Lake Water Agency, and West Basin Municipal Water District. At MNS, Julia is a Principal Engineer responsible for serving as a technical lead to ensure projects meet the quality standards expected for our clients. Her project experience includes:

Recycled Water Master Plan, City of Oxnard, CA.

Project Manager. Prepared Recycled Water Master Plan including market assessment, hydraulic modeling, regulatory requirements, capital improvement cost estimates and overall implementation plan. Recycled water would be produced at the City's recently completed Advanced Water Treatment Facility and serve municipal, industrial and agricultural customers.

Recycled Water Implementation Plan, City of Oxnard, CA.

Project Manager. The Recycled Water Implementation Plan is an institutional and programmatic 'road map' for the City to implement a Recycled Water Program. This included Customer Agreements, retrofit responsibilities, sample City Ordinance, recycled water rates, staffing recommendations and on-going funding needs.

Water Operations Support, City of Oxnard.

Project Manager. Currently serving as Interim Water Supply Manager for the City. Responsibilities include oversight of groundwater, imported water and recycled water supplies and improvements. Coordination with water suppliers and groundwater management agency.



Recycled Water Master Plan, City of Santa Paula, CA. *Project Manager.* Scope included market assessment of potential customers within and outside City limits, including landscape irrigation, agricultural use and groundwater recharge. Prepared evaluation of phasing alternatives, impacts to groundwater basin, recommended City ordinance, retrofit requirements for customers, regulatory requirements, operational requirements and preliminary construction cost estimates.

Recycled Water Pipeline Extension Phase 1B-1, Castaic Lake Water Agency, Santa Clarita, CA. *Project Manager.* Responsible for design of extension to 24-inch recycled water pipeline including crossing under Interstate 5 in Caltrans right-of-way.

Recycled Water Phase 2 Preliminary Design Report, Castaic Lake Water Agency, Santa Clarita, CA. *Project Manager.* Responsible for preparation of analysis of three alternatives for expansion of recycled water system. Project required coordination with retail purveyors and Los Angeles County Sanitation Districts, layout of facilities, hydraulic modeling, market assessment, preparation of construction cost estimates, evaluation of permitting requirements and investigation of utilities.

Recycled Water Pump Station PS-1 Upgrades, City of Burbank Water & Power, CA. *Project Manager.* Responsible for preliminary and final design of upgrades to existing pump station at Burbank Water Reclamation Plant. Pump station expansion from 1,650 GPM to 5,500 GPM.

Valhalla Recycled Water Main Extension, City of Burbank Water & Power, CA. *Project Manager.* Responsible for preliminary and final design, and services during bidding of a recycled water main to convey recycled water from the existing recycled water system to Valhalla Memorial Park and Cemetery and other recycled water customers in its vicinity. Included 6,500 feet of 8-inch and 12-inch distribution pipeline.

Miscellaneous Wellfield Improvements, Calleguas Municipal Water District, Thousand Oaks, CA. *Project Manager.* Responsible for preliminary design and final design of civil site improvements (paving and erosion control), mechanical and piping improvements, and electrical and security improvements.

Salinity Management Pipeline Phase 1D, Calleguas Municipal Water District, Thousand Oaks, CA. *Project Manager.* Responsible for preliminary and final design of

54-inch high-density polyethylene pipeline, including 30-inch pipeline connection to Camrosa Water District's Water Reclamation Facility.

La Colina Force Main No. 2, City of Santa Barbara, CA. *Project Manager.* Responsible for preliminary design and detailed design of a parallel 3,300-foot, 8-inch force main and valve vault. The scope included evaluating pipeline materials, transient analysis, consideration of temporary bypassing requirements, construction phasing and cost estimates preparation. Plans and specifications were prepared for high-density polyethylene pipe.

Tapia Water Reclamation Facility Primary Clarifier Rehabilitation, Las Virgenes Municipal Water District, CA. *Project Manager.* Responsible for evaluating concrete degradation, mechanical equipment, and rehabilitation methods. Plans and specifications for first clarifier will be released for construction and lessons learned applied to remaining four clarifiers.

Tapia Water Reclamation Facility Channel Mixing Improvements, Las Virgenes Municipal Water District, CA. *Project Manager.* Responsible for preparing plans and specifications to replace various mixing systems in the facility's channels, including grit chamber effluent channel, primary clarifier feed channel, aeration basin feed channel, mixed liquor channel, and return activated sludge channel.

Tapia Water Reclamation Facility Headworks Rehabilitation, Las Virgenes Municipal Water District, CA. *Project Manager.* Responsible for design-build of improvements to the headworks facility, including replacing the bar screens, weirs, grating, electrical, and instrumentation.

Edward C. Little Water Recycling Facility Reverse Osmosis Clean-in-Place Discharge Alternatives Evaluation, West Basin Municipal Water District, CA. *Project Manager.* Responsible for evaluating alternatives for the discharge of clean-in-place solution from the reverse osmosis process. The evaluation included quantifying volumes of potential discharge, coordinating with the Los Angeles County Sanitation Districts and City of El Segundo, sizing new sewer lines, evaluating storage capacity, and evaluating the conversion of the existing abandoned lime clarifier to a storage facility.



Wilhelm Nowotny, PMP

Construction Services Manager

Firm

- MNS Engineers, Inc.

Areas of Expertise

- Construction Management
- Construction Inspection
- Water and Wastewater
- Capital Project Development
- Alternative Deliver Methods: Lump Sum, Design-Build, CMAR/GMP

Years of Experience:

- 32

Certifications

- Project Manager Professional (PMP), Project Management Institute, PMI No. 1575372

Education

- M.A. Public Administration, the George Washington University, D.C.
- B.A. Political Science/Economics, Texas A&M University

Associations

- Project Management Professional, PMI Institute No. 1575372
- Design Build Institute of America, Houston Chapter President

Mr. Nowotny is a seasoned construction professional with over 32 years of experience leading multidisciplinary teams in the successful completion of over \$3 billion in large complex water and wastewater projects throughout the United States, the Dominican Republic, and Peru. Wilhelm's broad experience includes all aspects of large capital project development processes from design management through project closeout. He is proficient in all alternative delivery methods including lump sum, design-build, and CMAR/GMP. His success in the industry is centered around a strong drive to provide the customer with outstanding results—on time and on budget. Mr. Nowotny's experience in team building includes both design and construction professionals. His project experience includes:

Central Area Leader, Houston, TX. *Central Area Operations Director.* Wilhelm was responsible for coordination between the engineering and construction teams to ensure proper synthesis between design and construction operations. He also mentored the site construction management team, provided guidance in resolving project issues, developed and maintained a close relationship with key project stakeholders, and developed individual project critical path schedules and project management plans. He was responsible for all project key performance indicators, safety, quality, budget, and schedule. Throughout the project, Wilhelm negotiated and resolved potential difficult project issues with the owner.

District 1, MWH Constructors, Inc., Tampa, FL. *Director of Eastern Operations.* Wilhelm was responsible for the overall success of MWH Constructors operations in the eastern United States. Wilhelm, the construction expert for MWH Global, served on the internal risk assessment team to evaluate and mitigate risks associated with the design engineer's work for the consortium constructing the expansion of the Panama Canal.

Greenfield Wastewater Treatment Plant and Collection System (\$400M), City of Arequipa, Peru. *Project Executive.* Wilhelm coordinated the efforts of MWH US and MWH Peru design teams to ensure timely delivery of project design documents for this new \$400M 1,800 LPS trickling filter wastewater treatment facility in Arequipa, Peru.

He led the MWH permit team in securing design approval and permits to construct the project in 50% less time than



it normally takes to get such approval. Over 40 public meetings were held as required in the permitting process. He also led the translation team tasked with translating more than 1,100 project drawings and 30,000 pages of specifications from English to Spanish. Wilhelm served as the wastewater duty expert for the Fluor EPCM team and successfully negotiated the main project construction contract based on FIDIC documents.

Expansion of City of Tallahassee Water Recycle Facility (\$168M), Tallahassee, FL. *Project Director.* Wilhelm increased budgeted gross profit from 6.5% to 8.5% using innovative contracting strategies and aggressive scheduling. He developed a partnership with Florida State and Florida A&M to utilize their top construction and engineering students to serve as interns on the project. At one time, the project was staffed with seven interns. His efforts to train and motivate the project team resulted in a true safety culture that enabled the project to exceed two million man-hours without an OSHA recordable incident.

Greenfield Membrane Wastewater Treatment (\$50M), Regional Wastewater Operating Authority, Greenville, SC. *Project Director.* Wilhelm maximized shared savings by leading the project team to exceed a very aggressive completion schedule by two months, returning to the Owner over \$2M in savings. He motivated and coached the project team into a collaborative partnership with the local contractors. This contributed to the project's success in exceeding one million man-hours without an OSHA recordable incident. This project was Awarded Runner up in ENR Southeast Region, Project of the Year 2012.

Panama Canal Expansion Project, Construction of the Third Set of Locks. *Construction Liaison for Executive Risk Committee.* Wilhelm's duties included identification of risk elements in the design requirements of the project and the potential impacts on construction. He served as an intermediary between the MWH project design team and the three main members of the construction joint venture, Grupos Unidos por el Canal (GUPC).

Expansion of Existing Water Reclamation Facility (\$212M), Pima County Water Reclamation Facility, AZ. *Project Director.* Wilhelm led pre-construction efforts to include final development and negotiation of the \$212M guaranteed maximum price contract. He used internal and outside resources to recruit and train a project team of 28 full time professionals. Wilhelm developed an extensive critical path schedule for use by the project team in completing the project.

Biwater International, Santo Domingo, Dominican Republic (DR). *General Manager.* Wilhelm was responsible for construction operations of this British multinational water/wastewater contractor in the Dominican Republic. He developed the training program for the company's construction management team to ensure successful completion of various projects.

San Francisco de Macoris Water Treatment System, Refurbishment and Enlargement of Existing Water Treatment Plant (\$178M), San Francisco de Macoris, DR. Wilhelm assumed responsibility for this project at 40% of completion with 70% of the budget and schedule exhausted. He completed major buyout of ductile iron pipe saving \$12 million against projected cost and obtained a two month time extension from governmental authority, INAPA. The project was completed within the allotted time.

Bani Water Treatment Plant Expansion (\$43M), Bani, DR. Wilhelm recruited and organized the project team. His leadership of the procurement effort saved \$20M in projected costs through use of worldwide resources. The project brought potable water to over 150,000 residents.

Low Pressure Membrane Water Treatment Plant (\$75M), Yuma, AZ. Wilhelm negotiated with Yuma City officials for first ever project completed under an alternative delivery method, Construction Manager at Risk (CMAR). He led the team through a successful schedule development, buyout, and construction planning. The project completed as planned.

JF Shea Construction Company, Brea, CA. *Senior Project Manager.* Wilhelm was responsible for the day-to-day field management of the expansion LACSD's Valencia Water Reclamation plant expansion (LACSD) and Hill Canyon Water Reclamation facility (City of Thousand Oaks, California).

McCarthy Building Company, Phoenix, AZ. *Senior Project Manager.* Wilhelm was responsible for the construction of a water treatment facility (City of Scottsdale) and the 91st Avenue Wastewater Treatment Plant Expansion (City of Phoenix), totaling over \$100M.

South County Wastewater Treatment Plant Expansion Project, The Poole and Kent Company, Pinellas County, FL. *Project Manager.* Wilhelm assumed responsibility for the expansion of the South Cross Bayou Water Treatment Plant expansion after the original contractor was terminated. He directed reconstruction of non-complying work and completion of the balance of the work.



Kim Lindbery, PE

Resident Engineer

Firm

- MNS Engineers, Inc.

Areas of Expertise

- Wastewater treatment facilities
- Water and sewer lines
- Construction management
- Project oversight
- Caltrans procedures

Years of Experience:

- 21

Licensing

- Professional Civil Engineer, CA No. 50984

Education

- B.S. Civil Engineering, California Polytechnic State University, San Luis Obispo

Ms. Lindbery has significant career experience in project management for civil design and construction management, specializing in water resources and wastewater projects. She has more than 15 years of experience in construction management for sewer and wastewater projects in particular. Kim was previously a Senior/Principal Engineer with the Contra Costa Water District, overseeing capital improvement projects with costs up to \$65M. She is well-versed with Resident Engineering, project inspection, public relations, hazardous materials, multi-agency coordination and environmental restrictions. Her relevant experience includes:

Supplemental Water Project, Nipomo, CA. Kim is the Construction Manager for this \$14M supplemental water project for the Nipomo Community Services District. The project involves three separate construction contracts—Horizontal Directional Drilling (HDD) of 2600 ft of 30” HDPE Pipe under the Santa Maria River, 24” DIP, and jack and bore; Blosser Road Waterline which includes 5,000 ft of 18” pipeline and 270 ft of 36” jack and bore under the Santa Maria levee; and construction of a new Pump Station that includes construction of a reinforced concrete booster pump station, electrical system (including portable backup generator), water chloramination system and appurtenances, approximately 1720 LF of all-weather access road to the pump station site, 1750 LF of 24-inch ductile iron pipe, a pressure reducing station, and chloramination systems at four separate existing water wells in Nipomo. The project is being constructed within a highly sensitive environmental habitat requiring extensive coordination with permitting agencies.

Southland Wastewater Treatment Plant Upgrade, Nipomo, CA. Kim was the Construction Manager for this \$11M wastewater treatment plant upgrade and expansion project for the Nipomo Community Services District. Construction included converting the existing aeration basins to the Biolac® Wave Oxidation System, which is an extended aeration process; constructing clarifiers; and converting existing ponds to aerated sludge holding lagoons. Additional project elements involved replacing the existing pump station, including a new reinforced concrete wet well and installing new screw centrifugal pumps; constructing a new masonry block electrical building; constructing new headworks, including two parallel shaftless screw screens and a vortex grit removal system to increase effluent quality and to reduce maintenance issues; and associated yard



piping. This project required close coordination with the existing plant staff and operations to avoid any unanticipated disruption to the existing plant operations.

Wastewater Treatment Plant Upgrade, City of Paso Robles, CA. Kim was RE/Inspector for this \$4M waste water treatment plant upgrade and expansion project. Duties also included contract administration and inspection. Project included construction of concrete digester, digester control building, above-ground steel sludge holding tank, dewatering facility, upgrades of two digesters, installation of mixing pumps, relocation of PG&E transformer, and installation of a new switchgear box and piping.

Southland Wastewater Treatment Plant Upgrade, Nipomo, CA. Kim provided inspection services for the City's 30" PVC sewer interceptor and upgrade project located at River Road.

Hollister Bridge Replacement, Cuesta College, San Luis Obispo, CA. Kim acted as Senior Inspector for this \$2M bridge replacement project on the Cuesta College campus. It involved construction of a 160-ft single-span, cast-in-place, pre-stressed concrete bridge over Chorro Creek. Creek diversion and restoration were a major part of the project. This project required permitting from Regional Water Quality Control Board and California Department of Fish & Game, US Fish & Wildlife, NOAA Fisheries, and Army Corps of Engineers. Utility coordination and installation of temporary utility lines were required. Also, the project involved extensive interaction with the State Department of Architecture.

City Street Reconstruction Project, City of San Luis Obispo, CA. Kim was Resident Engineer/Inspector for his \$700k street improvement and pavement reconstruction project. Work consisted of surface grinding, removal and replacement of asphalt concrete, curb and gutter reconstruction, striping and pavement markers, and reconstruction of associated utility, drainage and surveying monuments. The project required significant coordination with the City and the public throughout the project.

Various Projects, Contra Costa Water District, Concord, CA. As Senior/Principal Engineer, Kim was responsible for contract administration, inspection and project staff supervision, plan and specification preparation and review, construction management, as well as public relations and partner liaison activities.

Sample project experience in this position includes:

- **Main Street Relocation:** Project involved installation of new 16" PVC pipeline due to widening of Hwy 680 by Caltrans for approximately 3,000 feet. Extensive coordination with Caltrans, the City and other utilities was required for relocation work.
- **Multi-Purpose Pipeline Project:** \$65M transmission main project including over 20 miles of 24" pipeline and a new pump station. Project included heavy environmentally sensitive areas and coordination with several Cities, the County, Caltrans, and the Naval Weapons Station.
- **Port Chicago Pipeline:** \$5M, 36" diameter transmission main approximately 11,000 ft. The pipeline was placed within a main arterial street requiring extensive coordination with local agencies as well as Naval Weapons Station. The project included jacking and boring under an existing canal and extensive daily traffic control.
- **Mallard Slough Pump Station and Pipeline Project:** \$11 million pump station reconstruction and pipeline replacement within the delta involving strict environmental requirements, as well as biological monitoring. Jack and boring was required at 3 locations to get under oil pipelines and the Railroad. Project also included over 8,000 ft of 36" diameter pipe and management of hazardous materials. Significant public outreach and coordination with Oil Company, County, and City was required.
- **Canal Repair Project** – This project involved bypassing and dewatering of Contra Costa Canal in sections to allow removal of damaged concrete panels. Dewatering required a "fish ambulance" to save and protect any fish caught in the dewatered sections. Repairs were made by filling and compacting voids left behind leaking panels, and new panels were installed with rebar and shotcrete.
- **Naval Weapons Station 24" Intertie** – Project was to construct an intertie to existing pipeline system on the Concord Naval Weapons Station for approximately 1,500 feet. Included coordination with the Navy and monitoring for hazardous materials and protected species.
- **Bay Point Pipeline Project** Installation of a 16" pipeline within Contra Costa County and the Naval Weapons Station. The pipeline involved trenching through a creek habitat, wetland protection, potential hazardous waste and species monitoring as well as coordination with the Navy and neighboring residential community.
- **Mallard Intertie:** \$3 million pipeline project involving removal and replacement of an existing inlet to the major reservoir for Contra Costa Water District. New pipeline was 3,000 feet of 48" diameter pipe.



Donald J. Spates

Construction Inspector

Firm

- MNS Engineers, Inc.

Areas of Expertise

- Reinforced concrete and masonry
- Structural steel
- Project management
- Construction inspection

Experience with MNS

- Since 2008

Experience with Others

- 20 years

Certifications

- Structural Masonry Inspector – ICC and DSA
- Reinforced Concrete Inspector – ICC and ACI

Professional Development

- Construction Management Cost Control and Scheduling courses

Mr. Spates brings over 25 years of experience in the construction field including project supervision and inspection on water and wastewater facilities and pipelines. Specialty inspection experience also includes masonry, reinforced concrete, structural steel, metal stud framing, and underground piping. He is skilled at interpreting plans and specifications to mitigate cost and schedule risks, ensuring a cost effective and timely work flow. Donald is an excellent project team supervisor and strives to implement resource saving solutions. His project experience with MNS includes:

Supplemental Water Project, Nipomo, CA. Donald is the Construction Inspector for this \$14M supplemental water project for the Nipomo Community Services District. The project involves three separate construction contracts—Horizontal Directional Drilling (HDD) of 2600 ft of 30” HDPE Pipe under the Santa Maria River, 24” DIP, and jack and bore; Blosser Road Waterline which includes 5,000 ft of 18” pipeline and 270 ft of 36” jack and bore under the Santa Maria levee; and construction of a new Pump Station that includes construction of a reinforced concrete booster pump station, electrical system (including portable backup generator), water chloramination system and appurtenances, approximately 1720 LF of all-weather access road to the pump station site, 1750 LF of 24-inch ductile iron pipe, a pressure reducing station, and chloramination systems at four separate existing water wells in Nipomo. The project is being constructed within a highly sensitive environmental habitat requiring extensive coordination with permitting agencies.

Southland Wastewater Treatment Plant Upgrade, Nipomo, CA. Donald was the Construction Inspector for this \$11M wastewater treatment plant upgrade and expansion project for the Nipomo CSD. Construction included converting the existing aeration basins to the Biolac® Wave Oxidation System, which is an extended aeration process; constructing clarifiers, and converting existing ponds to aerated sludge holding lagoons. Additional project elements involved replacing the existing pump station including, a new wet well and installing new screw centrifugal pumps; constructing a new masonry block electrical building; constructing a new headworks, including two parallel shaftless screw screens and a vortex grit removal system to increase effluent quality and reduce maintenance issues; and associated yard piping. This project required close coordination with the existing plant staff and operations



to avoid any unanticipated disruption to the existing plant operations.

City of San Joaquin Wastewater Plant, City of San Joaquin, CA. Donald was the construction Project Manager for this \$3.5M wastewater treatment plant upgrade project. He was responsible for managing all aspects of constructing new waste water facility including procurement and issuing purchase orders, building and updating project schedule, review and submittals for all materials and equipment, managing monthly progress payments, planning and implementing construction phases of project, estimating and writing proposed change orders and implementing those changes into project schedule, directing flow of construction to superintendents, responsible for answering all written communication pertaining to project and managing construction within schedule and budget. The project consisted of constructing a mechanical screen structure, oxidation ditch, mixed liquor splitter box, two secondary clarifiers, scum pump station, RAS/WAS pump station, two sludge beds, decant structure and sludge decant pump station, effluent flow meter structure, electrical building and new pecculation pond and yard piping for a complete usable facility.

Water Treatment Plant Upgrade, City of San Luis Obispo, CA. As Construction Inspector, Donald specialized in reinforced concrete inspection on this water treatment plant upgrade project. Upgrades included a new clarifier, oxidation tanks and centrifuge building.

California Men's Colony Water Treatment Plant, San Luis Obispo, CA. For this \$80M new water treatment plant project, Donald's role was general foreman responsible for concrete, masonry, structural steel, and piping. He was responsible for procurement and supervising construction of clarifiers, oxidation tanks, and poured in place concrete buildings. Masonry and structural steel were required in five buildings, including high strength bolting and welding, installation of various pumps and mechanical equipment and piping associated with the new plant.

Henry C. Garnet Water Purification Plant Expansion, Kern County Water Agency, CA. The Garnet Plant is a conventional water treatment facility that is being expanded from a peaking capacity of 38 million gallons per day (mgd) to 72 mgd with the contracted annual production increasing from 25,000 to 53,000 acre-feet (af) during a 30-year ramp-up period. MNS provided project inspection and administration for the \$70M plant expansion which included construction of a new raw

water pump station; new clearwells; new Train B flash mixing structure; flocculation and sedimentation basins; new filters, diffusers, and backwash piping and pumping system; new chemical feed facility; miles of yard piping ranging from 4" to 72"; massive excavation and grading, over 30,000 cy of structural concrete, bar reinforcement, mechanical systems, instrumentation and controls. Coordination with the plant staff was critical since daily operation could not be interrupted while constructing the new facilities and tying into the existing system. Donald was the lead inspector for this project.

Campus Infrastructure Improvements, California State University, Monterey Bay, CA. Donald provided construction inspection for underground piping and building services throughout the campus. His responsibilities included procurement and supervising construction of a structural steel building, metal stud framing, plastering, interior wall covering, tile flooring, supervising installation of piping, setting vaults, installing valves, piping mechanical rooms at each entrance, supervising excavation and backfill of pipe line, and hydrostatic testing of pipelines.

New Library Construction, Cuesta College, San Luis Obispo, CA. Donald provided construction inspection for this 3-story library expansion project, including concrete reinforcing and placement and masonry construction.

Assistant Superintendent, The Ryan Company. Donald's responsibilities included directing plan interpretation of structural masonry, reinforced concrete, structural steel, metal stud framing, underground utilities and general lay-out of project site. His duties also included ordering materials and acting as Quality Control Officer for project. Donald was also responsible for ensuring proper interpretation of project specifications and code compliance, assisting in the allocation of manpower resources to specific job assignments, and conducting weekly safety meetings and ensuring that safety procedures are followed on project site

Independent Special Inspector – Reinforced Concrete and Structural Masonry. Donald performed all aspects of inspection and quality control pertaining to reinforced concrete and structural masonry. He was responsible for adherence to project specifications, applicable codes and quality of materials, as well as daily reports and verification of material testing.



Craig Caballero

Construction Manager / Inspector

Firm

- MNS Engineers, Inc.

Areas of Expertise

- Land development
- Constructability review
- Project management
- Roadway construction
- Underground Utility Construction
- Personnel Management
- Project management

Years of Experience: 29

Licensing

- General Engineering Contractor, CA 962753
- General Building Contractor, CA 962753

Education

- Shoring design and safety and Confined space testing and safety, URC
- Traffic Control and Safety, American Traffic Safety Services Association
- Uniform Building Code, Architecture, Construction Management, Cuesta College
- Advanced Land Surveying, Allan Hancock College
- Architecture, CAD Design, Advanced Welding, Allan Hancock College

Mr. Caballero has over 29 years of experience in the construction industry as a construction manager, inspector, builder, surveyor, civil design engineer, and estimator for all phases of and public improvement projects, residential, and commercial projects. As owner of his own construction firm he was responsible for managing field crews and inspecting all work done by his crews. As a contractor and inspector, he has performed various services including land surveying, design & drafting, soils sampling and testing, earthwork excavation for public and private roads, overseeing AC paving, traffic control, retaining walls, pipe line design and construction for both public and private developments, large drainage systems including RCP, HDPE, CMP, Storm-Tec Chambers and underground storm water retention basins, sewer lift stations, large scale sewer septic systems, structural concrete designs, gray water management and system design. He also served as Project Manager for public works projects including roads, storm drains, underground utilities and pipeline construction. Safety manager for excavation, shoring, confined space and certified in traffic control by ATSSA. His project experience includes:

Los Osos Water Recycling Facility Project, County of San Luis Obispo

Craig is the lead inspector for this \$48 million 1.2 MGD greenfield water recycling facility that includes commissioning of a 4,700 new lateral collection system for the Los Osos community of approximately 14,000 residents. The project construction includes the following: Administration Building; Maintenance Building; Headworks/Septage Receiving; Oxidation Ditches; Secondary Clarifiers; Scum Pump Station; RAS/WAS Pump Station; Filter Influent Pump Station; Tertiary Filters; UV Facility; Chemical Facility; Effluent Pump Station; Aerated Sludge Storage Tanks; Dewatering Building with Truck Loading Station; Electrical Building; Groundwater Wells and Pumps; Water Storage Tank; Recycled Water Storage Ponds; Storm Water Retention Pond; Plant Drain Pump Station; Storm Water Pump Station; all associated electrical, instrumentation, and control systems; yard piping; paving; grading and excavation; landscaping and irrigation; constructing a new plant entrance road. Administration was web based and 100% digital and paperless. Responsibilities includes project inspection, tracking pay items and quantities, project coordination, submittal and RFI review.



Los Osos Waste Water Collection System, County of San Luis Obispo**Contract No. 300448.08.01.BC**

This is a \$30 million dollar contract to install a new waste water collection system in the town of Los Osos Baywood. This project included 81,500' of 8" to 18" gravity sewer 5' to 25' deep, 600 pre-cast manholes 5' to 25' deep, 1 Triplex pump lift station, 3 duplex lift stations, 1 pocket pump lift station, 20,000' of Stormtec infiltrator Effluent disposal field, 100,000,000 gallons of dewatering from 85 dewatering wells, 17,000' of 6" to 16" sewer force main, 46,000' recycled force main (including feed lines at E.D.S. Field), 27,500' of fiber optic duct banks, 30,000 tons of HMA(including trench patching and full width reconstruction), 30,000 cubic yards of ClassII aggregate Base, 800' of 30" and 36" Jack & Bore, miscellaneous concrete replacement, and 400,000 sf of native plant re vegetation,. Craig was the Resident Project Representative, the lead inspector responsible for project inspection, collecting and measuring all daily quantities, traffic control compliance, SWPPP compliance, monitoring all dewatering discharge to Morro Bay, monitoring compliance with E.S.A. areas, monitoring contract requirements for Native American sensitive areas, setting all limits of HMA trench repair paving, processing monthly pay estimates, recording all dewatering discharge data, providing asbuilt data, and work directly with the community liaison to address public contacts.

Los Osos Waste Water Collection System, County of San Luis Obispo**Contract No. 300448.08.01.AD**

This is a \$26.5 million contract to install a new waste water collection system in the town of Los Osos Baywood. This project included 111,000 of 8" to 18" gravity sewer 5' to 25' deep, 600 pre-cast manholes 5' to 25' deep, 1 Triplex pump lift station, 6 duplex lift stations, 17 pocket pump lift station, 100,000,000 gallons of dewatering from 85 dewatering wells, 12,000' of 6" to 16" sewer force main, 8100' recycled force main, 35,500' of fiber optic duct banks, 35,000 tons of HMA (including trench patching and full width reconstruction), 36,000 cubic yards of Class II aggregate base. Craig was the construction inspector responsible for monitoring crews as directed by the Resident Project Representative.

Los Osos Waste Water Collection System, County of San Luis Obispo**Contract No. 300448.08.01.PS**

This is an \$8.7 million contract to install a new waste water collection pump system in the town of Los Osos. This project included 2 Triplex pump lift station, 9 duplex lift stations, 18 pocket pump lift station, installation of all

pipng and mechanical systems, pump system LCP, 6 backup generator standby buildings, and installation of control and communication systems. Craig was a construction inspector responsible for monitoring crews as directed by the Resident Project Representative.

Black Road Sewer Treatment Plant Expansion, Santa Maria, CA. This was a \$10 million waste water treatment plant expansion that built two processing tanks and expanded the settling ponds including all the underground utility construction, concrete, grading, this expansion doubled the capacity of the existing plant.

Teddy Bear Development Theodora & Bruno St., Nipomo, CA. Craig provided design support and construction oversight of this 146 unit development in Nipomo. Craig performed a constructability review of all construction documents, design support for the owner, and oversaw all onsite and offsite grading and civil improvements. The project included approximately 75,000 cy of grading and excavation; removal of over 250 trees; underground utility construction for two public streets and one private street. Improvements included drainage facilities and sewer manholes; 3600 ft. of 8" sewer mains 6' to 14' in depth; 1500 ft. of 12" water mains 6' to 7' in depth; installation of all fire hydrants, 5,000' of dry utilities; roadway construction for both public and private; 10,000 tons base and 5,000 tons of AC paving; storm water retention basins that included placement of 10,000 tons of 1-1/2" rock, on-site curbs, gutters, and sidewalks; landscape irrigation.

Highway 1 and 24th Street, County of San Luis Obispo, CA. Craig was the Construction Manager for this improvement project which reconstructed a portion of Highway 1. The project consisted of significant grading, underground utility construction and relocations, highway reconstruction including placement of Class II base; AC paving; 18" HDPE storm drain and manholes; 8" sewer line 5' to 10' in depth, poured in place and precast sewer manholes; daily traffic control; retaining walls; fencing; curb, gutter and sidewalk; and placement of 5000 tons of rock gabions to stabilize the area due to the shallow ground water table. Highway construction was performed in accordance with Caltrans standard plans and specification. Craig's duties included daily reports, coordination, traffic control monitoring, tracking quantities, SWPPP adherence, field engineering.



Mark E. Reinhardt, PLS

Principal Surveyor



Firm

- MNS Engineers, Inc.

Areas of Expertise

- Land surveying project management
- Municipal survey services
- Right-of-way services and documents
- Caltrans standards

Years of Experience

- Total: 38
- With MNS: 28 (since 1987)
- Prior to MNS: 10

Licensing

- Professional Land Surveyor, CA 6392

Education

- BA Geology, University of Montana, Missoula, MT
- AS Land Surveying, Flathead Valley Community College, Kalispell, MT

Affiliations

- American Congress on Surveying and Mapping
- American Council of Engineering Companies
- California Land Surveyors Association
- International Right of Way Association
- Rotary International

Mr. Reinhardt has significant career experience in land surveying and oversees all of the firm's surveying activities. Along with managing a full range of survey services, Mark is the contract City Surveyor for the Cities of Malibu, Carpinteria, Buellton, and Greenfield. His responsibilities include reviewing all parcel maps, tract maps, lot line adjustments, and other land development projects. He is also knowledgeable and experienced in preparing resolutions and back up data for roadway vacations and other special projects related to City real estate projects.

Mark has extensive expertise in right-of-way engineering and has prepared design surveys, right-of-way maps, appraisal maps, deeds, and legal descriptions for several State Highway projects using Caltrans standards. Mark has provided right-of-way engineering services and documents for several roadway projects within the Counties of San Benito, Monterey, San Luis Obispo, Santa Barbara, Ventura, Los Angeles, San Joaquin, and Kern. He is very effective in coordinating the needs of various agencies on a project. His project experience includes:

Mesa Road/Phelps Road Trunk Sewer, Goleta West Sanitary District, CA. *Principal Surveyor/Project Manager.* This project replaced and rerouted 11,400 feet of trunk sewer line. Surveying services included preparing a base map, which included aerial topographic mapping and color digital ortho-photo preparation; conducting a thorough field survey of all hardscape and utilities along the entire corridor; performing extensive boundary and right-of-way retracements along with the research and retracement of numerous sanitary sewer easements in favor of the District; and preparing grant deeds, legal descriptions, and plats for the acquisition of new sewer line alignment and for temporary construction purposes to remove the old line and for construction. Following completion of the mapping and easement study, MNS provided quitclaim deeds with legal descriptions and plats to extinguish easements no longer used following the new trunk line construction. The budget was significantly reduced by using one-person survey crews utilizing GPS and Robotic Total Station systems. Responsibilities included managing the base map preparation for design and providing assistance in eliminating various easements and acquiring others.

Silver Sands Mobile Home Park, City of Carpinteria, CA. *Principal Surveyor.* The goal of this multifaceted project addressed and resolved several issues between



the City and this private holding. Project elements included drafting a memorandum of understanding and project implementation agreement, summary vacation of several roadway segments, lot line adjustment, and Coastal Commission review effort, followed by preparing a base map and roadway design for improvements along the park frontage. Mark was instrumental in supporting the City with all aspects of accepting the engineering design, which was also completed by MNS.

Main Street Interchange at US 101, City of Santa Maria, CA. *Principal Surveyor.* This project designed new northbound off/on-ramps and other interchange improvements. Both ramps crossed a major, concrete lined flood control channel. Agencies involved each required special easements and/or fee transfers; Caltrans District 5, Santa Barbara County Association of Governments, Santa Barbara County Flood Control, City of Santa Maria, and eight private landowners. Twenty-four easements were identified through careful mapping delineation of existing rights and future needs.

North Jameson Lane Widening, Class II Bike Lanes and Bridge, County of Santa Barbara, CA. *Principal Surveyor.* This project involved widening 1.7 miles of North Jameson Lane to accommodate a Class II bike lane and replacing three creek-crossing bridges. In coordination with the Highway 101 Corridor Committee and the Montecito Association, this project required securing a coastal development permit. The completed project successfully balanced political, aesthetic, engineering, and environmental issues. MNS provided a project study report, engineering design, geotechnical study, utilities coordination, and hydraulics report for three creek crossings.

River View Park, City of Buellton, CA. *Project Manager.* This new 19-acre park featured a ceremonial pavilion, multiple picnic areas, basketball and volleyball courts, regulation horseshoe pits, children's play areas, restrooms, and playing fields. MNS provided mass grading and drainage design, oversight during the grading operation, budget oversight, construction management and inspection, surveying, and materials sampling/laboratory analysis.

City Surveyor Services, City of Buellton, CA. *City Surveyor.* Mark has served as City Surveyor since their cityhood in 1992. On an as-needed basis, responsibilities include performing and conducting all the typical duties of City Surveyor, including reviewing and/or preparing all legal descriptions, reviewing applications for lot line adjustments, voluntary mergers, annexations, certificates of compliance, etc.; producing base maps and right-of-

way maps; and construction surveying for most of the City's capital improvement projects. Mark has reviewed and approved dozens of Tract and Parcel Maps on behalf of the City.

Mockingbird Canyon Lake Bathymetric Survey and Preliminary Dredging Design Report, City of Riverside, CA. *Principal-in-Charge/Project Manager.*

This project determined the amount of sediment deposited since the construction of the Lake, performed a sediment removal operation, and restored the Lake to its certified capacity of 1,250 acre feet. Project elements included compiling the LiDAR survey for the 100-acre site, bathymetric survey of the lake bottom, conventional aerial survey, ground-based survey, and utility location survey. This project required researching and compiling property boundary, easements, utility atlas information, and field utility locations to incorporate into the project base map.

Cachuma Reservoir Bathymetric and Aerial Mapping, Cachuma Operations Maintenance Board, CA. *Project*

Manager. Managed by the Cachuma Operations Maintenance Board, the Cachuma Reservoir spans 3,293 acres. This project required preparing a project base map by conducting an aerial topographic mapping project and a bathymetric survey of the lake bed and combining the data into one, seamless elevation model. MNS developed one-foot contours from the model to create elevation vs. capacity and elevation vs. area tables. Responsibilities included managing the project, coordinating with the aerial mapping consultant and the bathymetric mapping consultant, and overseeing the survey control, base map preparation, and project report preparation.

Santa Claus Lane Pedestrian Crossing, County of Santa Barbara, CA. *Principal Surveyor/Project Manager.*

MNS conducted a traffic flow, parking, and pedestrian study along this 3,200-foot historic corridor that accesses the beach and commercial areas. Surveying services included providing the base map for design, including aerial topographic mapping, ortho-photography, utility mapping and boundary, and right-of-way mapping. During the right-of-way retracement, several discrepancies were discovered between the recorded maps, highway maps, and recorded documents. Mark performed a methodical and diligent effort to retrace the development of the right-of-way and adjacent parcels from the early 1900s to the current day. Through this effort, a Record of Survey was filed, which showed the right-of-way location and provided the public with data to correct any past discrepancies.



JACK V. IVERS
PRESIDENT

EDUCATION

Bachelor of Science Electrical Engineering, 1979
Michigan Technological University, Houghton, Michigan

PROFESSIONAL REGISTRATION

Electrical Engineer, California E 12522

AFFILIATIONS

ACEC-CA	American Council of Engineering Companies - California
IAEI	International Association of Electrical Inspectors
IEEE	Institute of Electrical and Electronic Engineers, Senior Member
NFPA	National Fire Protection Association

EXPERIENCE

Principal in Charge of electrical design for construction projects including water, waste water, educational, correctional, and healthcare facilities. With IRJ since 1985, President since 1992. Member of the California Hospital Building Safety Board from 1994 to 2002. Also responsible for feasibility, capacity, and emergency power studies. Designs have included many variations of lighting, power, security, telephone, data, fire alarm, clock, intercom, and public address systems. Related projects include pump stations and lift stations, water and wastewater treatment facilities, generator installations, and access controls at various institutional facilities.

Cal-Am Borchard Pump Station, Newbury Park, CA - This project includes construction administration services for a water pump station with three 150hp pump motors, motor control center, access control system, and radio transmitter for off-site data acquisition.

Cal-Am Warwick Pump Station, Thousand Oaks, CA - The project includes design review and construction administration services for a water pump station with a 100kW generator, one 40hp pump motor, a triplex 5hp pump motor packaged pump station, and motor control center.

Santa Ynez Pump Station near Santa Ynez, CA - This project included design services for replacement of an existing 250hp 480-volt reduced voltage starter with a new variable frequency drive. Project also included replacement of existing controls and protection for the pump and the motor, as well as integration with the existing SCADA system.

Polonio Pass Water Treatment Plant near Shandon, CA - The project included replacement of the existing 12kV service switch and a 600-amp automatic transfer switch. Project also included a complete review of the facility electrical system and design of electrical repairs to correct deficiencies.

Mesa Verde Pump Station near Santa Ynez, CA - This project included forensic analysis of a pump station with four 50hp 480-volt submersible pump motors. The analysis included a review of the incoming service, motor power connections, control connections, and instrumentation.

City of Oxnard Reclaimed Water Turnouts, Oxnard, CA - This project includes obtaining electrical services for numerous turnouts on a reclaimed water line. The project includes instrumentation to monitor quantity and quality of the the water delivered to various customers.

Limoneira Farm Workers Housing, Santa Paula, CA - The project included the electrical design and construction administration services for a sewage lift station. The design included the use of a three-phase variable frequency drive to convert single phase utility power to three-phase customer power.

Other water and wastewater experience includes several pump stations and storage tanks with the Valencia Water District, expansion of the Tapia Water Reclamation Facility in Calabasas, CA, construction observation for a 200mgd expansion of the Alfred Merritt Smith Water Treatment Plant in Las Vegas, NV, electrical service to lift stations for the City of Ventura, County of Ventura, and the Limoneira Company, and a feasibility study for a solar photovoltaic system at the Ojai Valley Sanitary District Treatment Plant in Ojai, CA.





SMITH STRUCTURAL GROUP, LLP

ATTACHMENT 2

Michael E. Parolini, P.E., S.E.

Principal Structural Engineer

Professional Registration

California Registered Structural Engineer, No. 5405
California Registered Professional Civil Engineer, No. 69340
Arizona Registered Professional Engineer, Structural, No. 53141
Hawaii Registered Professional Engineer, Structural, No. 14832-S
Mississippi Registered Civil Engineer, No. 20837
Oregon Registered Civil/Structural Engineer, No. 85894
Texas Registered Professional Engineer, Structural, No. 109653
LEED Accredited Professional, United States Green Build Council
Model Law Structural Engineer, National Council of Examiners for Engineering and Surveying (NCEES), No. 46863

Experience

Partner & Principal Structural Engineer, Smith Structural Group, LLP, San Luis Obispo, CA — 2011-Present

Responsible for Project Management, Client relations, Complete Design and Detailing of Structural Systems, Construction Administration as it relates to the field of Structural Engineering, Contributing member of project teams for various types of projects including Commercial, Industrial, Municipal, Public Safety, University, K-12, Healthcare, Retrofit, Adaptive Re-use, Structural Evaluations, Coastal Zone Structures and Residential. Management of Employees, Business affairs and day to day operations.

Lecturer, California Polytechnic State University, San Luis Obispo (Cal Poly), CA — 2007-Present

Courses Taught: Structural CAD for Building Design & Small Scale Structures, Responsible for the preparation of all materials relating to course documentation to achieve continued ABET Accreditation for the Architectural Engineering Program.

Senior Project Engineer, Lampman & Smith, San Luis Obispo, CA — 2007-2011

Responsible for Project Management, Architect and Client relations, Complete Design and Detailing of Structural Systems, Construction Administration as it relates to the field of Structural Engineering, Contributing member of project teams for various types of projects including Commercial, Industrial, Municipal, Educational, Retrofit, Evaluations and Residential.

Project Engineer, RLA Engineering, Arroyo Grande, CA — 2003-2007

Responsible for Project Management, Architect and Client relations, Complete Design and Detailing of Structural Systems, Construction Administration as it relates to the field of Structural Engineering, Contributing member of project teams for various types of projects including Commercial, Municipal, and Residential.

Education

California Polytechnic State University, San Luis Obispo — BS Architectural Engineering, 2003

Service

2006-2012: Committee for the Joint Use of Recreational Facilities (JUC) | Committee for the Shared Use of Recreational Facilities (SURF) | Two time Chairperson (San Luis Obispo City Council Advisory Body)

2012-Present: Parks & Recreation Commissioner (San Luis Obispo City Council Advisory Body)

2000-2003: Coach & Executive Board Member for the San Luis Obispo Little League Baseball Program



Project Assignment:	Senior Project Engineer
Fields of Special Competence:	Project Engineering related to Electrical Systems, Process Control, & Computer Monitoring Systems for Industrial, Water and Wastewater Systems
Education:	Bachelor of Science in Aeronautical Engineering, Embry-Riddle Aeronautical University, Prescott, AZ
Registration:	P.E. Electrical Engineering, CA, CO, FL, HI, LA, NV, NM
Years of Experience:	22.5 Years

As Senior Project Engineer, Mr. Bloom is involved in a systems engineering group which is responsible for the assessment, design, coordination, and implementation of industrial, water, and wastewater SCADA Control Systems. It is the duty of the Senior Project Engineer to design and specify all hardware, software, and communications requirements for implementing a functional SCADA and control system. The Senior Project Engineer's duties include but need not be limited to: communications system evaluation, design, and coordination; computer system hardware and software specification; PLC/RTU application design and specification; instrumentation evaluation and specification, and special design services.

Mr. Bloom has more than 20 years experience in design, specification, coordination and implementation of complete integrated computer-based systems in the water and wastewater industry.

During his employment at TESCO, Mr. Bloom has been responsible for engineering and the design, integration, and deployment of the following projects:

US Dept. of Interior, National Park Service - Yosemite El Portal Utilities WWTP Improvements Project

Mr. Bloom was responsible for this design-and-build project which involved the replacement of an obsolete Modicon PLC at the Filter Control Panel and integration of the Treatment Plant's obsolete relay control logic wiring and loop controllers at the main control panel into a new Main PLC Control Panel system. The upgrade also included the supply, programming, and integration of a new SCADA System for monitoring and control of the plant PLC systems, which communicates to the Treatment Plant PLC's via Ethernet and Fiber Optics. TESCO was responsible for reverse-engineering the undocumented Treatment Plant, re-engineering the Filter Control Panel and Main Control Panel, equipment supply, all Plant PLC and OIT programming, SCADA System development and programming, factory testing, installation and retrofit work, existing system modifications, field testing, startup, plant commissioning, operator training, and documentation.

US Dept. of Interior, National Park Service - Yosemite Wawona Utilities WTP Upgrades Project

Mr. Bloom was responsible for this design-and-build project which involved the upgrade and replacement of the plant's Main PLC at the Water Treatment Plant and the upgrade of two remote Tank site PLC / RTU systems. The upgrade also included the supply, programming, and integration of a new SCADA System for monitoring and control of the plant PLC systems via Ethernet communications and the remote sites via radio telemetry. TESCO was responsible for gathering information and reverse engineering for the undocumented portions of the Treatment Plant, developing P&ID diagrams, generating equipment

design submittals, supplying all equipment and software, providing Plant and remote site PLC programming, Main Plant OIT programming and screen development, SCADA System configuration and programming, installation and retrofit work, existing system modifications, field testing, startup, plant commissioning, operator training, and documentation.

US Dept. of Interior, National Park Service - Yosemite Wawona Traffic Tunnel Management Control System

This design-and-build project involved the integration of a Main PLC System to provide SCADA monitoring and controls for a main roadway tunnel in the Yosemite National Forest. The Main PLC System interfaces with a Carbon Dioxide (CO2) monitoring system/analyzer to provide monitoring/alarming of CO2 safety levels, which are used for control/automation of the tunnel's exhaust fan system. The Main PLC System is configured to control safety traffic gates in the event of critical CO2 levels. Tunnel and fire condition alarms are transmitted to alarm dispatch center for emergency alerting. The Main PLC System also consists of a touchscreen Operator Interface Terminal (OIT) to provide real-time status conditions, alarms, and graphical user interface for operators. The Main PLC System provides communication means for WAN integration into the Yosemite National Park SCADA network to allow real-time monitoring, alarm status notification, data report logging, and trending of CO2 levels produced by road traffic and facility energy usage (also measured by the Main PLC System). This project required information gathering and site investigations to determine the best means and methods of establishing monitoring and control requirements. TESCO was also responsible for the supply and integration of the Main PLC Systems, associated engineering documents, application programming, field startup and operator training.

AECOM | City of San Luis Obispo PG&E Water Reclamation Facility SST Project

This design-and-build project involved the reverse-engineering of an obsolete, undocumented DCS monitoring and control system for the purpose of upgrading and modernizing the system. Mr. Bloom was responsible for the design engineering related to the PLC automation systems for the WRF's various process areas to facilitate and orchestrate comprehensive automated control of the system. DCS and SCADA upgrades were designed for supervisory monitoring and control. This project involved system assessment, standards development, control strategy / sequence of operation development, integration plans, deployment plan, and testing plans. The project subsequently transitioned into the build phase for build and integration, where Mr. Bloom was involved in consulting, quality review, project directing, testing requirements and coordination, and engineering documentation. Mr. Bloom collaborated and facilitated engineering design criteria and integration needs directly with AECOM as the Program Management Team, which Tesco was contracted with.





MARK WATSON, CVS-Life, PE, PMP

VA Team Leader

Firm

Value Management Strategies, Inc.

Education (School/Degree)B.S. – Geological Engineering,
University of Missouri, Rolla**Registrations**

Certified Value Specialist – Life, No.

20020523, SAVE International

Professional Engineer – Missouri, No.

2005001059

Project Management Professional, No.

1442915, Project Management Institute

Years of Experience

16

Years with Firm

7

Mark Watson is a registered Professional Engineer and Certified Value Specialist (CVS). He has an in-depth knowledge of Value Methodology (VM) and the application of it to many types of construction and design related projects. Mark's experience includes value studies on a wide array of projects that cover the gamut of the design and construction industry. He has conducted Value Engineering (VE) and value planning studies on roads, bridges, water and wastewater facilities, transit facilities, airport facilities, and drainage facilities, as well as buildings for education, healthcare, prisons, vehicle maintenance facilities, barracks, and U.S. embassy and consulate operations. The size of these projects and programs has ranged from a few hundred thousand dollars in capital costs to as high as \$6 billion. Mark has led VE studies on projects in all stages of design from the schematic/planning stage to 100% complete.

Monterey Peninsula Water Supply Project (MPWSP) Desalination Plant, Monterey, CA, Monterey Peninsula Regional Water Authority:

VE Study Facilitator. The primary purpose of the overall MPWSP is to replace existing water supplies that have been constrained by legal decisions affecting the Carmel River and Seaside Groundwater Basin water resources. The purpose of the desalination plant portion of the MPWSP is to treat the water supplied by the seawater intake wells sufficient to meet the applicable water quality standards. Project Cost: \$74,029,943. The VE team was tasked with exploring ideas to improve project value by reducing project cost without sacrificing functionality; identifying opportunities to improve the desalination plant's operations and reliability; identifying recommendations for reducing long-term operational costs; and improving the overall maintainability of the facility. The VE team

recommended 16 alternatives with approximately \$9 million in initial cost savings and \$23 million in life-cycle cost savings.

Jensen Water Treatment Plant Solids Handling Facility and Lagoon, Los Angeles, CA, Los Angeles Metropolitan Water District:

VE Study Facilitator. This project proposes to construct a mechanical dewatering facility with belt presses, conveyors, and a cake storage area, as well as a series of lagoons for air drying solids. These facilities will allow MWD to reliably process solids at all anticipated production rates, while complying with water quality regulations and existing permit conditions. To meet the scheduled deadline, the project has been divided into two contract packages. Contract No. 1 includes site preparation for both contract packages, including soil improvements for the Belt Press Building and lagoon construction. Contract No. 2 includes construction of the Belt Press Building, equalization tanks, Filtrate Pump Station, cake storage area, Dry Polymer Building modification, and utility service connections. Project Cost: Contract No. 1 - \$22,740,000; Contract No. 2 - \$13,130,000. The objectives of the VE study were to review the design relative to project purpose and need to identify more economical alternatives in providing a new solid dewatering facility and lagoons and develop VE alternatives that improve aspects of the solids processing by either reducing cost or improving performance. The VE team identified 12 alternatives for improvement of the project, of which 7 were implemented for a total initial cost savings of \$22,153,000 and a life-cycle cost savings of \$5,934,000.

Horseshoe Road Superfund Site, Operable Unit 3, US Army Corps of Engineers – Kansas City District, Sayreville, NJ:

VE Study Facilitator. The Horseshoe Road and Atlantic Resources Corporation (ARC) Sites are located on approximately 16.5 acres in Sayreville, Middlesex County, New Jersey. Various operations were conducted at the sites for over 30 years, which have resulted in contamination. This VE study focused on OU3, which consisted of remediation of arsenic- and mercury-contaminated marsh and river sediments. Remediation activities at OU3 consist of the excavation, transportation, and offsite disposal of approximately 21,000 CY of contaminated sediments from the Horseshoe Road/ARC marsh and the dredging, transportation, and offsite disposal of approximately 14,000 CY of contaminated sediments from the Raritan River. All excavated and dredged areas will then be backfilled and graded with clean cover material. Project Cost: \$30,310,517. The primary objective of the VE study was to review and evaluate available project information to enhance the value of the project through the identification of appropriate cost-saving measures and added value improvements without sacrificing project requirements. The VE team identified 11 alternatives that could potentially add value to the project, either through cost savings, improved performance, or a combination of both.





C

Billing Rates

FEE SCHEDULES

Fee schedules for MKN and subconsultants are included on the following pages





MKN & ASSOCIATES, INC.
 2015 FEE SCHEDULE FOR PROFESSIONAL SERVICES

ENGINEERS AND TECHNICAL SUPPORT STAFF

Project Manager	\$165/HR
Senior Project Engineer	\$155/HR
Project Engineer	\$135/HR
Senior Planner	\$120/HR
Hydraulic Analyst	\$115/HR
GIS Specialist	\$115/HR
GIS Technician	\$95/HR
Drafter	\$80/HR
Administrative Assistant	\$45/HR

Routine office expenses such as computer usage, telephone charges, office equipment and supplies, incidental postage, copying, faxes, etc., are included in the hourly rates.

DIRECT PROJECT EXPENSES

Outside Reproduction	Cost
Subcontracted or Subconsultant Services	Cost + 5%
Travel & Subsistence (other than mileage)	Cost
Auto Mileage	Current IRS Rate - \$.575/mi.





John F. Rickenbach Consulting
 7675 Bella Vista Road
 Atascadero, California 93422

805/610-1109
 JFRickenbach@aol.com

JFR Consulting 2015 Fee Schedule

JFR CONSULTING 2015 FEE SCHEDULE		
Position	Standard Rate	Reduced Rate¹
Principal	\$155/hr	\$140/hr
Senior Associate	\$110/hr	\$95/hr
Associate	\$95/hr	\$85/hr
GIS/Graphics Tech	\$95/hr	\$85/hr
Administrative Assistant	\$65/hr	\$55/hr
Direct Expenses: printing, field supplies, communications, etc. Mileage: At current IRS Rate	Cost plus 10%	N/A
¹ Reduced rates are applied at the discretion of JFR Consulting on a project-by-project basis, and are typically applied to publicly-funded long-range planning projects.		

BILL RATE RANGES

Subject to change effective March 1st each year

Administrative Assistant	\$ 40 - \$ 80
Agency Coordinator	\$ 55 - \$ 105
Architect	\$ 100 - \$ 150
Assistant Designer	\$ 70 - \$ 95
Assistant Manager of Architecture	\$ 120 - \$ 175
Assistant Planner	\$ 70 - \$ 95
Associate Designer	\$ 75 - \$ 115
Associate Planner	\$ 75 - \$ 115
Billing Coordinator	\$ 45 - \$ 80
Chief Executive Officer	\$ 170 - \$ 270
Civil Engineer	\$ 100 - \$ 145
Construction Inspector	\$ 105 - \$ 150
Design Director	\$ 130 - \$ 190
Designer I	\$ 40 - \$ 100
Designer II	\$ 55 - \$ 110
Designer III	\$ 75 - \$ 145
Engineer I	\$ 75 - \$ 100
Engineer II	\$ 90 - \$ 115
Intern	\$ 35 - \$ 65
Information Technology Technician	\$ 60 - \$ 105
Manager of Information Technology	\$ 105 - \$ 170
Human Resource Generalist	\$ 60 - \$ 100
Job Captain	\$ 85 - \$ 145
Landscape Architect	\$ 90 - \$ 140
Manager of Architecture	\$ 150 - \$ 220
Manager of Engineering Services	\$ 150 - \$ 225
Manager of Landscape Architecture	\$ 135 - \$ 205
Manager of Marketing	\$ 95 - \$ 145
Manager of Planning	\$ 135 - \$ 205
Manager of Surveying	\$ 135 - \$ 210
Marketing Coordinator	\$ 60 - \$ 100

Office Coordinator	\$ 40 - \$ 80
Party Chief	\$ 80 - \$ 135
Principal	\$ 155 - \$ 250
Principal Landscape Architect	\$ 120 - \$ 190
Principal Planner	\$ 120 - \$ 190
Project Accountant	\$ 65 - \$ 100
Project Manager	\$ 110 - \$ 190
Senior Architect	\$ 125 - \$ 185
Senior Designer	\$ 105 - \$ 150
Senior Engineer	\$ 115 - \$ 185
Senior Land Surveyor	\$ 105 - \$ 160
Senior Landscape Architect	\$ 105 - \$ 145
Senior Marketing Coordinator	\$ 75 - \$ 115
Senior Party Chief	\$ 105 - \$ 160
Senior Planner	\$ 100 - \$ 145
Supervisor of Surveying	\$ 125 - \$ 175
Survey Technician I	\$ 45 - \$ 70
Survey Technician II	\$ 55 - \$ 100
Survey Technician III	\$ 75 - \$ 130

Survey Crew Rates

REGULAR

One person w/ GPS or Robotic Workstation	\$ 125 - \$ 155
Two person	\$ 175 - \$ 290
Three person	\$ 235 - \$ 390

PREVAILING WAGE

One person w/ GPS or Robotic Workstation	\$ 150 - \$ 180
Two person	\$ 225 - \$ 340
Three person	\$ 325 - \$ 490



Joe Koenig
805 Aerovista Place, Suite 201
805.550.3685/joe@konigmedia.com

FEE SCHEDULE FOR PROFESSIONAL SERVICES

Designer/Developer:

Standard Rate	\$100 per hour
Reduced Rate	\$90 per hour

Direct Expenses: Printing, communications, etc.

Mileage: At current IRS rate



KEVIN MERK ASSOCIATES, LLC

Standard Fee Schedule for Environmental Services

The following sets forth the billing rates for our personnel.

<u>Professional and Technical Personnel</u>	<u>Rate</u>
Principal	\$ 125-150/hour
Supervising Associate	\$ 105-125/hour
Senior Associate	\$ 95-105/hour
Biologist	\$ 75-95/hour
Graphics, GIS Technician	\$ 75-95/hour
Word Processor/Administrative Assistant.....	\$ 55-65/hour

Expert witness services consisting of depositions and in-court testimony will be charged at a rate of \$250/hour.

<u>Representative Equipment</u>	<u>Unit Rate</u>
Sound Level Meter	\$100/day
Hypsometer.....	\$ 50/day
Wind Meter.....	\$ 25/day
Temperature-pH-Conductivity Meter	\$ 25/day
GPS (sub-meter precision)	\$250/day
Infrared/Wildlife Camera	\$ 50/day

Reimbursable Expenses

Expenses associated with completing a project are termed Reimbursable Expenses. These expenses do not include the hourly billing rates described above. Reimbursable expenses include, but are not limited to the following.

1. Direct costs associated with the execution of a project are billed at cost plus 15% to cover General and Administrative services. Direct costs include, but are not limited to, subcontractor services, authorized travel expenses, permit charges and filing fees, printing and graphic charges, performance bonds, sample handling and shipment, equipment rental other than covered by the above charges, etc.
2. Vehicle use in company-owned two wheel drive vehicles will be billed at a day rate of \$50/day plus \$0.56/mile for mileage over 50 miles per day. 4x4 vehicles will be billed at a day rate of \$75/day plus \$0.56/mile over 50 miles per day. Rental vehicles will be billed at cost plus 15%.

Mark J Laquidara
Private Consultant
12 Day Hill Road
Framingham, MA 01702
Email: markjlaq@gmail.com
Phone: (781) 588-5025

Mark Laquidara Fee Schedule

Professional Consulting Services	\$200.00/hour
Expert Witness Testimony	\$250.00/hour
Trials & Deposition	\$300.00/hour
Travel Time	\$100.00/hour
Direct Expenses: printing, field supplies, communications, travel and subsidence etc.	Cost
Mileage:	Current IRS Rate



STANDARD SCHEDULE OF FEES

Project Management

Principal-In-Charge	\$240
Senior Project Manager	220
Project Manager	200
Project Coordinator	120

Engineering

Principal Engineer	\$200
Supervising Engineer	185
Senior Project Engineer	170
Project Engineer	150
Associate Engineer	135
Assistant Engineer	110
Engineering Intern.....	95

Surveying

Principal Surveyor.....	\$200
Supervising Surveyor	185
Senior Project Surveyor.....	170
Project Surveyor.....	150
Senior Land Title Analyst.....	130
Assistant Project Surveyor	125
Party Chief	140
Chainperson.....	120
One-Person Survey Crew.....	180

Technical Support

CADD Manager.....	\$140
Senior GIS Analyst.....	140
GIS Analyst.....	120
Supervising CADD/Engineering/GIS Technician..	120
Senior CADD/Engineering/GIS Technician	110
CADD/Engineering/GIS Technician	100

Direct Expenses:

Use of outside consultants as well as copies, blueprints, survey stakes, monuments, computer plots, telephone, travel (out of area) and all similar charges directly connected with the work will be charged at cost plus fifteen percent (15%). Mileage will be charged at the current federal mileage reimbursement rate. Expert Witness services will be charged at three (3) times listed rate and will include all time for research, deposition, court appearance and expert testimony.

Prevailing Wage Rates:

Rates shown with Prevailing Wage "(PW)" annotation are used for field work on projects subject to federal or state prevailing wage law.

Construction Management

Principal Construction Manager.....	\$200
Senior Construction Manager.....	185
Resident Engineer	170
Structure Representative.....	160
Construction Manager.....	150
Assistant Resident Engineer	145
Construction Inspector (PW)	138
Office Engineer	105

Municipal Services

City Engineer	\$200
Deputy City Engineer.....	185
Assistant City Engineer	175
Plan Check Engineer.....	160
Permit Engineer	140
City Inspector	125
City Inspector (PW)	135
Planning Director	185
Senior City Planner	160
Assistant Planner.....	145

Administrative Support

Administrative Analyst	\$90
Administrative Assistant	70

Rate Schedule 1207

IRJ Engineers, Inc.
July 6, 2015

The hourly rate schedule is listed below.

Principals	\$150.00 per hour
Professional Engineers	\$125.00 per hour
Senior Engineering Designers	\$ 90.00 per hour
Engineering Designers/CAD Drafters	\$ 75.00 per hour
Clerical Staff	\$ 55.00 per hour



Hourly Compensation Rates

Effective July 1, 2014

Position	Rate
Principal Structural Engineer	\$160 / hr
Principal Engineer	\$150 / hr
Senior Structural Engineer	\$120 / hr
Senior Project Engineer	\$110 / hr
Project Engineer	\$95 / hr
Staff Engineer	\$85 / hr
CAD Operator	\$70 / hr
CAD Technician	\$60 / hr
Administrative Professional	\$35 / hr

Reimbursable Expenses shall be billed at a rate of 1.10 times direct cost

Value Management Strategies, Inc.

900 Canterbury Place, Suite 300
Escondido, CA 92025

Name	Job Classification	All Inclusive Hourly Billing Rate Min
Terry Hays	Principal / PM /CVS Tm Ldr	\$ 298.36
Rob Stewart	Principal / PM /CVS Tm Ldr	\$ 298.36
George Hunter	CVS Tm Ldr	\$ 228.29
Fred Kolano	CVS Tm Ldr	\$ 210.72
Mark Watson	CVS Tm Ldr	\$ 219.52
Eric Trimble	CVS Tm Ldr	\$ 210.72
Ron Tanenbaum	CVS Tm Ldr	\$ 201.50
Greg Brink	Risk Management/CVS	\$ 219.07
Ashley Carson	CVS Tm Ldr/LEED Green Associate	\$ 191.25
Cheryl Kramer	Project Coordinator	\$ 158.04
April Hiller	Technical Editor/AVS	\$ 92.19
Jessica Combs	Technical Editor/AVS	\$ 92.19
Mariah Brink	Technical Editor/AVS	\$ 92.19
Sandy Northrop	Assistant Project Coordinator	\$ 92.19
Cheri Keller	Bookkeeping & HR	\$ 92.19

OH

2015 Rates

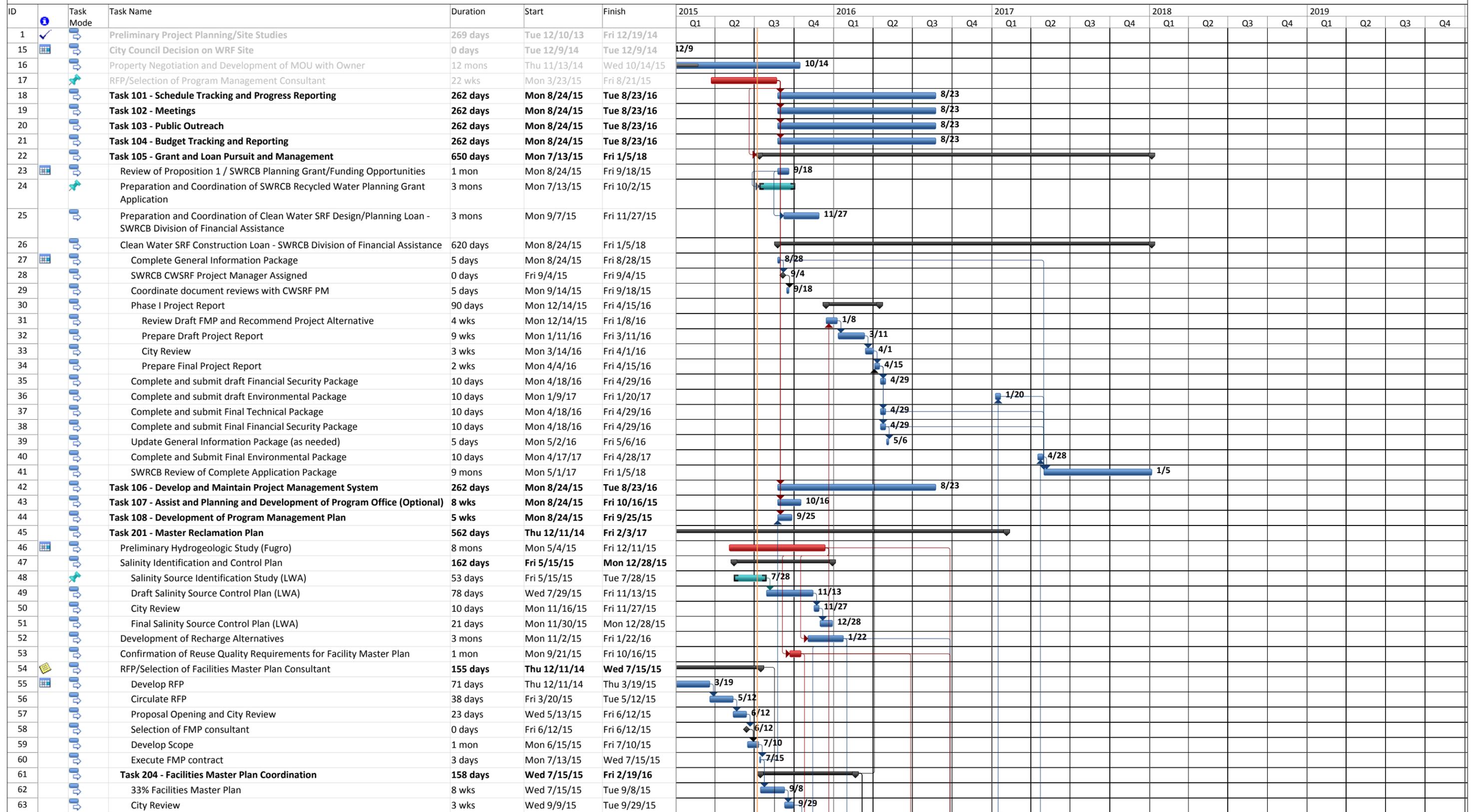
173.98% overhead rate, with 10% profit

D

Task Groups 100-300 Schedule



Morro Bay Water Reclamation Program Schedule - Task Groups 100 through 300



MB Reclamation Program Schedule
Date: Wed 7/8/15



Morro Bay Water Reclamation Program Schedule - Task Groups 100 through 300

ID	Task Mode	Task Name	Duration	Start	Finish	2015				2016				2017				2018				2019			
						Q1	Q2	Q3	Q4																
64		67% Facilities Master Plan	2 wks	Mon 10/19/15	Fri 10/30/15																				
65		City Review	3 wks	Mon 11/2/15	Fri 11/20/15																				
66		90% Facilities Master Plan	3 wks	Mon 11/23/15	Fri 12/11/15																				
67		City Review	2 wks	Mon 12/14/15	Fri 12/25/15																				
68		Final Facilities Master Plan	8 wks	Mon 12/28/15	Fri 2/19/16																				
69		Lead Outreach to Customers and Stakeholders	9 wks	Mon 11/30/15	Fri 1/29/16																				
70		Develop Reclamation Phasing Strategies	13 wks	Mon 1/25/16	Fri 4/22/16																				
71		Perform Recycled Water Funding Evaluation	13 wks	Mon 3/28/16	Fri 6/24/16																				
72		Determine governance and ownership of recycled water facilities	13 wks	Mon 6/27/16	Fri 9/23/16																				
73		Draft Master Reclamation Plan Report	9 wks	Mon 9/26/16	Fri 11/25/16																				
74		City Review	5 wks	Mon 11/28/16	Fri 12/30/16																				
75		Final Master Reclamation Plan Report	5 wks	Mon 1/2/17	Fri 2/3/17																				
76		Tasks 202-203 - Coordination of CEQA/Permitting	555 days	Mon 8/17/15	Fri 9/29/17																				
77		Notice of Preparation	4 mons	Mon 8/17/15	Fri 12/4/15																				
78		Admin Draft EIR/EA	6 mons	Mon 2/22/16	Fri 8/5/16																				
79		City Review	4 wks	Mon 8/8/16	Fri 9/2/16																				
80		Preliminary Draft EIR /EA	4 wks	Mon 9/5/16	Fri 9/30/16																				
81		City Review	2 wks	Mon 10/3/16	Fri 10/14/16																				
82		SWRCB Review of Draft EIR/EA (SRF Requirement)	1 mon	Mon 10/17/16	Fri 11/11/16																				
83		Public Draft EIR/EA	2 mons	Mon 11/14/16	Fri 1/6/17																				
84		Public Review	2 mons	Mon 1/9/17	Fri 3/3/17																				
85		Final EIR/EA	6 wks	Mon 3/6/17	Fri 4/14/17																				
86		LCP/General Plan Amendment	26 wks	Mon 12/26/16	Fri 6/23/17																				
87		RWQCB/CDFG/NOAA Permit Application/Negotiation	12 mons	Mon 10/31/16	Fri 9/29/17																				
88		Tasks 301-304 - RFQ for Design/Build Team	105 days	Mon 6/13/16	Fri 11/4/16																				
89		Develop Draft RFQ for DB Team	3 wks	Mon 6/13/16	Fri 7/1/16																				
90		City Staff Review of Draft RFQ	2 wks	Mon 7/4/16	Fri 7/15/16																				
91		Update RFQ	1 wk	Mon 7/18/16	Fri 7/22/16																				
92		City Council Review and Approval of Final RFQ	2 wks	Mon 7/25/16	Fri 8/5/16																				
93		Circulate RFQ	9 wks	Mon 8/8/16	Fri 10/7/16																				
94		Prepare materials for Addenda to RFQ (as needed)	9 wks	Mon 8/8/16	Fri 10/7/16																				
95		Qualifications Submittals Due	0 days	Fri 10/7/16	Fri 10/7/16																				
96		Review Qualification Submittals	4 wks	Mon 10/10/16	Fri 11/4/16																				
97		Task 305 - Development of Bridging Documents	125 days	Mon 2/22/16	Fri 8/12/16																				
98		Prepare Draft Functional Requirements and Performance Specifications	3 mons	Mon 2/22/16	Fri 5/13/16																				
99		Workshop - Present Draft Report to Staff and City Council	1 wk	Mon 5/16/16	Fri 5/20/16																				
100		Update Draft	12 wks	Mon 5/23/16	Fri 8/12/16																				
101		Submit Final Functional Requirements and Performance Specifications	0 days	Fri 8/12/16	Fri 8/12/16																				
102		Tasks 306-309 - Procurement of Lift Station/Transmission Mains Design Consultant	70 days	Mon 2/22/16	Fri 5/27/16																				
103		Develop RFP	4 wks	Mon 2/22/16	Fri 3/18/16																				
104		Circulate RFP	6 wks	Mon 3/21/16	Fri 4/29/16																				
105		Proposal Opening and City Review	4 wks	Mon 5/2/16	Fri 5/27/16																				
106		Selection of LS/Pipelines Design Consultant	0 days	Fri 5/27/16	Fri 5/27/16																				
107		RFP for Design/Build Team	205 days	Mon 10/17/16	Fri 7/28/17																				
118		Design/Bid/Build Lift Station and Transmission Mains	865 days	Mon 7/11/16	Fri 11/1/19																				
136		Phase I Design/Build Delivery	1030 days	Mon 1/2/17	Fri 12/11/20																				
154		RFQ/Selection of EIR/EA/Permitting Team	106 days	Fri 3/20/15	Fri 8/14/15																				
159		Phase II Recycled Water Distribution System	60 mons	Mon 12/14/20	Fri 7/18/25																				

MB Reclamation Program Schedule
Date: Wed 7/8/15

Task		Summary		External Milestone		Inactive Summary		Manual Task		Manual Summary		Deadline		Critical		Critical Split	
Split		Project Summary		Inactive Task		Duration-only		Start-only		Critical		Progress					
Milestone		External Tasks		Inactive Milestone													

E Budget

BUDGET

As the program proceeds and all program elements are identified, MKN is committed to developing detailed, transparent scopes and budgets that will clearly identify the level of effort required for each task. Our objective is to drive program development to deliver all the City's goals with the highest level of quality at minimum long-term cost to ratepayers.

A typical program management budget is approximately 3 to 4% of total program costs. For a \$100 to \$120 million program, for example, costs could range from \$3 to \$4.8 million – with annual program management expenses that are often higher during design and planning phases of the project, then a little lower during construction and startup. The costs for design-build contract documents (including concept design for design-build bidding documents), design services (ex. bid package for outfall repair), Master Reclamation Plan, and aggressive public outreach would not be included in that assumption. Costs for these tasks are detailed in the budget.

Construction management can vary from 6 to 8% of the construction costs. Assuming construction costs vary between \$80 and \$100M for both phases of the program, a range of \$4.8 to \$8 million would be expected. Integrating the program management and construction management activities will reduce duplication of effort and cost for both types of services, ensure a high level of quality control throughout design and construction, and ensure consistency among the different Phase I and Phase II program elements.

MKN proposes to complete all work under the Program Management contract on a time and materials basis with a budget per task order that will not be exceeded without receiving written authorization from the City. The table on the text page summarizes the level of effort anticipated for each phase of Task Groups 100 through 300 with exceptions as noted in Section 3 of the proposal.

Our standard fee schedule, and those of our subconsultants, are included in Appendix C. Please note that MKN typically increases billing rates by no more than 3% annually. The City will be notified in writing prior to MKN applying updated rates, but it is assumed that future task orders will reflect these annual increases.



Morro Bay WRF Program Management Services

mkn	Project Manager	Senior Project Engineer	Project Engineer	Assistant Engineer	Administrative Assistant	Total Hours (MKN)	Subtotal Labor (MKN)	ODCs (MKN)	JFR	RRM	MNS	Laquidara (TAT)	Konig Media	Total Subconsultant Cost	Total Cost
	Task Group 100 Program Administration														
Task 101-Schedule tracking and progress reporting	48		48			96	\$ 14,400	\$ 432	\$ 3,780					\$ 3,780	\$ 18,612
Task 102-Program Documentation	40		80			120	\$ 17,400	\$ 522	\$ 3,780					\$ 3,780	\$ 21,702
Task 103-Meetings	300		104			404	\$ 63,540	\$ 1,906	\$ 50,400					\$ 50,400	\$ 115,846
Task 104-Public outreach	80					80	\$ 13,200	\$ 396	\$ 31,605	\$ 68,250		\$ 5,000		\$ 104,855	\$ 118,451
Task 105-Budget tracking and reporting	48					48	\$ 7,920	\$ 238	\$ 3,780					\$ 3,780	\$ 11,938
Task 106-Grant and loan pursuit and management	40		0	0		40	\$ 6,600	\$ 198						\$ -	\$ 6,798
Task 107-Grant and loan support	50		25	25		100	\$ 14,500	\$ 435						\$ -	\$ 14,935
Task 108-Develop and maintain project management system	12		24	50	12	98	\$ 11,510	\$ 345	\$ 2,520					\$ 2,520	\$ 14,375
Task 109-Assist in planning and development of Program Office	12		16		16	44	\$ 4,860	\$ 146	\$ 630					\$ 630	\$ 5,636
Task 110-Development and Maintenance of Program Management Plan	80		40			120	\$ 18,600	\$ 558	\$ 6,300					\$ 6,300	\$ 25,458
Subtotal	710	0	337	75	28	1150	\$ 172,530	\$ 5,176	\$ 102,795	\$ 68,250	\$ -	\$ -	\$ 5,000	\$ 176,045	\$ 353,751
Task Group 200 Preliminary Planning															
Task 201-Master Reclamation Plan	100	160	240	240	40	780	\$ 103,100	\$ 3,093	\$ 18,270		\$ 10,500	\$ 5,250		\$ 34,020	\$ 140,213
Task 202-CEQA	40		40			80	\$ 12,000	\$ 360	\$ 68,670					\$ 68,670	\$ 81,030
Task 203-Permitting	40		40			80	\$ 12,000	\$ 360	\$ 32,550					\$ 32,550	\$ 44,910
Task 204-Facility Master Plan coordination	240	40	24			304	\$ 49,040	\$ 1,471				\$ 5,250		\$ 5,250	\$ 55,761
Task 205-Develop Project Delivery Technical Memorandum	40		24	24		88	\$ 12,600	\$ 378						\$ -	\$ 12,978
Task 206-Coordination of Model Development and Model Runs	16		60	60		136	\$ 17,640	\$ 529						\$ -	\$ 18,169
Task 207-Alignment Study and Coordination with Caltrans	8		60	12		80	\$ 10,800	\$ 324						\$ -	\$ 11,124
Task 208 - Data Collection and "As-Needed" Services	40	20	70	70		200	\$ 27,200	\$ 816	\$ 5,050	\$ 5,250				\$ 10,300	\$ 38,316
Subtotal	524	220	558	406	40	1748	\$ 244,380	\$ 7,331	\$ 124,540	\$ 5,250	\$ 10,500	\$ 10,500		\$ 150,790	\$ 402,501
Task Group 300 Phase I Preliminary Engineering and Procurement															
Task 301-Outfall Assessment and Rehabilitation Support	24	40	40	40	8	152	\$ 20,520	\$ 616						\$ -	\$ 21,136
Task 302-Design-Build Procurement (Bridging Documents/Concept Design TBD)	300		80			380	\$ 60,300	\$ 1,809		\$ 5,000				\$ 5,000	\$ 67,109
Task 303-influent Lift Station and Transmission Pipeline Design Procurement	76		16			92	\$ 14,700	\$ 441						\$ -	\$ 15,141
Task 304 - Data Collection and "As-Needed" Services	40	20	70	70		200	\$ 27,200	\$ 816	\$ 5,050					\$ 5,050	\$ 33,066
Subtotal	440	60	206	110	8	824	\$ 122,720	\$ 3,682	\$ 5,050	\$ -	\$ 5,000	\$ -		\$ 10,050	\$ 136,452
TOTAL BUDGET	1674	280	1101	591	76	3722	\$ 539,630	\$ 16,189	\$ 232,385	\$ 73,500	\$ 15,500	\$ 10,500	\$ 5,000	\$ 331,885	\$ 892,704



SUBMITTED BY:

MKN & Associates, Inc.

530 Paulding Circle, Suite B

Arroyo Grande, CA 93420

PH 805.904.6530 | mknassociates.us



AGENDA NO: C-2

MEETING DATE: August 5, 2015

Staff Report

DATE: July 30, 2015

TO: Water Reclamation Facility Citizens Advisory Committee

FROM: Rob Livick, PE/PLS –Director of Public Works/City Engineer

SUBJECT: Discussion and Recommendation to City Council – Change in Meeting Schedule

RECOMMENDATION

Staff recommends the Water Reclamation Facility Citizens Advisory Committee (WRFCAC) consider recommending to the City Council to change the meeting schedule to the first Tuesday of the month from 3:00 p.m. to 5:00 p.m. at the Veteran’s Memorial Building.

DISCUSSION

The meeting day currently in place for the monthly WRFCAC meetings is the second Wednesday of the month. This is one day after the first Council meeting of the month and generally results either in delay in a recommendation going to the City Council or a rescheduling of the WRFCAC meeting. This current meeting is an example of a rescheduled meeting. Moving the meeting to the first Tuesday of the month has the advantage of being a minimum of a week prior to the City Council meeting and being able to use the same set up as Planning Commission.

Prepared By: RL

Dept Review: RL

City Manager Review: _____

City Attorney Review: _____



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