

**BID PROPOSAL, CONTRACT DOCUMENTS, AND
SPECIFICATIONS**

FOR THE

**Happy Camp Campground
Construction Project**

Bid Date: Friday December 8th, 2017 @ 2:00 PM at

CANYON LAKE

Property Owners Association

31512 Railroad Canyon Road

Canyon Lake, Ca 92587



CANYON LAKE

PROPERTY OWNERS ASSOCIATION

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NOTICE INVITING BIDS

For the *HAPPY CAMP CAMPGROUND CONSTRUCTION PROJECT*

Canyon Lake Property Owners Association
Canyon Lake, CA

NOTICE IS HEREBY GIVEN that the **Canyon Lake Property Owners Association (CLPOA)** invites bids for the above stated project and will receive such bids **up to the hour of 2:00 P.M. (PDT) on Friday December 8th, 2017. Bids may be delivered via mail, in person, via email to: ekazakoff@canyonlakepoa.com or via fax to: 951-244-6845.**

The work of improvement consists of furnishing all materials, equipment, tools, labor and incidentals as required by the Plans and Contract Documents for the above stated project.

The general items of work to be done hereunder consist of:

Modernization of the entire campground area including rehabilitation of the asphalt roads, all new sewer system, new water laterals, and new electrical system. Slight campsite layout changes to accommodate larger RV’s with slide-outs. Total electrical system upgrade to accommodate modern RV’s and increased overall load. Project shall be completed by May 20th, 2018.

(All quantities listed herein are approximate and furnished here for general scope ONLY. Construction quantities shall be per plan and contractors site visits. Bidders shall perform their own quantity take-off and bid the job per the drawings and site visits. Contractors shall report any major quantity discrepancies prior to the bid date)

Demolition of approximately 29,680 sq. ft. existing pavement, 1090 sq. ft. concrete, 7 trees and 44 electrical vaults. Pavement should be crushed and reused for aggregate. Relocate 2 street lights and 2 signs. Adjust existing 6 sewer manholes and 18 water valves to grade. Remove RV sewer hookups as required. Grade new campsites and RV areas. Construction of approximately 28,400 sq. ft. A.C. overlay of existing pavement and 18,400 sq. ft. of new 4” A.C. to be constructed over a 4” A.B material. Construct 820 sq. ft. concrete walkway. Install wiring and electrical panels (7 new). Install new RV electrical pedestals. Install new street lights and walkway lights per plan. All wiring will be installed underground. New underground plumbing including 44 laterals and hose bibs and 1,100 LF of 6” sewer lateral, and 37- 4” RV Dumpsites. Erosion control including BMP and lake contamination protection.

The existing restroom building will be remodeled in another, separate phase – RFP to be released at a later date. The 20’x10’ modular campground office shown as “proposed” on these drawing is not part of this contract. No work will be required on the existing sewer lift station. No work will be required on the existing restroom building at this time.

There will be several additive/deductive alternates to this bid:

1. *Optional RV utility hookups on Tent sites 26-33.*
2. *Trim and Save 5 Olive trees that are scheduled for demolition per plan*
3. *Change the layout of the sewer and water hookups shown on the plans, to be drivers (left) side of a motorhome with its windshield facing the lake.*
4. *Optional use of coiled polyethylene water piping underground instead of PVC shown on plans*
5. *2x4 Redwood headers at all locations where asphalt transitions to dirt and that can be driven over by a vehicle.*

*The location of this project is at Happy Camp, within the Gated Community of Canyon Lake, CA. The address is 30550 Longhorn Drive, Canyon Lake, CA, 92587. Site visits will require calling 951-244-6841 x510 for access ahead of time. **A job walk will be held on Wednesday November 22nd, 2017, at 10:00 am, at the project site.***

The Bidder shall examine carefully the site of the proposed contract work. The submission of a bid proposal shall be conclusive evidence that the Bidder has investigated the project site and is satisfied as to the conditions to be encountered. The Contractor shall submit Bidder's Statement of Experience, Financial Condition, References, and Insurance Certificate as shown Page BD 8 with the online bid submittal.

Bidders may visit the site on their own schedule as well, but must contact GM, below to be called in for gate access – gate access will also be required for the job walk.

The plans and specifications are available online to download from:
<http://www.canyonlakepoa.com/about-us/request-for-proposals-rfp>.

Any questions pertaining to this project shall be submitted in writing to General Manager, Eric Kazakoff at ekazakoff@canyonlakepoa.com 951-244-6841 x210 prior to Tuesday December 5th, 2017.

A payment bond and a performance bond, each in an amount equal to 100% of the total contract amount, MAY be required concurrently with the execution of the contract.

Contractor must state that they are bondable, and state their bond rate on the bid forms. Bond premium, if required by CLPOA will be paid by CLPOA.

Monthly progress payments shall be based upon the engineer's estimate of the percentage of work completed, or upon a mutually agreed to schedule of values. **A bid bond will not be required for this project. PREVAILING WAGES WILL NOT BE REQUIRED ON THIS PROJECT.**

The **CLPOA** reserves the right to reject any or all bids, to waive any irregularity, to accept any bid or portion thereof, and to take all bids under advisement for a period of ninety (90) days.

At the time of submitting a bid, the contractor shall possess **Class "A" or Class "B"** contractor's license contractor's license to perform the work.

Bid Document

A. SCOPE OF WORK

The work to be done consists of furnishing all labor, materials, necessary tools and machinery, supervision, and all utility and transportation services required for:

Modernization of the entire campground area including rehabilitation of the asphalt roads, all new sewer system, new water laterals, and new electrical system. Slight campsite layout changes to accommodate larger RV's with slide-outs. Total electrical system upgrade to accommodate modern RV's and increased overall load. Project shall be completed by May 20th, 2018

(All quantities listed herein are approximate and furnished here for general scope ONLY. Construction quantities shall be per plan and contractors site visits. Bidders shall perform their own quantity take-off and bid the job per the drawings and site visits. Contractors shall report any major quantity discrepancies prior to the bid date)

Demolition approximately 29,680 sq. ft. existing pavement, 1090 sq. ft. concrete, 7 trees and 44 electrical vaults. Pavement should be crushed and reused for aggregate. Relocate 2 street lights and 2 signs. Adjust existing 6 sewer manholes and 18 water valves to grade. Remove RV sewer hookups as required. Grade new campsites and RV areas. Construction of approximately 28,400 sq. ft. A.C. overlay of existing pavement and 18,400 sq. ft. of new 4" A.C. to be constructed over a 4" A.B material. Construct 820 sq. ft. concrete walkway. Install wiring and electrical panels (7 new). Install new RV electrical pedestals. Install new street lights and walkway lights per plan. All wiring will be installed underground. New underground plumbing including 44 laterals and hose bibs and 1,100 LF of 6" sewer lateral, and 37- 4" RV Dumpsites. Erosion control including BMP and lake contamination protection.

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3. *Change the layout of the sewer and water hookups shown on the plans, to be drivers (left) side of a motorhome with its windshield facing the lake.*
4. *Optional use of coiled polyethylene water piping underground instead of PVC shown on plans*
5. *2x4 Redwood headers at all locations where asphalt transitions to dirt and that can be driven over by a vehicle.*

in accordance with the bid items in the Contractor's Proposal, the Specifications, and other Provisions of the Contract.

B. INSTRUCTIONS TO BIDDERS

1. **Form of Proposal.** The proposal must be made on the form of Contractor's Proposal which is included in the Contract Documents and must be completely filled in and signed. If provision is made for alternates, they must all be bid, unless otherwise provided in the Special Provisions.
2. **Bid Bond.** There is no Bid Bond required for this project.

3. Submission of Proposal. A proposal may be delivered via mail, in person, via email to: **ekazakoff@canyonlakepoa.com** or via fax to: **951-566-9211**.
4. Bids must be received by the time and at the place set forth in the Notice Inviting Bids: 2:00 P.M. (PDT) on **Friday December 8th, 2017**.
5. Contract Documents. The complete Contract Documents are identified in the Agreement. Potential bidders are cautioned that the successful bidder incurs duties and obligations under all of the Contract Documents and that they should not merely examine the Plans and Specifications in making their bid.
6. License. To be considered for award of the contract, a potential bidder must have the kind of license required under provisions of the California Business and Professions Code for the work covered in this proposal. This includes joint ventures.

Each item of work will be performed by a Contractor which is qualified and properly licensed for that work.

7. Quantities. The amount of work to be done or materials to be furnished under the Contract as shown in the Contractor's Proposal are but estimates and are not to be taken as an expressed or an implied statement that the actual amount of work or materials will correspond to the estimate.

The CLPOA reserves the right to increase or decrease or to entirely eliminate certain items from the work or materials to be furnished if such action is found to be desirable or expedient.

Contractor is cautioned against the unbalancing of his bid by prorating his overhead only into one or two items when there are a number of items listed in the schedule.

8. Interpretation of Documents. Discrepancies, omissions, ambiguities, requirements likely to cause disputes between trades and similar matter shall be promptly brought to the attention of the **Project Manager, Steve Schneider** sschneider@canyonlakepoa.com, 951-244-6841 x500, or the **General Manager**. When appropriate, Addenda will be issued by the CLPOA. No communication by anyone as to such matters except by an Addendum affects the meaning or requirements of the Contract Documents.
9. ADDENDA. **The CLPOA** reserves the right to issue Addenda to the Contract Documents at any time prior to the time set to open bids. Each potential bidder shall leave with the **Project Manager** his name, email address, phone number, and address for the purpose of receiving Addenda to be emailed or mailed to such names at such addresses. To be considered, a Contractor's Proposal must list, acknowledge, and take into account all issued Addenda. Addenda notification will only be given to prospective bidders that have registered for the bid in question. No additional, general public notifications will be given regarding the bid.
10. Inspection of Site. Bidders must examine the site and acquaint themselves with all conditions affecting the work. By making his bid a bidder warrants that he has made such site examination as he deems necessary as to the condition of the site, its accessibility for materials, workmen and utilities and ability to protect existing surface and subsurface improvements. No claim for allowances - time or money - will be allowed as to such matters.
11. Bonds. **The CLPOA may require** a 100% Payment Bond and 100% Performance Bond from the successful bidder. Contractor must be bondable and must state their bond rate on the bid form.

The bonds must be underwritten by a Surety Company, which is admitted to transact the business of insurance in the State of California, and which carries a rating in the current issue of Best's Insurance Guide of "A" or better with a financial size of at least "VIII". The bond forms included in the project documents shall be used.

12. Bids. Bids are required for the entire work, including all alternate bid schedules, if applicable, unless otherwise explicitly allowed in the bid documents. The amount of the

bid for comparison purposes will be the total of all items. The total of unit basis items will be determined by extension of the item price bid on the basis of the estimated quantity set forth for the item.

No bidder may withdraw his bid for a period of ninety (90) days .

13. Award of Contract. The **CLPOA** reserves the right to reject all bids received. Acceptance by the **CLPOA** by resolution or minute order at a meeting regularly called and held of a Contractor's Proposal constitutes an award of the contract and the execution of the Agreement is a written memorial thereof. Thereafter, **CLPOA** shall mail or deliver to the selected responsible bidder the agreement for Contractor's execution and return.
14. Return of Guarantee. Bid bonds (if required on this project) will not be returned unless specifically requested by the bidder. Any submitted negotiable securities of unsuccessful bidders will be returned by mail within 30 days of the award of a contract to the successful bidder. Any submitted negotiable security of the successful bidder will be returned by mail within 30 days of receipt by the CLPOA of executed contract, certificate of insurance, performance bond and payment Bond.
15. Subletting and Subcontracting. Bidders are required pursuant to the Subletting and Subcontracting Fair Practices Act (commencing with Section 4100 of the Public Contracts Code) to list in their proposal the name and location of place of business of each subcontractor who will perform work or labor or render services in or about the construction of the work or improvement or a subcontractor who specifically fabricates and installs a portion of the work or improvement according to detailed drawings contained in the Plans and Specifications in excess of 1/2 of 1% of this prime Contractor's total bid. Failure to list a subcontractor for a portion of the work means that the prime Contractor will do that portion of the work. It is the CLPOA's intent for the Subletting and Subcontracting Fair Practice Act to apply to all phases of the work.
16. Qualifications of Bidders. No award will be made to any bidder who cannot give satisfactory assurance to the **CLPOA** as to his own ability to carry out the contract, both from his financial standing and by reason of his previous experience as a Contractor on work of the nature contemplated in the contract. The bidder may be required to submit his record of work of similar nature to that proposed under these specifications, and unfamiliarity with the type of work may be sufficient cause for rejection of bid.
17. Alternate Bid Schedules. If the Proposal includes bid items listed under a Base Bid Schedule and one or more Alternate Bid Schedules, the following shall apply: The **CLPOA** may award only the items of work listed on the Base Bid Schedule, or may choose to award some or all of the Alternate Bid Schedules in addition to the Base Bid Schedule.

The **CLPOA** also reserves the right to reject all bids received.

18. Submission of Insurance Certificate. Within 10 business days of the date of the Notice of Acceptance of Proposal and Intent to Award issued by **The Canyon Lake Property Owners Association**, the successful Contractor shall submit a certificate of insurance, including

required endorsements, which provides evidence that the bidding Contractor has insurance coverage that meets the requirements of the General Conditions. Failure to have complete insurance coverage in place and to provide all required certificates and endorsements within the specified 10 business days period will be grounds for rescinding the award of the contract, making a claim against the bid bond, and awarding to the second low responsible bidder, at the sole discretion of the **CLPOA**.

19. Signature and Seal If the bid proposal is made by an individual, it shall be signed and his full name and his address shall be given; if it is made by a co-partnership, it shall be signed with the co-partnership name by one of the partners, who shall sign his own name and, in addition, the name and address of each partner shall be given; if it is made by a corporation, the name of the corporation shall be signed by its duly authorized officer, or officers, attested by the corporation seal, and the names and titles of all current officers of the corporation shall be given.

20. Mathematical Errors In the event the CLPOA determines that there has been a mathematical error on the Bidding Sheet resulting from incorrect multiplication of unit prices times quantities, or incorrect addition of bid prices to determine the total bid, unit prices shall control and the multiplication and the total bid amount shall be corrected accordingly prior to evaluating the bid.

C . BIDDER'S PROPOSAL
WITH SUPPORTING DOCUMENTS:

Happy Camp Campground
Construction Project

TO THE PRESIDENT OF THE BOARD OF DIRECTORS, CANYON LAKE PROPERTY OWNERS ASSOCIATION, CANYON LAKE, CALIFORNIA:

1. PROPOSAL

The undersigned proposes to furnish all labor, materials, equipment and methods necessary to properly construct and complete for the **Canyon Lake Happy Camp Campground Project** as set forth in the Bidding Sheet, and in accordance with Bidder's Plan for Construction accompanying this proposal and incorporated herein by reference.

The undersigned hereby declares, as bidder, that the only persons or parties interested in this proposal as principals are those named herein, that this bid is made without any connection with any other person or persons making a bid for the same purposes; except for any other division of the undersigned which may submit an independent bid; that the bid is in all respects fair and without collusion or fraud; that he has read the Invitation to Bid and the Instruction to Bidders and agrees to all the stipulations contained therein; that he has examined the form of Contract, (including the Special Requirements, Basic Specifications, and Drawings and other documents incorporated therein by reference); that in exchange for consideration of his bid proposal by the CLPOA he proposes, in the event his bid as submitted on the attached and incorporated Bidding Documents be accepted by the CLPOA, to contract in the said form to furnish and provide the items mentioned in this proposal and in the said form of Contract and in the Special Requirements, Basic Specifications, and Drawings, and to furnish and provide the same within the time stipulated therein; and he will accept as full payment therefor the prices named in said Bidding Sheet.

The Bidder further agrees that he shall execute such Contract within ten days from the date of mailing to him of written notice of the CLPOA's acceptance of this proposal and within same time shall furnish the required faithful performance bond or securities as permitted by Code of Civil Procedure Section 995.710, the labor and material payment bond, and certificates of insurance and endorsements.

2. BIDDER'S STATEMENT OF EXPERIENCE, FINANCIAL CONDITION
AND REFERENCES

How many years of experience in construction work has your organization had? _____

The following outline is a record of the undersigned Bidder's experience in construction of the three **(3) most recent projects of a type similar in magnitude and character to that contemplated under this Contract**. Include the location of each project as well as the name, address, and phone number of the Owner, and name of individual to contact.

1. Owner's Name: _____
Contact Person: _____
Address of Owner: _____
Phone: () _____
Project Description: _____
Amount of Contract: _____ Completion Date: _____

2. Owner's Name: _____
Contact Person: _____
Address of Owner: _____
Phone: () _____
Project Description: _____
Amount of Contract: _____ Completion Date: _____

3. Owner's Name: _____
Contact Person: _____
Address of Owner: _____
Phone: () _____
Project Description: _____
Amount of Contract: _____ Completion Date: _____

As a part of this supporting document, submit credit references, insurance certificates and, or other information and references sufficiently comprehensive to permit an appraisal of your financial condition.

3. BIDDING SHEET
Supplemental Instructions

1. Bidders are advised that:
 - a. The Bidders shall submit a price for all bid item numbers under all Bid Schedules.
 - ~~b. For this project there must be bids for the base bid and it will be acceptable to enter "No Bid" on the alternates, if so desired by the bidder.~~
 - c. Award, if made, will be for Base Bid and any alternates chosen by the Board of Directors. Some Alternates may be awarded to other bidders.**
 - d. The CLPOA may award only the items of work listed on the Base Bid Schedule, or may choose any Alternate. Alternates may be additive or deductive.
 - e. All contract construction shall be by an organization which has had at least five (5) years of successful experience in the construction of facilities of the type specified or comparable
 - f. The CLPOA reserves the right to vary the amount of work under the Contract, and may add or deduct from the various bid numbers at the unit prices shown on the Bidding Sheet, and as a result of this prerogative, there will be no claim for damages or profits, real or anticipated.
 - g. Bid items must include a proportional amount of profit, overhead, etc., within the bid price for each bid item number, since the schedule of bid item numbers under which award is to be made will be determined by CLPOA after bids have been received.
 - h. The Bidder shall submit his proposal on the bidding documents contained herein.

2. To complete this Bidding Sheet, use the blanks provided to fill in the bid prices at which you propose to furnish the scheduled construction, including all labor, materials, (other than materials supplied by the CLPOA), equipment, work, and methods necessary to complete the work in accordance with the Contract Completion Schedule located in the Special Requirements. Fill in the figures for the unit prices, extensions and sum of extensions (Total Bid) for all Bid Schedules and/or Bid Items shown on the Bidding Sheet. Figures and words must be inserted for the "Total Bid". Blanks in the Certified Data Sheet must be completely filled in.

3. Addenda: Receipt of Total Addenda No.(s)_____is hereby acknowledged. Proposal may be rejected if any issued addenda is not acknowledged.

Bidder's Company Name

b. Bid Item Schedule

The undersigned hereby proposes to furnish and install the following items of construction for the CLPOA, all in strict accordance with the attached and/or incorporated Special Requirements, Basic Specifications and Drawings, including all labor, materials, equipment, work, method, etc., necessary to complete the work in accordance with the stated completion schedule(s), for the following bid prices:

Canyon Lake Happy Camp Campground – Bid Form

ITEM #	ITEM	UNIT	ESTIMATED QUANTITY	AMOUNT
1	Base Bid			
	Mobilization, traffic control, storm water pollution prevention, Erosion control and lake contamination protection, Demolition, Site Clearing, Excavation, Excavation, sawcutting, refuse disposal, Earth moving, Grading, Pavement crushing.	LS	1.00	
2	Base Bid			
	Forming, Asphalt Concrete overlay, New Asphalt Concrete, and Asphalt Base material. Concrete walkways. (new/rehab Roadways and walkways)	LS	1.00	
3	Base Bid			
	Relocate power pole, street light and 2 signs. Existing sewer manholes and water valve grade adjust. (Relocate existing infrastructure)	LS	1.00	
4	Base Bid			
	New Underground wiring and RV electrical panels/pedestals, lighting post footings, conduit and wiring (New electrical system)	LS	1.00	
5	Base Bid			
	New Underground water laterals, hose bibs, new sewer system and RV sewer connections. Abandon old water laterals at the mains. (New sewer and water systems)	LS	1.00	
6	Alternate #1			
	Optional RV utility hookups on Tent sites 26-33. – addition of 8 more RV sites where there are currently tent sites			
7	Alternate #2			
	Trim and Save 5 Olive trees that are scheduled for demolition per plan if campsite layout permits.			
8	Alternate #3			
	Add a second sewer dumpsite to each campsite with sewer dumps, to accommodate both front lake-facing motorhomes, and backed in – ramp facing lake toyhaulers			

Canyon Lake Happy Camp Campground – Bid Form, Continued

ITEM #	ITEM	UNIT	ESTIMATED QUANTITY	AMOUNT
6	Alternate #4			
	Optional use of coiled polyethylene water piping underground instead of PVC shown on plans			
7	Alternate #5			
	2x4 Redwood headers at all locations where asphalt transitions to dirt and that can be driven over by a vehicle.			
8	Alternate #6			
	(if added by addendum)			

Alternate Bid Schedules and Method of Award

The Owner may award only the items of work listed on the Base Bid Schedule, or may choose to award some or all of the Alternate Bid Schedules in addition to the Base Bid Schedule. The Owner will select best combination of qualified, responsive and responsible bids using the sum of the base bid and all alternate bidschedules. The Owner also reserves the right to reject all bids received. **Alternates may be additive or deductive or n/c (no change= \$0.00).**

BIDDERS ARE WELCOME AND ENCOURAGED TO MAKE VALUE ENGINEERING SUGGESTIONS BY ATTACHING SEPARATE A SEPARATE SHEET OF DEDUCTIVE ALTERNATES WHENEVER APPROPRIATE.

PROPOSAL TOTALS

Base Bid Item #1	\$ _____
Base Bid Item #2	\$ _____
Base Bid Item #3	\$ _____
Base Bid Item #4	\$ _____
Bid Alternate #1	\$ _____
Bid Alternate #2	\$ _____
Bid Alternate #3	\$ _____
Bid Alternate #4	\$ _____
Bid Alternate #5	\$ _____
Bid Alternate #6 (if added by addendum)	\$ _____
PROJECT TOTAL _____	\$ _____

Base bids plus/minus alternates - words

Bidders shall provide unit and total bid amounts for the above items. The Owner is under no obligation to the contractor for said items and may ask the contractor at the Owner's discretion to complete some or all of said items. In such cases, the contractor shall be paid for actual quantity constructed per the unit prices provided on the bid schedule.

NOTES:

- Bid shall include all sales tax, and other taxes and fees.
- CLPOA will be paying the building permit fees for this project.
- Prevailing wages are not required.
- Submittals will be required within 30 days of award for all materials to be used.
- NO Change orders unless approved in writing by the GM first
- Project duration shall be: **COMPLETED AND TURNED OVER/ACCEPTED BY OWNER BEFORE MAY 20, 2018**

BIDDER DATA

Name of Bidder

Type of Organization

Person Authorized to Sign for Bidder

Address

Phone

Contractor's License

Type & Number

Expiration Date

Bidding Sheet-Continued

4. DESIGNATION OF SUBCONTRACTORS

Contractor submits the following complete list of each subcontractor who will perform work or labor or render service in or about the construction in an amount in excess ½ of 1% of the total bid.

NAME	LICENSE NO. AND CLASSIFICATION		
TELEPHONE	DESCRIPTION OF WORK CONTRACTED:		
ADDRESS	BID ITEM NOS.	AMOUNT	% OF TOTAL BID
CITY, ZIP			

NAME	LICENSE NO. AND CLASSIFICATION		
TELEPHONE	DESCRIPTION OF WORK CONTRACTED:		
ADDRESS	BID ITEM NOS.	AMOUNT	% OF TOTAL BID
CITY, ZIP			

NAME	LICENSE NO. AND CLASSIFICATION		
TELEPHONE	DESCRIPTION OF WORK CONTRACTED:		
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NAME	LICENSE NO. AND CLASSIFICATION		
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NAME	LICENSE NO. AND CLASSIFICATION		
TELEPHONE	DESCRIPTION OF WORK CONTRACTED:		
ADDRESS	BID ITEM NOS.	AMOUNT	% OF TOTAL BID
CITY, ZIP			

NAME	LICENSE NO. AND CLASSIFICATION		
TELEPHONE	DESCRIPTION OF WORK CONTRACTED:		
ADDRESS	BID ITEM NOS.	AMOUNT	% OF TOTAL BID
CITY, ZIP			

NAME	LICENSE NO. AND CLASSIFICATION		
TELEPHONE	DESCRIPTION OF WORK CONTRACTED:		
ADDRESS	BID ITEM NOS.	AMOUNT	% OF TOTAL BID
CITY, ZIP			

NAME	LICENSE NO. AND CLASSIFICATION		
TELEPHONE	DESCRIPTION OF WORK CONTRACTED:		
ADDRESS	BID ITEM NOS.	AMOUNT	% OF TOTAL BID
CITY, ZIP			

Percent of work to be performed by sub-contractors: _____%
(Note: 50% of the work required to be performed by general contractor)

IN WITNESS WHEREOF Contractor executed this Proposal as of the date set forth on Page 1 of this proposal.

TITLE _____
 "Contractor"

5. BIDDER'S STATEMENT

1. Names and addresses of all members of co-partnership or names and titles of all officers of the corporation.

2. The bidder declares that the surety or sureties named in the space provided below has agreed to furnish bonds in the aggregate amounts set forth in the Instruction to Bidders, in the event the Contract is awarded on the basis of this proposal.

Name(s) and address (es) of surety or sureties agreeing to furnish bond.

Note: Contractor states they are bondable should CLPOA require payment and performance bonds: Y/N

Contractor Initials

Note: Contractor please state your bond rate:

Contractor Initials

Corporation organized
under the laws of the
State of:

Name of Bidder:

California Contractor's
License No. _____

Bidder's Address

License Expiration Date:

License Class _____

Bidder's Phone Number

I declare under penalty of perjury under the laws of the State of California that the foregoing representations are true and correct.

By: _____

(Bidder's Signature)

(Typed or Printed Name)

Title

D. AGREEMENT for Happy Camp Campground

This AGREEMENT FOR CONSTRUCTION SERVICES (the "Agreement") is entered into by and between **Canyon Lake Property Owners Association** ("Owner"), a California nonprofit mutual benefit corporation, and _____ ("Contractor") [License Number # _____] on _____, ____ 2017. Contractor and Owner are occasionally referred to throughout this document as "Parties."

RECITALS

- A. Owner is a California nonprofit mutual benefit corporation, organized for the purpose of managing and maintaining the common interest development commonly known as Canyon Lake Property Owners Association and the other purposes set forth in the Declarations of Covenants, Conditions, Restrictions and Reservation of Easements for Canyon Lake Property Owners Association, its Articles of Incorporation, By-Laws and other governing documents.
- B. The intent of this contract is for Owner to retain Contractor's services for **Demolition and reconstructing Happy Camp Campground with all demolition, concrete, asphalt paving, base material, and associated grading, sewer, water and electric utilities and improvements per the drawings and bidding documents, at the Campground Area, located at, 30550 Longhorn Dr, Canyon Lake, CA, 92587 as described in Exhibit A hereto.**
- C. Subject to the General Conditions in Art. II, Owner shall pay Contractor, pursuant to Art. II ¶ 11, in exchange for Contractor to provide the services detailed in Art. I.
- D. For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

ARTICLE I. SCOPE OF WORK

Subject to the General Conditions of this Agreement in Art. II, Contractor's work will consist as follows:

1. Contractor shall provide all materials, tools, equipment and labor to perform all work necessary or incidental to the performance of the services described in Article II and attached to this Agreement, as Exhibit A, incorporated by this reference, as though fully set forth herein. (The term "Work" as used herein shall mean and refer to the entirety of Contractor's duties under this Agreement.)
2. The Effective Date of this Agreement is the date on which it is executed by both Parties.
3. Contractor shall provide all project management including hiring of subcontractors, if necessary, and coordination with any of the subcontractors on the site.
4. Owner has the right to cancel this Agreement, within three days following the Effective Date, without any charge to Owner.

5. Owner has the right to cancel this Agreement, any time after three days following the Effective Date, with or without cause, by providing written notice, via overnight mail, to Contractor at the address listed in below. Termination shall be effective 3 days after Owner sends Contractor the termination notice.

If Owner terminates this Agreement pursuant to this provision, Contractor shall be entitled to collect from Owner the undisputed value of any services performed or materials provided by Contractor, if any, before the date the notice was received by Contractor.

6. The contract price includes any and all governmental applications and fees, if required.
7. ~~Contractor shall provide all necessary building permits, if any, at Contractor's cost and expense.~~
8. All work, material or equipment shall comply with the requirements of codes, ordinances and regulations of the local government having jurisdiction at the location of the work, including the regulations of serving utilities, and any other participating government agencies having jurisdiction.
9. Contractor shall visit the site and verify all existing conditions prior to commencement of work.
10. Owner may from time to time, retain one or more Consultants to advise Owner on this project. Such Consultants serve at the absolute discretion of Owner. Such Consultants' only involvement in the project will be to advise Owner – Consultants' involvement, actions or inactions shall in no way whatsoever limit Contractor's liability or duties under this Agreement. Such Consultants are not parties to this Agreement.
11. It is not the responsibility of Owner or its Consultants to supervise the work of Contractor in any way whatsoever, or to in any way relieve Contractor of his responsibility to carry out all its contractual duties.
12. Contractor shall coordinate its work with that of any the other trades that may be concurrently working at the Campground, if applicable.
13. Contractor shall be responsible for keeping the building, site, and premises clean and tidy with respect to Contractor's work at all times.
14. Contractor shall dispose of waste in accordance with California State Waste Management requirements, and any other laws governing the use of any of the substances / products used by Contractor.
15. Contractor shall be responsible for the cost to repair or replace any portion of the Properties, or improvements thereon, damaged or destroyed by the intentional or unintentional act or omission of Contractor, its agents, employees or subcontractors. Contractor agrees that Owner

may withhold from Contractor's compensation an amount sufficient to repair or otherwise correct such damage or destruction provided, however, that Contractor has first been notified of the damage or destruction. This paragraph shall not be construed to give Contractor the right to contract directly for the required repair, replacement, or correction of damage or destruction without the prior written consent of the Owner.

16. Contractor guarantees its work for three (3) year from the date of completion and acceptance of the work. During this period, any defects in materials, workmanship, or performance shall, without cost to Owner, be remedied within a reasonable length of time (not to exceed 2 months) from when notice is given by Owner to Contractor of the defect. Contractor shall undertake all service or adjustments required to the equipment during this period as part of the guarantee. This guarantee period in no way limits any applicable statutes of limitation or repose that may be applicable to claims against Contractor related to this contract and any work to be completed pursuant to this Agreement.
17. At the project completion Contractor shall provide written notice to Owner certifying that the work is complete. Upon receipt of this written notice, Owner's warranty will begin to run provided that all work is in fact completed. If the work is not completed, the warranty shall not begin to run until such time as the parties agree that the work is 100% complete.

ARTICLE II. GENERAL CONDITIONS

1. This is a lump sum contract; there are no hidden costs. However, should additional work (outside the scope of this contract) be required, a written order must be obtained from Owner before ordering material and proceeding with the work.
2. Contractor guarantees the price for the entire project. There will be no labor or material cost increases.
3. All materials are to be installed in strict accordance with the specifications of the engineer and/or manufacturer and all applicable laws and regulations. Contractor may only store equipment and materials on the properties on or near the Campground with the written approval of Owner, and then only in locations and for durations as allowed by Owner.
4. Contractor shall provide a qualified supervisor on site at all times that work is being performed or materials are delivered to job site.
5. All vehicles used by Contractor shall remain at pre-approved parking areas.
6. Contractor shall coordinate all activities with Owner's General Manager. Owner's General Manager is the only person authorized to order work or services under this Agreement on behalf of the Owner. Any such authorization shall be in writing, signed by Owner's General Manager. The Parties expressly acknowledge that no other agent, employee, subordinate or member/homeowner of Owner may order work or services. If Contractor performs work or

services at the request of any such agent, employee, subordinate or member/homeowner, Contractor shall not be entitled to any compensation from Owner for such work.

7. Contractor recognizes that these are residential properties and Contractor shall not interfere with or disturb the residents, commercial tenants or visitors/customers, any more than is necessary to complete the Work. For this reason, Contractor agrees to take such safety measures as are reasonably necessary to assure such safety, including but not limited to, obeying all laws, regulations, rules and guidelines adopted by any federal, state or municipal agency, and applicable safety organization, or by Owner. Contractor further agrees to take such steps as will reasonably assure that Contractor's agents and employees will perform all work in a safe and lawful manner while on or about Owner's properties.
8. Contractor may not delegate or assign any of its duties herein without prior written permission from Owner.
9. Upon written request from Owner, Contractor shall provide to Owner the name and address of any subcontractors hired to perform Work related to this Agreement.
10. When Work is substantially complete, Contractor shall inform Owner for purposes of inspection. Should any defects require correction, they shall be corrected at no cost to Owner. Contractor shall not cover up any work until proper inspection of work has been performed by Owner's General Manager.
11. Owner will pay for Contractor's services pursuant to this Agreement \$ _____, total for all Work, as described in Exhibit A.
12. Time is of the essence in this Agreement.
13. If Contractor falls behind in schedule, Contractor will increase the labor force during working hours to meet and maintain the schedule of work.
14. Work must be performed Monday through Friday between the hours of 7:00 am and 5:00 pm, excluding Saturdays, Sundays, and holidays during which days no work will be performed. Work may not be performed at any other times or dates, unless the Owner expressly agrees in writing.
15. Contractor shall, at all times during the term of the Agreement or any extension thereof and at Contractor's own cost and expense, procure from insurance company(ies) acceptable to the Owner, and continue in force, insurance policies of the amount and types set forth below (but, in no event, with levels below those required by any applicable law, ordinance or regulation); furnish the Owner with certificates of insurance accompanied by additional insured endorsements naming the Owner, its directors, officers, employees and management, as additional insureds under said policies and providing that the insurance company(ies) must give the Owner at least 30 days' written notice of any cancellation and have the insurance company(ies) issue the Owner the appropriate ACORD form explicitly stating that the certificate(s) of insurance convey(s) all rights and privileges afforded under the policy(ies) to the certificate holder.

Coverages	Limits of Liability	
	Each Occurrence	Aggregate
General Liability	\$1,000,000	\$2,000,000
Workers' Compensation	\$ (as required by law)	\$ (as required by law)
Automobile Liability - Any Auto Used	Bodily Injury/Property Damage - \$1,000,000 Combined Single Limit	

Coverages shall apply to all locations where the named insured is performing services and/or activities in connection with, or arising out of, this Agreement. The policy of insurance which affords comprehensive general liability shall contain at a minimum:

- (a) A provision or endorsement stating that such insurance, subject to all of its terms and conditions, applies to the liability assumed by Contractor under this Agreement, including, but not limited to, the liability assumed under the defense, indemnification and hold harmless provisions hereof (blanket contractual coverage);
- (b) Premises operations, products/completed operations hazard, contractual liability, broad- form property damage, and independent contractors' coverages;
- (c) Personal injury (false arrest, detention or imprisonment, malicious prosecution, libel, slander, defamation, or violation of right of privacy, wrongful entry or eviction, or other invasion of right of private occupancy, bodily injury and assault and battery) coverages; and
- (d) Legal liability coverage for dishonest acts of insured's employees.

The foregoing requirements as to types, limits and approval of insurance coverage to be maintained by Contractor are not intended to, and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Contractor under this Agreement.

If Contractor, at any time during the term hereof, should fail to secure or maintain the foregoing insurance, Owner shall have the power, but not the duty, to obtain such insurance in the Contractor's name or as the agent of the Contractor and shall be compensated by the Contractor for the cost of the insurance premiums with interest thereon at the legal rate.

16. Contractor shall DEFEND, INDEMNIFY AND HOLD HARMLESS Owner (including Owner's officers, directors, shareholders, partners, members, managers, principals, insurers, assigns, attorneys, representatives, parent entities, divisions, subsidiaries, predecessors, successors in interest, agents, employees, licensees, affiliates, contractors, servants, and their respective successors and assigns) FROM ANY AND ALL CLAIMS, DEMANDS, OBLIGATIONS, ACTIONS, CAUSES OF ACTION, WRONGFUL DEATH CLAIMS, DAMAGES, COSTS, LOSSES, EXPENSES AND LIABILITIES OF EVERY NATURE (including, without limitation, attorney fees and other costs incurred in connection with

the defense of any such claims or actions or in the enforcement of this defense and indemnity obligation) whether based on tort, contract, or equitable principles, and whether based on intentional or unintentional acts or omissions, arising from or in connection with (i) the performance of Contractor's obligations arising from this Agreement and/or (ii) the Contractor's failure to observe or comply with the provisions of this Agreement. Contractor's obligation to defend and indemnify herein shall extend to, but not be limited to, any and all claims, demands, obligations, actions, causes of action, wrongful death claims, damages, costs, expenses and liabilities, (including, without limitation, attorneys' fees and other costs incurred in the defense of claims or actions or in the enforcement of this defense and indemnity obligation) whether occurring before, during or after the performance of this Agreement, which arise from the activities and/or products of Contractor and/or Contractor's employees, agents, contractors, suppliers, subcontractors, officers, directors, shareholders, partners, members, insurers, assigns, attorneys, representatives, principals, parent entities, divisions, subsidiaries, successors in interest, licensees, affiliates or servants, or their respective successors and assigns. Contractor's obligation to defend and indemnify herein shall include, without limitation, claims based on duties, obligations or liabilities imposed on Owner by statute, ordinance, regulation or other law, and claims based on theories of peculiar risk or non-delegable duty or arising from conditions of the work place, and include, without limitation, claims for or based on injury or death to persons or damage to or loss of property contributed to in part by the negligent act or omission or other misconduct of Owner or other party to be indemnified herein (whether active or passive), as long as the injury, death, damage, or loss is caused or alleged to be caused in part by the negligent act or omission or other misconduct of Contractor and/or Contractor's employees, agents, contractors, suppliers, subcontractors, officers, directors, shareholders, partners, members, managers insurers, assigns, attorneys, representatives, principals, parent entities, divisions, subsidiaries, successors in interest, agents, licensees, affiliates, or servants or their respective successors and assigns. The above provisions of this paragraph do not obligate Contractor to indemnify Owner against liability for damages for death or bodily injury to persons, injury to property, or other loss, damage or expense arising from the sole negligence or willful misconduct of Owner. To the fullest extent allowed by applicable law, Contractor waives all claims against Owner for damage to or loss of property and/or injury to or death of persons in or about the Properties from any cause arising at any time, except to the extent caused by the gross negligence or willful misconduct of Owner; provided, however, that this sentence is not intended as a waiver of mechanic's liens, stop notices or bond rights as contemplated under California law. All indemnifications by Contractor in this Agreement in favor of Owner shall continue in full force and effect until all statutes of limitation pertaining to any relevant claim or cause of action have expired. Nothing in this paragraph shall reduce or limit the Owner's rights as an insured pursuant to the coverages which must be provided under this Agreement.

17. The Parties agree that, to the extent that any provision of this Agreement is determined to be unenforceable, the unenforceable provision should be severed from the Agreement or modified to comply with the law, without affecting the validity or enforceability of any of the other terms or provisions of the Agreement.

18. Arbitration Clause. Any dispute, claim or controversy arising out of or relating to this Agreement or the breach, termination, enforcement, interpretation or validity thereof, including the determination of the scope or applicability of this agreement to arbitrate, will be determined by arbitration in the State of California, pursuant to the Federal Arbitration Act (9 U.S.C. §§ 1-16, now in effect and as may hereafter be amended). The arbitration shall be administered by JAMS in Riverside County, California, pursuant to JAMS' Streamlined Arbitration Rules and Procedures. Judgment on the Award may be entered in any court having jurisdiction.

Arbitration is the only forum in which a dispute regarding this Agreement may be heard. Both Parties hereby expressly waive all rights, constitutional and otherwise, to have their disputes under this Agreement determined by a jury trial or bench trial. The arbitrator shall have the authority to award attorney fees and costs to the prevailing party, including without limitation, all costs incurred in initiating or defending the arbitration claim, and any and all discovery costs. The arbitrator's decision will be legally binding, final, and judgment may be entered thereon.

Each Party is responsible for its share of the arbitration fees. In the event a Party fails to proceed with arbitration, unsuccessfully challenges the arbitrator's award, or fails to comply with the arbitrator's award, the other Party is entitled to costs of suit, including reasonable attorney fees for having to compel arbitration or defend or enforce the award.

19. If, for any reason, a dispute regarding this contract is litigated outside of arbitration: such litigation shall be governed exclusively by the laws of the State of California, without regard to conflicts of laws principles; and the Riverside County Superior Court will have exclusive jurisdiction.
20. This Agreement constitutes the complete understanding between the Parties as to the subject matter of this Agreement, and a fully integrated written memorialization of same. No prior or contemporaneous statements or writings may be considered in the interpretation of this Agreement. This Agreement may be modified only upon mutual agreement between the Parties, memorialized in a fully executed writing.
21. The language of this Agreement shall not be interpreted in favor of or against any Party as the drafter of this Agreement. In this respect, the parties expressly agree that Cal. Civ. Code § 1654 will not apply, such that any ambiguity in this Agreement will not be construed against the drafter.

ARTICLE III. COMPLIANCE WITH LABOR CODE SECTION 2810

1. **CONTROLLING ARTICLE**. In the event of any inconsistency between the terms of Article III of this Agreement and any other part of this Agreement, the terms of this Article III shall control.
2. **CONTRACTOR REPRESENTATION AND WARRANTY**. Contractor has warranted and represented to Owner, and Owner has relied thereon, that the consideration contemplated in this Agreement includes funds sufficient to allow the Contractor to comply with all applicable local, state and federal laws or regulations governing the labor or services to be provided.

3. CONTACT INFORMATION. The name, address and telephone number of the Owner, to whom the services described in the Agreement shall be provided, and of the Contractor, through whom the services are to be provided, are as follows:

Contractor: _____

Owner: Canyon Lake Property Owners Association
c/o General Manager
31512 Railroad Canyon Road
Canyon Lake, CA 92587
(951) 244-6841

ARTICLE IV. LIQUIDATED DAMAGES

The work specified herein shall be completed by May 20th, 2018. For each consecutive calendar day in excess of the time specified for the completion of work, the Contractor shall pay the CLPOA **\$1,500.00 per day** the minimum value of the costs and actual damage caused by the failure of the Contractor to complete the Work within the allotted time.

It is further agreed that in case the Work is not finished and completed in all parts and requirements within the specified number of calendar days, the CLPOA have the right to increase the number of calendar days if it deems best to serve the interest of the CLPOA. If the CLPOA decides to increase the said number of calendar days in lieu of charging liquidated damages, it shall further have the right to charge to the Contractor, its heirs, assignees or sureties and to deduct from the final pavement for the Work all or any parts, as the CLPOA may deem proper, the actual cost of engineering, inspection, superintendence, and other overhead expenses which are directly chargeable to the Contract, and which accrue during the period of such extension, except that the cost of final surveys and preparation of the final estimate will not be included in such charges.

ARTICLE V. EXECUTION AND COUNTERPARTS

The Parties acknowledge that they have read and understand the contents of this Agreement and that they are executing it voluntarily, without any duress and with full knowledge of its meaning and effect. Each signatory to this Agreement expressly warrants that he or she has full and actual authority to bind the signatory's principal, i.e. Owner or Contractor, to all terms of this Agreement.

This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but all of which together shall constitute one (1) and the same instrument. Signatures may be by facsimile or scanned pdf images transmitted via electronic mail, and shall have the same validity, effect and enforceability as if they were in original ink.

THIS CONTRACT CONTAINS A BINDING ARBITRATION PROVISION WHICH AFFECTS YOUR LEGAL RIGHTS AND MAY BE ENFORCED BY THE OTHER PARTY.

IT IS SO AGREED.

“OWNER”

Canyon Lake Property Owners Association

Date: _____

By: _____

Paul Queen, Its: Board President

Date: _____

By: _____

Eric Kazakoff, Its: General Manager

“CONTRACTOR”

Date: _____

By: _____

Its: _____

E. Technical Specifications for the Reconstruction of Happy Camp Campground Project

Rev. November 2017

Project Scope of Services

The general items of work to be done hereunder consist of grading and reconstruction of Happy Camp Campground, relocation/replacement of existing sewer, water and electric utilities, relocation of existing street lights and power poles, removal of several existing trees, removal and reuse of existing pavement, and realignment of existing roadways.

Review of Contract Documents and Job Site

The Contractor shall carefully study and compare the Contract Documents with each other and with information available to the Contractor and furnished by the CLPOA and shall immediately notify the Engineer of errors, inconsistencies or omissions discovered. If the Contractor performs any construction activity knowing it involves a recognized error, inconsistency or omission in the Contract Documents without notice to the Engineer, the Contractor shall assume appropriate responsibility for such performance and shall assume responsibility for the full costs for correction.

The Contractor shall make field measurements, verify field conditions and shall carefully compare such field measurements and conditions and other information known to the Contractor with the Contract Documents before commencing activities. Errors, inconsistencies or omissions discovered shall be reported to the Project Manager immediately.

When existing conditions are encountered which, in the opinion of the Project Manager, require temporary suspension of work for design modifications or for other determinations to be made, the Contractor shall move to other areas of work until such determinations are made at no cost to the CLPOA. The Contractor shall be allowed an extension of the Contract Time directly attributable to any such suspension. The Contractor shall not be allowed additional compensation directly attributable to any such suspension.

Preconstruction Audio Video

The Contractor shall make arrangements with a professional photographer, approved by the, to Project Manager prepare a full color pre-construction audio and video tape of the project site with the Project Manager present prior to construction of street and provide the Project Manager with a DVD copy. The cost for this work shall be included in the unit prices bid for the various contract items, and no additional compensation will be allowed thereafter.

Notification of Residents

The Contractor shall coordinate with CLPOA for notification at least ten (10) working days prior to commencing work, to all agencies, postal service, residents, utilities and waste disposal service affected by the work. Additional printed notification in person given not less than forty-eight (48) hours prior to performing any work which will restrict property access, close or partially close the street, or which will restrict or disallow street parking.

The printed notices shall contain a general description of the work to be done and the date that the work is to be done. All public notices must be reviewed and approved by the Project Manager prior to its distribution.

The Contractor shall also post printed "NO PARKING/NO DRIVING-TOW AWAY" signs at one-hundred-foot (100') maximum spacing along each side of the affected street for forty-eight (48) hours prior to the commencement of the street improvement work. The Contractor shall document the day, date and time the "NO PARKING" signs were posted. Posting of signs on trees and utility poles will not be allowed. The NO PARKING/NO DRIVING signs shall contain the day, date, hours and vehicle code, that parking will be prohibited on that particular street and a statement that parked vehicles will be towed away at the owner's expense per California Vehicle Codes CVC 22651L and CVC 22654D. The signs shall be removed immediately upon completion of work that will prohibit parking. The printed notices and the "NO PARKING" signs shall be furnished by the Contractor. Full compensation for compliance with the preceding requirements shall be considered as being included in the various Contract items in the bid schedule and no additional compensation will be allowed thereafter.

Protection of Public

The Contractor shall take all necessary precautions to protect the public, especially children, from the hazards of open excavations. Trenches, slopes, and excavations requiring shoring shall either be covered or adequately fenced at night and on weekends or whenever operations are not actually in progress. The Contractor shall provide safe pedestrian access on to existing facilities at all time. Unusual conditions may arise on the project, which will require that immediate and special provisions be made to protect the public from danger or loss or damage to life and property, due directly or indirectly to the progression of the work. It is part of the service required of the Contractor to make such provisions and to furnish such protection.

The Contractor shall use such foresight and shall take such steps and precautions as his operations make necessary to protect the public from danger or damage, or loss of life or property, which would result from the interruption or contamination of public water supply, irrigation or other public service or from the failure of partly completed work.

Whenever, in the opinion of the CLPOA, an emergency exists against which the Contractor has not taken sufficient precaution for the safety of the public or the protection of utilities or of adjacent structures or property or if immediate action shall be considered necessary in order to protect public or private personnel or property interest, or prevent likely loss of human life or damage on account of the operations under the contract, then and in that event, the CLPOA may provide suitable protection to said interest by causing such work to be performed and material to be furnished, as, in the opinion of the CLPOA, may seem reasonable and necessary.

The cost and expense of said labor and material together with the cost and expense of such repairs as may be deemed necessary shall be borne by the Contractor. If he shall not pay said cost and expense upon presentation of the bills therefore, duly certified by the CLPOA's Representative, then said costs and expense will be paid by the CLPOA and shall thereafter be deducted from any amounts due, or which may become due said the Contractor. Failure of the CLPOA or Engineer to take such precautionary measure shall not relieve the Contractor of his full responsibility for public safety.

Materials and equipment shall be stored so as to not create a public nuisance and to insure the preservation of their quality and fitness for the work. No materials or equipment shall be stored at the project site unless its use is imminent.

The Contractor is responsible to design, construct and maintain all safety devices and be responsible for conforming to all local, state and federal safety and health standard, laws and regulation.

The Contractor shall use proper safety signing and barricading as required per California Manual on Uniform Traffic Control.

Mobilization

The cost of Mobilization shall be included in the contract prices paid for the various items of work and no additional payment will be allowed thereafter. It shall include mobilization, bonds and insurance includes all costs associated with all phases, as described in order of work, insurance, bonds, required permits and fees, shop drawings, potholing, moving onto the job (mobilization), moving off the job (demobilization), preparation of project schedule, project phasing, supervision, coordination of concurrent work with other Contractors, meetings, and "as-built" plans required to perform the work indicated in the plans and specifications.

Record Drawings

The Contractor shall keep one clean set of bond originals to note any changes which take place during construction. These changes to the original plans and/or specifications shall be noted at the appropriate locations with the appropriate changes indicated in red pencil or ink. The Contractor shall note in large letters "RECORD DRAWINGS" on the Title Sheet of the plans. The job will not be finalized by the Engineer until these record drawings have been completed to the satisfaction of the Engineer. The changes shall be noted on the plans as the changes occur. The record drawings shall be submitted to the Resident Engineer, and become the property of the CLPOA at conclusion of the project.

Full compensation for maintaining and compiling the record drawings shall be considered to be included in other items of work and no additional compensation will be allowed.

Dust Control/Air Contaminants

Dust control shall be performed in accordance with Subsection 7-8, "Work Site Maintenance," of the standard Specifications, South Coast Air Quality Management District (SCAQMD) Rule 403, the general Provisions and the following Provision.

Dust resulting from the Contractor's performance of the work, either inside or outside, the right-of-way shall be controlled by the Contractor. Dust control includes the action necessary to prevent, reduce or control dust within the work area as required to complete the work. The Contractor shall carry out proper and efficient measures to prevent his operations from producing dust in amounts damaging to property or causing a nuisance, or harm to persons living nearby or occupying buildings in the vicinity of the work. The Contractor shall control dust 24 hours a day, seven days a week. The methods to be used for controlling dust in the construction area and a long haul road shall be approved by the Engineer prior to starting any work. The Rule 403 Implementation Handbook published by the SCAQMD, contains a detailed listing of reasonably available dust control measures.

Dust or dirt accumulations generated by the Contractor's operations shall be cleaned and removed by the Contractor from all areas as designated by the Engineer. Areas to be cleaned shall include, but not be limited to swimming pools, interiors of any structures including residences and places of business, exteriors of any structures including roofs, patios, driveways, and any other areas as required. The Contractor shall retain a professional cleaning service for the cleaning of swimming pools, and the interior and exterior of structures. The cost for cleaning and removal of dust or dirt shall be at the Contractor's expense and no additional compensation will be made thereafter.

Wash mud-covered tires and under-carriages of trucks leaving construction sites. Provide for street sweeping, as needed, to remove dirt from roadways left behind by vehicles leaving the project site. Cease grading, cleaning, earthmoving, or excavation operations during periods when winds exceed 25 miles per hour. The Contractor shall maintain contact with a meteorologist for current information about average wind speeds. Water for use in dust control shall, at the option of the Contractor, be potable or non-potable. Non-potable water shall consist of reclaimed wastewater or non-potable water developed from other sources.

If the Contractor uses reclaimed wastewater in the work, the sources and discharge of reclaimed wastewater shall meet the California Department of Health Services Water Reclamation Criteria and the Regional Water Quality Control Board requirements. The Contractor shall obtain either a wastewater discharge permit or a waiver from the Regional Water Quality Control Board. Copies of permits or waivers from the Regional Water Quality Control Board shall be delivered to the engineer before using reclaimed wastewater in the work.

Water shall be applied in the amounts, at the locations, and for the purposes designated in the Special Provision and these Specifications, and as ordered by the Engineer.

All equipment used for the application of water shall be equipped with a positive means of shut-off. Unless otherwise permitted by the Engineer or unless all the water is applied by means of pipe lines, at least one mobile unit with a minimum capacity of 3700 L (1,000 gallons) shall be available for applying water on the project at all times.

Chemical additives or binder may be used in water for compaction or dust palliative. If such additives are used, furnishing and applying the additives shall be at the Contractor's expense.

The right is reserved by the Engineer to prohibit the use of a particular type of additive, to designate the locations where a particular type of additive may not be used, or to limit the amount of a particular type of additive to be used at certain locations, all if the Engineer has reasonable ground for believing that such use will in any way be detrimental.

Dust control ordered by the Engineer to be applied on Saturdays, Sundays or holidays will be included in the Contract price for dust control and no additional compensation will be allowed thereafter.

No adjustment of compensation will be made for any increase or decrease in the quantity of dust control required, regardless of the reason for such increase or decrease.

The full compensation for Dust Control shall be considered as included in the contract lump sum price paid for dust control system and no additional compensation will be allowed thereafter.

Water

The Contractor shall make arrangements with the Water District/CLPOA to obtain water from designated fire hydrants at or near the project for use in dust control and soil compaction. It shall be the responsibility of the Contractor to pay for the water and any deposits required. Contractor shall obtain and furnish construction meter(s).

Water shall not be taken from any commercial or residential systems without the express written consent of the owner.

The cost to furnish and apply water shall be included in the contract prices paid for the various items of work and no additional payment will be allowed thereafter.

Over Excavation and Clearing and Grubbing

Over Excavation and Clearing and Grubbing shall conform to the provisions in Section 300-1, "Clearing and Grubbing", Section 300-4.6, "Application of Water", Section 7-8.2, "Air Pollution Control", Section 300, "Earthwork", Section 801-4.9, "Erosion Control Planting", and Section 300-1.2, "Preservation of Property", of the standard specifications and these special provisions.

The Clearing and Grubbing shall include all earthwork in the project including, but not limited to, all import, export, grading, compaction, pavement removal, curb & gutter removal, sidewalk removal, fence removal, landscape removal (everything as shown on the demolition plan) and grading and all earthwork not specifically noted elsewhere in the specifications. This item shall also include removal of asphalt concrete (except for cold-planning of asphalt concrete if addressed elsewhere in the bid schedule), concrete pavement, existing irrigation pipes, fence, and all weed kill, weed removal and trimming of all vegetation in conflict with the improvements.

Clearing and Grubbing will be paid per lump sum and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all work and no additional compensation will be allowed thereof.

The Contractor shall remove existing material 2 feet deep below bottom of proposed footings and 5 additional feet exterior of proposed community building and pre-gate footings. The Contractor shall protect existing utilities during over excavation operation. The Contractor shall back fill 2 feet below bottom of footing with (95% relative) compacted Crush Aggregate Base Engineered Fill. The removal of existing material, furnish, installation of Crush Aggregate Base will be paid by Cubic Yard under Over Excavation and Engineered Fill.

Sawcutting

Existing asphalt concrete pavement that is to match proposed asphalt concrete surfacing shall be sawcut to a neat vertical face. Existing asphalt concrete pavement that is unsound, as determined by the Engineer shall be removed to limits as required.

Payment for sawcutting is included in other contract items and no additional payment will be made therefore.

Subgrade Preparation

The subgrade shall be prepared per Section 301-1 "Subgrade Preparation" of the Standard Specifications, and these special provisions. The top twelve-inches of subgrade shall be moisture conditioned, processed, and compacted to a minimum relative compaction of 95%. Contractor shall over-excavate up to 2' in depth for the locations shown on the plans. The contractor shall prepare subgrade according to the plans, and these Specifications. The most stringent in the opinion of the Engineer shall apply.

If any import or export for dirt is required, contractor shall obtain from or export to external sources. If areas are encountered that the Contractor believes should be determined to be "unsuitable material", the Contractor shall notify the Engineer. If the Engineer determines that the material is "unsuitable" it shall then be removed and disposed of and paid for as extra work provided in Section 3.3 "Extra Work" of the Standard Specifications. Contractor shall not be allowed to encroach outside of project limits shown on the plan.

The grade tolerance for the subgrade grading plane at any point shall not vary more than 0.02' (1/4-inch) below or 0.04' (3/4-inch) above the grade established by the Engineer. The cost for finish subgrade shall be included in the contract prices paid for the various items of work and no additional payment will be allowed thereafter.

Aggregate Base

Aggregate base shall be crushed aggregate base and shall conform to the provisions in Section 200-2.2, "Crushed Aggregate Base" and 301-2, "Untreated Base" of the Standard Specifications, these special provisions and the geotechnical engineer's reports contained within this specification package. In addition to meeting all the requirements for Crushed Aggregate Base of the Standard Specifications, the material shall also have a minimum unit weight of 125 pcf as determined by California Impact Test Method 216F or ASTM D1557-00. The Crushed Aggregate Base shall meet the grading requirement for ¾-inch maximum.

The Contractor shall have the proposed base certified by an independent testing laboratory to meet specification standards and the minimum unit weight requirement. This certification, along with the data, shall be submitted to the Engineer for review, at the preconstruction meeting. This certification will not release the Contractor from having the base tested by the Engineer to meet specifications during construction.

The work consists of removal and reuse of the existing asphalt concrete road; pulverizing existing asphalt reusing the grindings by placing them and using them as base surfacing; and placing new asphalt concrete to a compacted thickness of 4 inches on prepared subgrade/base. The resultant pulverized material shall conform to Section 301-3.4.2.3, "Pulverized Base Material" of the Standard Specifications.

The maximum lift of aggregate base shall be 8.0 inches.

The unit price paid per cubic yard of aggregate base shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved in constructing aggregate base concrete complete in place and no additional compensation will be allowed therefore. Payment will be in accordance with Sections 301-2.4 of the Standard Specifications. Certified weight tickets must be submitted with each truck of base.

Minor Concrete Work

Minor concrete shall comply with Section 201-1, "Portland Cement Concrete", of the Standard Specifications and these Special Provisions. References to Section 201-1.2.1a, "Portland Cement", of the Standard Specifications shall mean Section 201-1.2.1 "Cement" of the same. Any concrete accelerators used to speed construction shall be at the Contractor's expense and no additional payment will be made. All concrete used for driveways and cross gutters shall be sufficiently strong to allow them to be opened to traffic within 72 hours of placement.

All minor concrete items (including but not limited to, sidewalks, curb & gutter, driveways, pedestrian ramps, cross gutters/spandrels, and PCC parking lot paving) shall be built per Riverside County Improvement Standards and Specifications except as otherwise noted or modified in these plans and specifications. The Contractor shall refer specifically to the standard plans of the Riverside County Transportation Department (latest edition) for further information.

The cost of curb & gutter, sidewalk, ramps, and cross gutter shall be per individual bid item.

Grind (Cold Mill) Existing A.C. Pavement

Existing asphalt concrete pavement shall be cold milled at the locations as shown on the plans and to a depth shown on the plans or as directed by the Engineer. Cold Milling shall comply with Section 302-1, “Cold Milling of Existing Pavement”, of the Standard Specifications

Cold milling machines shall be equipped with a cutter head not less than 6’ in width and shall be operated so that no fumes or smoke will be produced. The cold milling machine shall plane the pavement without requiring the use of a heating device to soften the pavement during or prior to the planning operation.

The depth, width, and shape of the cut shall be as shown on the typical cross sections or as designated by the Engineer. The final cut shall result in a uniform surface conforming to the typical cross sections. The outside lines of the planed area shall be neat and uniform. Milling asphalt concrete pavement operations shall be performed without damage to the surfacing to remain in place.

The material planed from the roadway surface, shall be removed and disposed of as directed in these Special Provisions. If the City needs these materials, it shall be transported to a 4-mile radius of project boundary and graded on shoulders and dirt roads as determined by City. The contractor shall provide equipment (including a water truck) for this work. The maximum size of the grind asphalt shall be 1.0 inch in the largest direction.

Cold milling asphalt concrete pavement (grind) for the depth indicated on the plans shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in cold milling asphalt concrete surfacing and disposing of planed material, including furnishing the asphalt concrete for and constructing, maintaining, removing, and disposing of temporary asphalt concrete tapers, as specified in the Standard Specifications and these Special Provisions and as directed by the Engineer and for saw cutting asphalt concrete. Cold milling, saw cut, and remove asphalt concrete will be paid under the asphalt concrete bid item.

Asphalt Concrete

Asphalt concrete shall be Type “A” and shall conform to the requirements of Section 39 of the Caltrans Standard Specifications and the following:

Aggregate grading shall be 3/4-inch maximum, medium for base courses and the final course shall be ½-inch maximum, medium.

The asphalt lift thickness table, as shown in Section 39-6.01, “General Requirements” of the Caltrans Standard Specifications, is revised as follows:

Total Thickness Shown on Plans	Minimum No. of Layers	Top Layer Thickness		Next Lower Layer Thickness		All Other Lower Layer Thickness	
		Min.	Max.	Min.	Max.	Min.	Max.
0.25’ or less	1	-	-	-	-	-	-

0.26' through 0.40'	2	0.12'	0.15'	0.14'	0.25'	-	-
0.45' or more	3 or more	0.12'	0.15'	0.15'	0.25'	0.15'	0.25'

- Notes: 1) When ¾-inch material is used, the minimum thickness for any lift shall be 0.15'.
2) The final cap shall be placed such that the joint is either on the lane line or within one foot of lane line.

The paving asphalt shall be PG 64-10 or as determined by the Engineer.

Section 39-3.01B (1) shall be amended to include:

Aggregate of the ¾-inch or ½-inch maximum size and aggregate for asphalt concrete base shall be separated into 3 or more sizes and each size shall be stored in separate bins. If 3 sizes are used, one bin shall contain that portion of the material which will pass the maximum size specified and be retained on a 10 mm sieve; one bin shall contain that portion of the material which will pass a 10 mm sieve and be retained on a 2.36 mm sieve; and one bin shall contain that portion of the material which will pass a 2.36 mm sieve.

All asphalt concrete for this project shall be supplied from one source unless requested in writing and approved by the Engineer. Said source shall be listed on the Contractors Source of Materials List as required in Section 6 of the Caltrans Standard Specifications.

Liquid Asphalt and asphaltic emulsion shall be furnished and applied as provided in Section 39-4.02.

The manholes and valves shall be adjusted to finish grade by the Contractor. The cost shall be considered included in the asphalt concrete item of work unless there is a specific line item for adjusting the valves and/or manholes.

Asphalt concrete will be paid for at a unit price per ton as a combined item, including mineral aggregate and asphalt binder in place on the roadbed and no additional compensation will be allowed therefore.

Asphalt concrete berm (dike) shall be constructed per the plan, per RCTD Standard and these specifications. All labor, tools, materials, and incidentals required to complete the AC dike in place shall be included in the per ton price for asphalt concrete.

All asphalt, other materials, labor, tools, and incidentals to complete the paving in place shall be included in the per ton price for asphalt concrete and no additional compensation shall be allowed.

Full compensation for furnishing and applying asphaltic emulsion (paint binder) shall be considered as included in the contract price paid for asphalt concrete.

If in the opinion of the Engineer the road does not drive smoothly, he shall direct the Contractor to have the road "profile graphed" and the Contractor will be responsible for any "bump" grinding or other remedies required to provide a smooth and aesthetically pleasing road. The cost for both the "profilgraphy" of the roadway and the "bump" grinding of pavement, if needed, shall be borne by the Contractor.

The Contactor shall be responsible for installation of redwood header as shown on the plans. There shall be no separate measurement or payment will be made. It shall be included in the price for asphalt concrete.

The contract price paid per ton for asphalt concrete shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals for furnishing and installing all asphalt concrete on the project, sawcut, unless specifically called out somewhere else and no additional compensation will be allowed therefore.

Roadside Signs (Install/Relocate/Salvage)

Roadside signs (install/relocate/salvage) shall conform to the provisions in Section 56-2, "Roadside Signs" of the Caltrans Standard Specifications and as directed by the Engineer.

Roadside signs shall be installed at the locations shown on the construction plans or where directed by the Engineer.

Roadside signs furnished by the Contractor shall be of the standard size specified in the State of California Department of Transportation Sign Specification Sheets, unless otherwise indicated on the construction plans.

Sheeting shall be guaranteed against defects for a period of ten years from the date of fabrication.

The base metal shall be new aluminum, 0.08 gauge, of alloys 6061-T6 or 5052-H38 conforming to the requirements of ASTM Designation: B209.

Any reflective sheeting supplied as a part of this contract, whether as a legend or background, shall be FHWA FP-85 Type IIA or AASHTO M268 Type III.

Reflective sheeting shall be applied to the sign by a method approved by the manufacturer of the sheeting and shall produce a durable bond equal to or greater than the strength of the reflective sheeting. No air pockets or bubbles shall exist between the sheeting and aluminum backing.

The reflective material and screening inks or overlay film shall be graffiti proof. The graffiti proofing method shall be supplied by and/or approved by the sheeting manufacturer. Neither the color nor the reflective intensity of the finished sign shall be significantly diminished by the use of graffiti remover when used in a manner approved by the City in conjunction with the sheeting manufacturer. Any signs graphitized by over the counter spray paint or marking pens, which fail to be restored, shall be replaced by the sign sheeting manufacturer.

All letters and numerals shall be in accordance with the "Standard Alphabet of Highway Signs" as used by the State of California, Department of Transportation.

All signs shall be installed using hex head bolts, washers, nuts and jam nuts in accordance with Standard Plans RS2 or as directed by the Engineer.

Salvaged roadside signs shall be delivered to the City Maintenance Yard.

The installation and relocation for Roadside Signs (including Salvage) shall be considered as included in the lump sum bid for Signing and Striping and shall include full compensation for furnishing all labor, materials,

tools, equipment and incidentals and for doing all the work involved and no additional compensation will be allowed therefor.

Adjust to Grade, Protect in Place, Sewer Manhole and Water

Adjusting of sewer manholes and water valve bases shall be done per the Standard Specifications, Elsinore Valley Municipal Water District (EVMWD) Specifications and these Special Provisions.

The sewer manholes and utility valves shall be adjusted (up or down) so that the street can be paved without interference from the existing manholes. After final paving the manholes shall then be raised to grade. The manholes may need to be raised or lowered. This item shall also include all costs, incidental or otherwise, related to protecting in place all sewer manholes and water valves within the construction area during construction.

Adjust/protect in place sewer manholes, water lines and water valves shall be included in the adjust utility valve covers lump sum bid item and shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all work whether the manholes shall be raised and/or lowered and no additional compensation shall be allowed therefore. The cost to perform this work shall be included in lump sum bid item for adjust valves, manholes, etc. The location and quantity of these items shown on the plans is approximate, contractor shall determine exact number. No additional compensation for this work will be approved in case of increase in quantity of valves, manholes, etc.

Potholing of Existing Utilities by Contractor

The Engineer has shown from a record research the approximate location of known underground interference facilities. Contractor shall field determine the exact location and depth of all existing underground interference and points of connection to existing water mains; and immediately notify the engineer in the event there is a conflict with the proposed pipeline alignment or grades. The owner reserves the right to make minor adjustments in alignment and grade, all at no additional cost to the owner.

Where underground main distribution conduits such as water, sewer, gas, electric power, telephone or cable television are shown on the Drawings, the Contractor shall assume, for the purpose of preparing a Bid that every property parcel will be served by at least one (1) service connection for each type of utility.

Contractor shall submit a signed report to the Owner describing the findings of the potholing efforts prior to the commencement of construction. Said report shall include at the minimum; the vertical and horizontal locations of the potholed facilities, the size(s) and material of the conduit(s), and the orientation of facilities. If Contractor does not report any conflict regarding the existing facilities and the proposed facilities, the Owner will assume that the proposed design is sufficient. If significant interference is found facilities existing during the initial potholing effort, Contractor shall begin construction on the end of the proposed to accommodate re-designing efforts. If, during construction a conflict between facility arises, all additional costs for re-designing the proposed pipeline shall be borne by Contractor and have no additional cost to the Owner.

As provided in Section 4216 of the California Government Code, at least two (2) working days prior to commencing any excavation, if the excavation will be conducted in an area which is known, to contain

subsurface installations, the Contractor shall contact the regional notification center (Underground Service Alert of Southern California) and obtain an inquiry identification number.

Potholing shall be considered as included in the prices paid for the various contract items of work involving the use of potholing no separate payment will be made therefor.

Install Sewer Lateral, Sewer Lateral With Cleanout

Sewer Lateral, Sewer Lateral with Cleanout shall be installed per the plan and per EVMWD Standard Drawing S-12 and S-14, and per the EVMWD specification.

Payment for Install Sewer Lateral, Sewer Lateral with Cleanout shall be made per the Lump Sum prices called for on the bid schedule. All equipment, material, labor and incidentals required to construct sewer lateral and cleanout improvements in-place as called for on the plans.

Install Water Service

Water Service shall be installed per the plan and per SPPWC Standard Drawing 505-3.

Payment for Install Water Service shall be made per the Lump Sum prices called for on the bid schedule. All equipment, material, labor and incidentals required to construct water lateral and BIBB valve improvements in-place as called for on the plans.

Contractor may propose as either additive or deductive alternate, the use of coiled polyethylene underground water distribution pipe. Full submittals must be provided for CLPOA's engineer to review.

Existing water laterals must be abandoned at the mains.

ELECTRICAL SPECIFICATIONS

BASIC ELECTRICAL REQUIREMENTS:

1.01 DESCRIPTION:

- A. THE GENERAL CONDITIONS, THE SUPPLEMENTARY GENERAL CONDITIONS AND DIVISION 1 GENERAL REQUIREMENTS APPLY TO THIS SECTION.
- B. PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED TO COMPLETE THE ELECTRICAL WORK SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN.

1.02 LISTINGS AND CODES: ALL ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL BE LISTED BY UNDERWRITERS LABORATORIES (UL) AND BEAR THEIR LABEL, OR LISTED AND CERTIFIED BY A NATIONALLY RECOGNIZED TESTING AUTHORITY WHERE U.L. DOES NOT HAVE A LISTING. IN ADDITION, THE MATERIALS, EQUIPMENT, AND INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS, WHERE APPLICABLE, OF THE DESIGNATED EDITION OF THE FOLLOWING:

- A. NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)
- B. AMERICAN STANDARD ASSOCIATION (ASA)
- C. NATIONAL FIRE PROTECTION AGENCY (NFPA-70)
- D. AMERICAN NATIONAL STANDARD INSTITUTE (ANSI)
- E. CALIFORNIA CODE OF REGULATION, TITLE 24 (CCR)

- F. NATIONAL ELECTRICAL CODE (NEC)
- G. ALL LOCAL AND STATE CODES HAVING JURISDICTION

IN THE CASE WHERE THE CODES HAVE DIFFERENT LEVELS OF REQUIREMENTS, THE MOST STRINGENT RULE SHALL APPLY.

1.03 SHOP DRAWINGS:

- A. CONTRACTOR SHALL SUBMIT TO THE ARCHITECT, FOR APPROVAL, SIX (6) SETS OF A COMPLETE LIST AND CATALOG CUTS OF ALL MATERIALS HE PROPOSES TO PROVIDE FOR THE ELECTRICAL SYSTEMS COVERED BY THESE DRAWINGS. EACH ELECTRICAL ITEM SHALL BE IDENTIFIED BY THE MANUFACTURER AND TRADE NAME OF THE ITEM AS WELL AS THE DESCRIPTION GIVEN ON THE ELECTRICAL ENGINEERING PLANS. UNLESS OTHERWISE SPECIFICALLY AUTHORIZED BY THE ELECTRICAL ENGINEER, MAKE ALL SUBMITTALS IN GROUPS CONTAINING ALL ASSOCIATED ITEMS. THE ELECTRICAL ENGINEER MAY REJECT PARTIAL SUBMITTALS AS NOT COMPLYING WITH THE PROVISIONS OF THIS SECTION. NO MATERIALS SHALL BE DELIVERED TO THE JOB UNTIL THE LIST HAS BEEN APPROVED BY THE ARCHITECT. ACCEPTANCE OR REJECTION OF SUBSTITUTE MATERIALS SHALL BE AT THE DISCRETION OF THE ARCHITECT.
- B. MAKE ALL SUBMITTALS IN ACCORDANCE WITH THE GENERAL CONTRACTOR'S SCHEDULE OF SHOP DRAWINGS AND FAR ENOUGH IN ADVANCE OF SCHEDULED DATES OF INSTALLATION TO PROVIDE REQUIRED TIME FOR REVIEWS, SECURING NECESSARY APPROVALS, POSSIBLE REVISIONS AND RESUBMITTAL, INCLUDING PLACING ORDERS AND SECURING DELIVERY.

1.04 LOCATIONS AND ACCESSIBILITY: WORK SPECIFIED AND NOT CLEARLY DEFINED BY THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ELECTRICAL ENGINEER, IN WRITING, PRIOR TO INSTALLATION SO THAT IT MAY BE INSTALLED AND ARRANGED TO MEET THE INTENT OF THE DESIGN.

1.05 TESTING AND ADJUSTMENT: UPON COMPLETION OF ELECTRICAL WORK, ADJUST AND TEST CIRCUITS, LIGHTS AND OTHER ELECTRICAL ITEMS TO INSURE PROPER OPERATION OF ALL ELECTRICAL EQUIPMENTS.

- A. CHECK SERVICE VOLTAGES UNDER MAXIMUM OBTAINABLE LOADS. EQUIPMENT, FIXTURES, OR PARTS FOUND TO BE IN NEED OF CORRECTION DURING SUCH TESTING SHALL BE IMMEDIATELY REPAIRED OR REPLACED WITH NEW EQUIPMENT AND THAT PART OF THE SYSTEM SHALL BE RETESTED. SUCH REPLACEMENT OR REPAIR SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
- B. ALL FAILURES SHALL BE CORRECTED IN A MANNER SATISFACTORY TO THE ENGINEER. THE CONTRACTOR SHALL FURNISH ALL NECESSARY COSTS OF RETESTING AND CORRECTING FAILURES.
- C. ALL ELECTRICAL TESTS SHALL BE WITNESSED BY ANY INSPECTOR THAT SHALL HAVE EXPERIENCE IN ELECTRICAL WORK, EQUAL TO THAT OF AN ELECTRICIAN HAVING AT LEAST FIVE (5) YEARS EXPERIENCE AS AN I.B.E.W. JOURNEYMAN.

1.06 LAYOUT AND INSTALLATION:

- A. LAYOUT AND INSTALLATION OF ELECTRICAL WORK SHALL BE COORDINATED WITH THE OVERALL CONSTRUCTION SCHEDULE AND WORK SCHEDULE OF VARIOUS TRADES, TO PREVENT DELAY IN THE COMPLETION OF THE PROJECT. COMPLETE DRAWINGS AND SPECIFICATIONS FOR THE ENTIRE PROJECT SHALL BE AVAILABLE AT THE JOB SITE. IT SHALL BE OBLIGATORY TO THOROUGHLY CHECK THESE DOCUMENTS BEFORE ORGANIZING THE ELECTRICAL WORK SCHEDULE OR INSTALLING MATERIAL AND EQUIPMENT.

1. WHERE OUTLETS ARE PLACED IN A WALL, THEY SHALL BE LOCATED AT THE SAME HEIGHT WITH RESPECT TO EACH OTHER FEATURES AND/OR FINISHES ON THE WALL.
2. LOCATIONS SHOWN ON ARCHITECTURAL REFLECTED CEILING PLANS, OR ON WALL ELEVATIONS SHALL TAKE PRECEDENCE OVER ELECTRICAL PLAN LOCATIONS.
3. REVIEW EXACT LOCATIONS OF EACH OUTLET INDICATED AND COORDINATE WITH THE ARCHITECTURAL DRAWINGS. MINOR RELOCATIONS SHALL BE MADE WITHOUT INCURRING ADDITIONAL COST TO OWNER.
4. THE ARCHITECTURAL, STRUCTURAL, ELECTRICAL, PLUMBING, AND MECHANICAL DRAWINGS AND SPECIFICATIONS, TAKEN TOGETHER INDICATE THE WORK TO BE DONE UNDER THIS PROJECT. THE WORK SHALL BE EXECUTED IN ACCORDANCE WITH THESE DRAWINGS AND ANY DETAIL SCALE DRAWINGS WHICH MAY BE FURNISHED BY THE ARCHITECT DURING THE PROGRESS OF THE WORK. THE CONTRACTOR SHALL EXAMINE ALL ARCHITECTURAL, STRUCTURAL, ELECTRICAL, PLUMBING AND MECHANICAL DRAWINGS IN ORDER TO BE DULY INFORMED AS TO THE SCOPE AND DETAIL OF THE WORK WHICH WILL BE REQUIRED.
5. THE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC IN THE NATURE AND INDICATE THE PREFERRED LOCATIONS OF OUTLETS AND EQUIPMENT, AND ARE TO BE FOLLOWED AS CLOSELY AS POSSIBLE. IT IS NOT WITHIN THE SCOPE OF THE DRAWINGS TO SHOW ALL BENDS, OFFSETS, PULLBOXES, AND OBSTRUCTIONS AND IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INCLUDE SUCH IN THE BID. THE DRAWINGS ARE NOT INTENDED TO BE SCALED, AND THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR DIMENSIONS AND LIMITATIONS OF THE BUILDING STRUCTURE, AND TO THE MECHANICAL DRAWINGS FOR THE LOCATION OF EQUIPMENT REQUIRING ELECTRICAL SERVICE AND CONNECTIONS.
6. IN THE EVENT THAT CHANGES IN THE INDICATED LOCATIONS OR ARRANGEMENTS ARE NECESSARY DUE TO FIELD CONDITIONS, SUCH CHANGES SHALL BE MADE BY THE CONTRACTOR WITHOUT EXTRA COSTS, PROVIDING THE CHANGE HAS BEEN APPROVED BY THE ARCHITECT BEFORE THE WORK HAS COMMENCED AND NO ADDITIONAL MATERIALS ARE REQUIRED. THE CONTRACTOR SHALL ADVISE THE ARCHITECT OF ANY ADDITIONAL COSTS AND HAVE APPROVAL OF SAME BEFORE PROCEEDING.

1.07 OPERATION AND MAINTENANCE INSTRUCTIONS: FULLY INSTRUCT AND DEMONSTRATE TO THE OWNER'S OPERATING PERSONNEL THE PERFORMANCE, OPERATION AND MAINTENANCE OF EQUIPMENT. THE TIME ALLOWED FOR SAID INSTRUCTION SHALL BE INCLUDED AS PART OF THESE CONTRACT DOCUMENTS.

1.08 WARRANTY: ALL MATERIALS AND EQUIPMENT FURNISHED AND INSTALLED UNDER THIS SECTION SHALL BE WARRANTED IN WRITING BY THE CONTRACTOR FOR A PERIOD OF ONE YEAR (EXCEPT BALLASTS FOR LIGHTING FIXTURES SHALL HAVE A TWO YEAR GUARANTEE) FROM DATE OF ACCEPTANCE OF THE WORK. SHOULD ANY TROUBLE DEVELOP DURING THIS PERIOD, DUE TO DEFECTIVE MATERIALS OR FAULTY WORKMANSHIP, THE CONTRACTOR SHALL FURNISH ALL NECESSARY LABOR AND MATERIALS TO CORRECT TROUBLE AT NO EXTRA COST TO THE OWNER.

1.09 FINAL REVIEW AND ACCEPTANCE: UPON STATED COMPLETION OF CONTRACT, WORK SHALL BE SUBJECT TO REVIEW BY REPRESENTATIVES OF OWNER, ARCHITECT OR ENGINEER FOR ADHERENCE TO CONTRACT DRAWINGS AND SPECIFICATIONS. ANY CHANGES REQUIRED TO BRING WORK INTO

SUBSTANTIAL CONFORMANCE WITH DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

1.10 RECORD DRAWINGS: PROVIDE AND MAINTAIN IN GOOD ORDER A COMPLETE SET OF ELECTRICAL CONTRACT PRINTS. ALL CHANGES SHALL BE CLEARLY RECORDED ON THIS SET OF PRINTS. AT THE END OF THE PROJECT, THE CONTRACTOR SHALL TRANSFER ALL CHANGES TO ONE SET OF MYLAR TRANSPARENCIES FOR SUBMISSION TO THE ARCHITECT. UPON COMPLETION OF THE WORK, DELIVER TO THE ARCHITECT ONE COMPLETE SET OF FINAL PRINTS OF THE MYLARS AND THE MYLARS THEMSELVES, WITH CONTRACTOR AS BEING A CORRECT AND ACCURATE RECORD OF THE INSTALLATION.

The electrical work on this project will be inspected by the California Department of Housing and Community Development – They have jurisdiction over this campground – The City of Canyon Lake does not.

END OF SECTION

GENERAL MATERIALS FOR ELECTRICAL WORK:

1.01 MAIN SERVICE EQUIPMENT AND PANELBOARDS: MAIN SERVICE SHALL CONSIST OF PULL, METER, AND MAIN SECTIONS PER REQUIREMENTS OF THE SERVING UTILITY COMPANY AND RATE AS INDICATED ON THE DOCUMENTS.

- A. MAIN DISCONNECT SWITCHES SHALL BE SIZED AS INDICATED ON THE DRAWINGS, HEAVY DUTY TYPE WITH CLASS R REJECTING CLIPS. SWITCHES SHALL BE U.L. APPROVED FOR USE AS A SERVICE ENTRANCE.
- B. FUSES, IF SPECIFIED, SHALL BE DUAL-ELEMENT, CURRENT LIMITING TYPE, UNLESS NOTED OTHERWISE.
- C. SERVICE ENTRANCE EQUIPMENT SHALL BE ADEQUATE FOR A SHORT CIRCUIT DUTY AVAILABLE AT THE SITE AS VERIFIED BY THE SERVING UTILITY COMPANY.
- D. PANELBOARDS AND LOAD CENTERS SHALL BE FLUSH OR SURFACE MOUNTED AS INDICATED ON PLANS AND SHALL CONFORM TO THE REQUIREMENTS OF THE U.L. FRONTS SHALL BE FINISHED TO RESIST CORROSION WITH NOT LESS THAN ONE PRIMING COAT AND ONE FINISHING COAT. EXPOSED PARTS OF TRIM AND DOORS SHALL BE PAINTED BY OTHERS AFTER INSTALLATION. ALL BRANCH CIRCUIT PANELBOARD LOCKS SHALL BE "LIKE-KEYED" WITH THREE KEYS FURNISHED TO OWNER. ADJACENT POLES OF SINGLE POLE DEVICES SHALL BE OF A DIFFERENT PHASE WITH SPLIT-PHASE BUSSING. CIRCUITS SHALL BE NUMBERED FROM TOP TO BOTTOM WITH ODD NUMBERS ON THE LEFT AND EVEN NUMBERS ON THE RIGHT. A NEATLY TYPED CIRCUIT DIRECTORY WITH A PLASTIC COVER SHALL BE PROVIDED IN A HOLDER MOUNTED INSIDE THE CABINET DOOR. BREAKERS SHALL BE BOLT-ON OR PLUG-IN TYPE AS INDICATED ON PANEL SCHEDULES WITH RATINGS AS SHOWN ON THE DRAWINGS WITH A MINIMUM SHORT CIRCUIT RATING OF 10,000 AMPS SYMMETRICAL. THE FRONT SHALL INCLUDE FLUSH HINGED DOOR WITH LOCK, COVERING ALL BREAKERS.
- E. IDENTIFICATION NAMEPLATES SHALL BE PROVIDED OF MICARTA 1/8" THICK, OR APPROVED SIZE, WITH BEVELLED EDGES AND ENGRAVED WHITE LETTERS 1/4" HIGH MINIMUM ON BLACK BACKGROUND. THESE NAMEPLATES SHALL BE PROVIDED FOR ALL CIRCUITS IN THE SERVICE DISTRIBUTION AND POWER DISTRIBUTION BOARDS, MOTOR CONTROL CENTERS, LIGHTING DISTRIBUTION PANELBOARDS, SEPARATELY MOUNTED STARTING SWITCHES, DISCONNECTION

SWITCHES. MOTOR CONTROL PUSH-BUTTON STATIONS, SELECTOR SWITCHES, TRANSFORMERS, TERMINAL CABINETS, TELEPHONE CABINETS, ETC. THESE NAMEPLATES SHALL HAVE THE SAME IDENTIFICATION NAMES AS INDICATED ON THE PLANS.

1.02 CONDUITS AND RACEWAYS: ALL CONDUITS AND RACEWAYS SHALL CONFORM TO U.L. STANDARDS AS APPLICABLE.

- A. ELECTRICAL METALLIC TUBING (EMT), NO LESS THAN ½” TRADE SIZE, 2” MAXIMUM TRADE SIZE. E.M.T. MAY BE USED IN DRY LOCATIONS ONLY.
- B. RIGID GALVANIZED STEEL CONDUIT (RGS) SHALL BE STEEL, GALVANIZED OR ZINC COATED FULL WEIGHT, NO LESS THAN ½” TRADE SIZE.
- C. LIQUID-TIGHT FLEXIBLE CONDUIT, NO LESS THAN ½” TRADE SIZE, FLEXIBLE, GALVANIZED STEEL CORE COMPLETELY ENCASED IN POLYVINYL CHLORIDE JACKET.
- D. NON-METALLIC POLYVINYL CHLORIDE (PVC), NO LESS THAN ¾” TRADE SIZE, SCHEDULE #40 UNLESS NOTED OTHERWISE. SUNLIGHT RESISTANT AND RATED FOR 90°C CONDUCTORS.
- E. FLEXIBLE METALLIC CONDUIT, NO LESS THAN ½” TRADE SIZE, STEEL, FORMED FROM CONTINUOUS STRIP AND ZINC COATED.

1.03 FITTINGS: FITTINGS AND OUTLETS FOR CONDUIT SYSTEMS SHALL CONFORM TO THE FOLLOWING.

- A. FITTINGS FOR ELECTRICAL METALLIC TUBING (EMT) FOR SIZES ½” THROUGH 2” SHALL BE WRENCH TIGHTENED COMPRESSION TYPE WHICH SHALL PROVIDE PULL-ON FORCE RESISTANCE AND ELECTRICAL CONTINUITY AS REQUIRED BY U.L. NO INDENTING FITTINGS OR ADJUSTABLE SET SCREW TYPE FITTINGS SHALL BE USED.
- B. FITTINGS FOR RIGID GALVANIZED STEEL CONDUIT (RGS) SHALL BE STEEL, THREAD FITTINGS ONLY. SPLIT AND “SET CREW” TYPE FITTINGS ARE NOT ACCEPTABLE.
- C. FITTING FOR LIQUID-TIGHT FLEXIBLE CONDUIT SHALL BE OF THE COMPRESSION TYPE WITH THREADED FERRULE, SEALING RING AND SUITABLE FOR WET CONDITIONS.
- D. FITTINGS FOR PVC SHALL BE NON-METALLIC, SUNLIGHT RESISTANT, AND OF THE SAME COMPOUND AS THE CONDUITS WHICH ARE BEING UTILIZED.
- E. FITTING FOR FLEXIBLE METALLIC CONDUIT SHALL BE OF THE “SQUEEZE” TYPE WITH EITHER ONE (1) OR TWO (2) SCREWS, CAST OF MALLEABLE STEEL, CADMIUM OR ZINC COATED.

1.04 CONDUCTORS: CONDUCTOR SIZES ARE SPECIFIED BY AMERICAN WIRE GAUGE (AWG). CONDUCTORS SHALL BE COPPER. WIRE SIZES #10 AND SMALLER SHALL BE SOLID CONDUCTOR. HOWEVER, CONTROL AND SIGNAL SYSTEMS MAY BE WIRED WITH #14 STRANDED. INSULATED FOR WIRING SHALL BE 600 VOLT TYPE “THWN”, 75°C. RATED FOR DRY OR WET LOCATIONS OR TYPE “THHN”, 90°C. RATED FOR DRY LOCATIONS. ALUMINUM CONDUCTORS SHALL BE ALLOWED FOR MAIN FEEDERS ONLY.

- A. CONDUCTOR SIZES SHALL BE AS INDICATED; WHERE SIZES ARE NOT INDICATED THEY SHALL BE AS REQUIRED BY CODE. ALL WIRING SHALL BE COLOR CODED FOR PHASE IDENTIFICATION AS FOLLOWS.

120/208V.. 3Ø 4W.	277/480V.. 3Ø 4W.
PHASE A = BLACK	PHASE A = BROWN
PHASE B = RED	PHASE B = ORANGE
PHASE C = BLUE	PHASE C = YELLOW
NUETRAL = WHITE	NUETRAL = WHITE
GROUND = GREEN	GROUND = GREEN

- B. MAKE SPLICES FOR CONDUCTORS #8 AND SMALLER WITH STEEL OR COPPER SPRING INSULATED WIRE NUTS. SPLICES FOR CONDUCTORS #6 OR LARGER SHALL BE WITH SPLIT BOLTS OR "KEARNEY'S" WHICH, WHEN USED, SHALL BE THOROUGHLY INSULATED.
- C. THE GREEN GROUND WIRE SHOWN ON CONDUIT RUNS SHALL RUN CONTINUOUS FROM PANEL TO LAST OUTLET. THIS WIRE SHALL BE PIGTAILED IN EACH OUTLET FOR CONNECTION TO BOX AND DEVICE SO THAT IF THE DEVICE IS REMOVED, THE GROUND WILL NOT BE INTERRUPTED.

1.05 BOXES: ALL BOXES SHALL BE SIZED FOR THE NUMBER AND SIZE OF CONDUCTORS AND CONDUITS ENTERING THE BOX AND EQUIPPED WITH PLASTER/EXTENSION RINGS WHERE REQUIRED. ALL BOXES SHALL BE LABELED TO INDICATE PANEL AND CIRCUIT NUMBER OF CONDUCTORS CONTAINED WITHIN. IN NO CASE SHALL ANY BOX BE LESS THAN 4" ROUND OR SQUARE. UNLESS SPECIFICALLY NOTED OTHERWISE, OUTLET BOXES FOR CONCEALED WORK SHALL BE GALVANIZED OR SHERARDIZED, ONE PIECE, PRESSED STEEL, WITH KNOCKOUTS AS REQUIRED.

- A. LIGHT OUTLETS SHALL BE 4" OCTAGON, 4" SQUARE OR LARGER IN ACCORDANCE WITH NEC 370-6 (a) AND 314, TABLE 314.16 (a), AND SHALL BE EQUIPPED WITH A RAISED PLASTER RING OF DEPTH REQUIRED TO PROVIDE A FLUSH MOUNTING CONDITION. PLASTER RING SHALL HAVE A 3" ROUND OPENING WITH TWO THREADED MOUNTING HOLES.
- B. SWITCH OUTLETS SHALL BE 4" SQUARE BOX FOR SINGLE AND TWO GANG APPLICATIONS. SPECIAL MULTI-GANG BOXES SHALL BE UTILIZED FOR MORE THAN TWO SWITCHES COMPLETE WITH PLASTER RING FOR MOUNTING SWITCHES.
- C. RECEPTACLE, TELEPHONE AND COMPUTER/DATA OUTLETS SHALL BE 4" SQUARE, OR LARGER BOX IN ACCORDANCE WITH NEC 370-6(a), AND 314, TABLE 314.6(a), WITH SINGLE GANG OR LARGER PLASTER RING TO SUIT THE DEVICE(S) INSTALLED, UNLESS SPECIAL BOXES ARE SPECIFIED (FLUSH CLOCK, ETC.) OR OTHERWISE REQUIRED FOR A PARTICULAR DEVICE.
- D. FLOOR BOXES, MOUNTED IN CONCRETE, FOR RECEPTACLE, TELEPHONE AND COMPUTER/DATA OUTLETS SHALL BE ROUND OR SQUARE, SINGLE OR MULTI-GANG AS REQUIRED. BOXES SHALL BE PRESSED STEEL OR IRON AS SPECIFIED ON DRAWINGS, BUT IN NO CASE OF LESS THAN 20 CUBIC INCH OF CAPACITY. BOXES SHALL HAVE THE CAPACITY OF VERTICAL AND ANGULAR ADJUSTMENT OF THE DEVICE MOUNTING PLATE AFTER POUR. PRE-POUR ADJUSTING LEGS SHALL BE PROVIDED ON ALL FOUR CORNERS. INTERNAL BARRIERS SHALL BE PROVIDED WHERE BOTH LINES AND LOW VOLTAGE SYSTEMS ARE IN THE SAME BOX.
- E. WHERE INDICATED BY "WP." THE CONTRACTOR SHALL PROVIDE CAST METAL BOXES AND COVERPLATES WITH GASKET(S) AS REQUIRED TO OBTAIN A "WEATHERPROOF" INSTALLATION.

1.06 PULL BOXES: SIZES AS INDICATED ON THE DRAWINGS AND PER UTILITY COMPANY REQUIREMENTS, BUT IN NO CASE OF LESS SIZE OR MATERIAL THICKNESS THAN REQUIRED BY THE GOVERNING CODE. PULL BOXES LOCATED IN OR AROUND VEHICULAR TRAFFIC AREAS SHALL BE PROVIDED WITH TRAFFIC RATED COVERS. ALL COVERS SHALL BE PERMANENTLY IDENTIFIED AS TO THE TYPE OF SERVICE CONTAINED THEREIN (IE: SCE, COMMUNICATIONS, ETC.) BOXES LOCATED IN DAMP OR WET AREAS SHALL BE RATED NEMA 3R. EXTERIOR PULL BOXES SHALL BE PLACED TO AVOID SURFACE WATER FLOW AREAS.

1.07 SWITCHES: LIGHTING SWITCHES SHALL BE SPECIFICATION GRADE, SINGLE POLE, OR 3-WAY TOGGLE TYPE AS INDICATED, 20 AMP, 120/277V. A.C. RATING FOR FULL CAPACITY OF CONTACTS FOR LAMP LOADS.

1.08 DISCONNECTS:

- A. MANUAL MOTOR STARTER SWITCHES SHALL BE TOGGLE TYPE ON/OFF, AS REQUIRED FOR CONTROL OF SINGLE AND THREE PHASE MOTORS AND RESISTANCE HEATER LOADS. SWITCHES SHALL BE SIDE WIRED AND BE COMPLETE WITH OVERSIZE SILVER CONTACTS.
- B. SAFETY SWITCHES SHALL BE HEAVY-DUTY INDUSTRIAL TYPE. SWITCHES SHALL BE FUSED OR NONFUSED AS INDICATED ON THE DRAWINGS. ENCLOSURES SHALL BE RATED EITHER NEMA 1 OR NEMA-3R AS REQUIRED BY INSTALLATION. UNITS SHALL BE QUICK MAKE, QUICK BREAK WITH OPERATING HANDLE WHICH CAN BE PADLOCKED IN THE "OFF" POSITION. FINISH SHALL BE A STANDARD LIGHT GRAY ENAMEL. SWITCHES SHALL HAVE AFFIXED TO COVERS, A NAMEPLATE INDICATING WHAT ITEM IS CONTROLLED BY SWITCH.
 - 1. FUSES SHALL BE OF CORRECT RATING FOR EACH INSTALLATION, AND SHALL BE EITHER CURRENT LIMITING OR MUTLI-ELEMENT TIME DELAY AS REQUIRED BY EQUIPMENT MANUFACTURERS RECOMMENDATION.

1.09 RECEPTACLES:

- A. DUPLEX RECEPTACLES SHALL BE RATED 20 AMP, 125V. A.C., 3 WIRE GROUNDING TYPE AND UNLESS OTHERWISE INDICATED, CONFIGURATION SHALL BE NEMA 5-20R. A BONDING JUMPER SHALL BE PROVIDED FOR GROUND BETWEEN THE GROUNDED OUTLET BOX AND THE RECEPTABLE GROUND TERMINAL. GROUNDING THROUGH THE RECEPTACLE MOUNTING STRAPS IS NOT ACCEPTABLE.
- B. CLOCK OUTLETS SHALL BE 20 AMP, 125V. A.C., 3 WIRE GROUNDING TYPE RECESSED RECEPTACLES WITH CLOCK HANGAR SUPPORT AND INTEGRAL PLASTIC PLATE.
- C. GROUND FAULT TYPE DUPLEX RECEPTACLE SHALL PROVIDE 20A. FEED THROUGH RATING AND 0.025 SECOND, NOMINAL TRIP TIME PER U.L. STANDARD.
- D. ISOLATED GROUND RECEPTACLES SHALL BE 20 AMP, 125V. 3 WIRE GROUNDING TYPE, ORANGE IN COLOR. RECEPTACLE SHALL NOT GROUND THROUGH MOUNTING STRAP, BUT ONLY THROUGH THE GROUND WHEN CONNECTED TO AN INDEPENDENT GROUNDING CONDUCTOR.

1.10 PLATES: PROVIDE PLATES FOR EVERY SWITCH, RECEPTACLE, AND TELEPHONE/DATA OUTLET.

- A. ALL INTERIOR PLATES SHALL BE IVORY COLORED SMOOTH NYLON OR PHENOLIC PLASTIC FOR ALL OUTLET LOCATIONS, UNLESS SPECIFICALLY NOTED OTHERWISE.
- B. ALL EXTERIOR COVERS SHALL BE WEATHERPROOF PER NEC 314.15 (a) THERMOPLASTIC, WITH CLEAR POLYCARBONATE TOP HINGED COVER AND PLATE GASKET.
- C. PLATES FOR ISOLATED GROUND RECEPTACLES SHALL BE ORANGE COLORED, SMOOTH NYLON PHENOLIC PLASTICM UNLESS NOTED OTHERWISE.

1.11 LIGHT FIXTURES: FURNISH ALL LIGHT FIXTURES, LIGHTING EQUIPMENT AND COMPONENTS SHOWN ON THE PLANS, LISTED IN THE "FIXTURE SCHEDULE" AND SPECIFIED HEREIN.

- A. BALLASTS FOR FLUORESCENT FIXTURES SHALL BE HIGH POWER FACTOR, ENERGY SAVING TYPE, COMPATIBLE WITH LAMPS AND THEIR DESIGN. CONSTRUCTION SHALL CONFORM TO C.E.C. OR OTHER LOCAL STANDARDS WHERE APPLICABLE.
- B. FLUORESCENT LAMPS SHALL BE ENERGY SAVING, COOL WHITE AND THE LENGTH AND WATTAGE TO FIT THE FIXTURE IN WHICH USED. ALL 4' RAPID START LAMPS SHALL BE 32W.
- C. INCANDESCENT LAMPS SHALL BE OF THE INSIDE FROSTED TYPE, WITH A RATING OF 120V. AND SCREW BASE, UNLESS NOTED OTHERWISE.

D. HIGH INTENSITY DISCHARGE (HID) BALLASTS SHALL BE HIGH POWER FACTOR AND RATED OF START-UP AT 20°F. ON ALL OUTDOOR FIXTURES. LAMPS AND BALLASTS SHALL BE COMPATIBLE WITH BALLASTS MULTI-VOLTAGE RATED.

E. LIGHTING FIXTURE DIFFUSER: ALL PLASTIC DIFFUSER FOR FLUORESCENT FIXTURES SHALL BE ACRYLIC. THEY SHALL BE 100% PURE VIRGIN ACRYLIC, MINIMUM THICKNESS .125" OVERALL.

1.12 PULL LINE: INSTALL AN UNSPLICED PULL LINE IN ALL EMPTY CONDUITS. PULL LINE SHALL BE A 3/16" BRAIDED POLY-PROPYLENE LINE.

1.13 GROUND RODS: PROVIDE STEEL CENTERED COPPER CLAD GROUND RODS IN ACCORDANCE WITH SECTION 250 OF THE NEC. MINIMUM LENGTH SHALL BE ¾"x8', DRIVEN NEARLY FULL LENGTH INTO THE EARTH WITH NO MORE THAN 2" LEFT ABOVE GRADE FOR PROPER CONNECTION TO THE GROUNDING CONDUCTOR(S).

1.14 TRANSFORMER(S): TRANSFORMERS SHALL BE DRY-TYPE, NEMA-1 DRY LOCATIONS OR NEMA-3R FOR WET OR DAMP LOCATIONS. TRANSFORMERS SHALL HAVE VENTILATED CORE AND COIL ASSEMBLIES MOUNTED ON RUBBER ISOLATION PADS TO MINIMIZE THE SOUND LEVEL. (6) 2-1/2% FULL CAPACITY TAPS WITH (2) ABOVE AND (4) BELOW SHALL BE PROVIDED AT 150°C. RISE, UNLESS NOTED OTHERWISE.

1.15 TIME SWITCH(ES):

A. TIME SWITCH(ES) FOR CONTROLLING MECHANICAL EQUIPMENT, SIGNS, DISPLAYS, ETC. SHALL BE A 7 DAY TYPE, SPDT, ADJUSTABLE WITH RESERVE POWER. 120V/277V.

B. TIME SWITCHES FOR CONTROLLING EXTERIOR LIGHTING, DUTY CYCLING, VENTILATING FANS, ETC. SHALL BE A 7 DAY TYPE. 3PST, WITH MANUAL BY-PASS SWITCHES, RESERVE POWER 120V. WITH (3) AMP CONTACTS.

1.16 PHOTOCONTROLS: PHOTOCONTROLS SHALL BE OUTDOOR TYPE, 120V/277. CURRENT RATING, ADJUSTABLE.

1.17 LOCATIONS: EQUIPMENT OUTLETS, LIGHTING FIXTURES, CONDUIT, WIRE, AND CONNECTION METHODS IN HVAC AIR-PLENUMS SHALL BE APPROVED FOR SUCH USE.

END OF SECTION

INSTALLATION OF ELECTRICAL WORK

1.01 GENERAL: ANY CUTTING, PATCHING OR FINISH REPAIR OF THE WORK OR WORK OF OTHER TRADES NECESSARY FOR THE INSTALLATION OF THE ELECTRICAL WORK SHALL BE PROVIDED UNDER THE SECTION.

1.02 MISCELLANEOUS:

A. PROVIDE TRENCHING, CONCRETE ENCASEMENT WHEN REQUIRED, BACKFILLING AND COMPACTION FOR ALL UNDERGROUND CONDUITS AND/OR STRUCTURES.

B. PROVIDE FOOTINGS FOR ALL POST AND/OR POLE-MOUNTED LIGHTING FIXTURES.

C. STRUCTURAL AND MISCELLANEOUS STEEL USED IN CONNECTION WITH ELECTRICAL WORK AND LOCATED OUTDOOR OR IN DAMP LOCATIONS, SHALL BE GALVANIZED UNLESS NOTED OTHERWISE. INCLUDED ARE UNDERGROUND PULLBOX COVERS, UNISTRUT BRACING AND SIMILAR ELECTRICAL ITEMS.

- D. FLASHINGS SHALL BE PROVIDED AT ALL POINTS WHERE CONDUIT OR OTHER ELECTRICAL COMPONENTS PENETRATE THE ROOF. FLASHINGS SHALL EXTEND A MINIMUM OF 5" ABOVE THE SURROUNDING ROOF SURFACE WITH WEATHERPROOF MASTIC APPLIED, TO PREVENT MOISTURE OR DUST FROM ENTERING THE OPENING. FLASHING SHALL BE DELIVERED TO THE ROOFING CONTRACTOR FOR INSTALLATION. THE CORRECT LOCATION OF ALL SUCH PENETRATIONS SHALL BE VERIFIED BY THE CONTRACTOR.
- E. PROVIDE SLEEVES UNDER WALLS, CONCRETE FOOTINGS AND FOUNDATIONS. SLEEVES SHALL HAVE AN INSIDE DIAMETER OF NOT LESS THAN 1" LARGER THAN THE OUTSIDE DIAMETER OF CONDUIT CONTAINED THEREIN.

1.03 CONDUIT: CONDUIT FOR LINE VOLTAGE WIRING SHALL BE CONCEALED WITHIN FINISHED WALLS, CEILINGS AND UNDER/IN FLOORS. EXPOSED CONDUITS ABOVE CEILINGS AND SURFACE MOUNTED IN MECHANICAL AND SERVICE AREAS SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO THE BUILDING WALLS. RIGHT ANGLE TURNS SHALL CONSIST OF CONDUIT BODIES OR SYMMETRICAL BENDS. ALL CONDUITS SHALL BE PROPERLY SECURED WITH COMPONENTS SPECIFICALLY MANUFACTURED FOR THIS USE. ALL CONDUITS SHALL BE SIZED IN ACCORDANCE WITH FILL CAPACITIES SET FORTH IN ARTICLE 310 – GENERAL WIRING AND COMPACT STRANDED CONDUCTORS, AND/OR ARTICLE 402 – FIXTURE WIRES, OR THE NEC. ALL CONDUIT RUNS SHALL BE INSTALLED TO AVOID TRAPPED CONDENSATION.

- A. ELECTRICAL METALLIC TUBING (EMT) - DO NOT EMBED EMT IN CONCRETE OR BELOW GRADE. EMT MAY BE USED WHERE CONCEALED OR WHERE NOT SUBJECT TO DAMAGE.
- B. RIGID GALVANIZED STEEL CONDUIT (RGS) SHALL BE USED IN MECHANICAL ROOMS, WHERE CONDUIT PASSES THROUGH CONCRETE SLABS ON GRADE WHERE SUBJECT TO PHYSICAL DAMAGE.
- C. FLEXIBLE METALLIC CONDUIT SHALL BE USED FOR FINAL CONNECTIONS TO ALL VIBRATING AND MECHANICAL EQUIPMENT. A CODE GAUGE GREEN INSULATED EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED IN SUCH CONDUITS. FLEXIBLE METALLIC CONDUIT MAY BE USED IN LENGTHS OF LESS THAN 6' FOR CONNECTING FIXTURES, PROVIDED THAT A CODE GAUGE INSULATED GROUNDING CONDUCTOR IS PROVIDED. LIQUID-TIGHT FLEXIBLE CONDUIT SHALL BE USED FOR ALL DAMP OR WET LOCATIONS.
- D. POLYVINYL CHLORIDE CONDUIT (PVC) SHALL ONLY BE USED UNDERGROUND AT A MINIMUM OF 30" BELOW FINISHED GRADE WHEN NOT INSTALLED UNDER A CONCRETE SLAB OF FOOTING. PROVIDE A CODE GAUGE GREEN GROUND WIRE IN ALL PVC RUNS. ALL UNDERGROUND CONDUITS SHALL SLOPE TO DRAIN TO EACH END AND TERMINATE WITH PRE-MANUFACTURED BELL ENDS AT ALL MANHOLES AND PULL BOXES.
- E. CONDUIT ENDS SHALL BE CUT SQUARE AND SHALL BE CAREFULLY REAMED OUT TO FULL SIZE WITH A TAPERED BURRING REAMER AND SHOULDERED TO THE FITTINGS.
- F. BENDS IN CONDUIT SHALL BE MADE IN ACCORDANCE WITH SECTION 300.34 OF NEC SO THAT THE CONDUIT WILL NOT BE DAMAGED, AND THAT THE INTERNAL DIAMETER OF THE CONDUIT WILL NOT BE EFFECTIVELY REDUCED.
- G. CONDUIT SUPPORTS SHALL BE PROVIDED FOR ALL ABOVE GROUND SYSTEMS. CONDUIT SHALL BE SECURELY SUPPORTED AND FASTENED WITHIN 3' OF ANY TERMINATION POINT AND AT A MAXIMUM OF EVERY 10 FEET ALONG LENGTH OF RUN.
- H. CLEARANCE: CONDUIT SHALL NOT RUN CLOSER THAN 6" TO ANY HOT WATER PIPE, STEAM PIPE, HEATER FLUE, OR VENT.

- I. CONDUITS SHALL BE USED WHERE CONDUIT RUNS MUST GO AROUND OUTSIDE CORNERS OF WALLS, BEAMS, EQUIPMENT, ETC. ALL CONDULET COVERS SHALL BE ACCESSIBLE.

1.04 CONDULETS AND TERMINATIONS: WIRE AND CABLE SHALL BE CONTINUOUS FROM OUTLET TO OUTLET, WITH THE SPLICES ONLY IN JUNCTION BOXES, GUTTERS, EQUIPMENT OR OTHER APPROVED LOCATIONS.

- A. MAKE SPLICES, JOINTS, TAPS AND CONNECTIONS TO EQUIPMENT WITH APPROVED SOLDERLESS LUDS SIZED FOR THE WIRE OR CONDUCTOR INVOLVED.
- B. IDENTIFY POWER AND LIGHTING FEEDERS WITH PERMANENT TAGS AT PANELS, PULL BOXES WHERE CONDUIT RUN IS BROKEN.
- C. INSTALLATION: THOROUGHLY CLEAN CONDUIT AND WIREWAYS TO INSURE ALL PARTS ARE PERFECTLY DRY BEFORE PULLING WIRES. USE APPROVED WIRE PULLING COMPOUND FOR SIZES #2 OR LARGER, AND ON LONG RUNS.
- D. WIRE OR CABLE BENDS IN JUNCTION AND/OR PULL BOXES SHALL BE MADE WITH A LONG RADIUS. BENDS FOR CABLE SHALL HAVE A RADIUS OF NOT LESS THAN 8 TIMES THE DIAMETER OF THE CABLE, IN ACCORDANCE WITH SECTION 300.34 OF THE NEC.
- E. CONDUCTORS: #12 AND SMALLER SHALL BE PROVIDED WITH EYE OR FORKED TYPE COMPRESSION SET CONNECTORS WHEN CONDUCTORS ARE TERMINATED ON A SET SCREW TYPE TERMINAL.

1.05 DEVICE AND JUNCTION BOXES:

- A. CONCEALED OUTLET BOXES SHALL BE ACCURATELY PLACED, FLUSH WITH THE FINISHED SURFACE OF WALL OR CEILING, UNLESS OTHERWISE INDICATED. THEY SHALL BE PLUMB AND RIGIDLY FASTENED TO THE STRUCTURE, INDEPENDENT OF THE CONDUIT, BY A BAR TYPE HANGER OR STRAP APPROVED FOR THAT PARTICULAR USE.
- B. OUTLET BOXES IN FURRED CEILING SHALL BE RIGIDLY FASTENED TO THE SUPPORTING STRUCTURE BY AN APPROVED BAR TYPE HANGAR OR BLOCKING.
- C. CONTROL APPARATUS, OUTLET BOXES, JUNCTION AND/OR PULLBOXES, AND OTHER SIMILAR EQUIPMENT SHALL BE INSTALLED AND MAINTAINED IN ACCESSABLE POSITIONS AND LOCATIONS.
- D. WALL OUTLETS SHALL NOT BE WIRED BACK-TO-BACK, BOXES ON OPPOSITE SIDES OF A COMMON WALL SHALL BE SEPARATED BY A SPACE OF AT LEAST 6". PROVIDE A MINIMUM OF 24" OF SEPARATION IN ACOUSTIC AND FIRE RATED WALLS.
- E. CAST STEEL OR ALUMINUM OUTLET BOXES SHALL BE USED FOR ALL SURFACE MOUNTING IN DAMP OR WET LOCATIONS. BOXES SHALL BE COMPLETE WITH THREADED HUBS AND WEATHERPROOF COVERS.
- F. PROVIDE MULTI-GANG BOXES WHERE REQUIRED. SECTIONAL OR GANGABLE BOXES SHALL NOT BE PERMITTED.

1.06 LIGHTING FIXTURES: FURNISH ALL LABOR AND MATERIALS TO INSTALL SPECIFIED EQUIPMENT IN THE MANNER INDICATED. ALL FIXTURES AND LIGHTING EQUIPMENT SHALL BE DELIVERED TO THE SITE COMPLETE WITH SUSPENSION ACCESSORIES, CANOPIES, CASTING, SOCKETS, REFLECTORS, BALLASTS, DIFFUSERS, LOUVERS, PLASTER FRAMES, RECESSED BOXES, ETC. WIRE AND ASSEMBLE AS DIRECTED BY MANUFACTURERS.

- A. FLUORESCENT FIXTURES SHALL NOT BE USED AS A RACEWAY FOR BRANCH CIRCUIT CONDUCTORS EXCEPT WHERE INSTALLED END-TO-END TO FORM A CONTINUOUS ASSEMBLY.
- B. CEILING MOUNTED FIXTURES WHICH ARE INSTALLED DIRECTLY ON COMBUSTIBLE OR FLAMMABLE CEILING MATERIAL, SHALL BE RATED AND APPROVED BY U.L. FOR SUCH INSTALLATION.

- C. RECESSED MOUNTED FIXTURES WHICH ARE INSTALLED IN GYPSUM BOARD OVER SUSPENDED WOOD CEILINGS SHALL BE COMPLETE WITH TWO (2) 1"x1-5/8" STEEL CHANNELS MOUNTED ON TOP OF AN PERPENDICULAR TO STRUCTURAL WOOD MEMBERS AND SECURED WITH FOUR (4) ¼"x1" LAG BOLT(S) AND WASHER(S). THERE SHALL BE FOUR (4) 3/8" BY REQUIRED LENGTH THREADED RODS WITH WASHERS AND LOCKNUTS SECURING FIXTURE TO CHANNEL AT FOUR (4) CORNERS.
- D. RECESSED MOUNTED FIXTURES IN SUSPENDED "T-BAR" TYPE CEILINGS SHALL BE SUPPORTED FROM THE STRUCTURE ABOVE WITH A #10 AWG WIRE AT EACH OF FOUR (4) CORNERS. SUPPORT WIRES SHALL ONLY BE TIGHTENED ENOUGH TO ALLOW FIXTURE TO FULLY SEAT INTO GRID.
- E. WHERE NUMBER OF WIRES INDICATED ON DRAWINGS EXCEED THE LOCAL CODE REQUIREMENTS FOR FIXTURE JUNCTION BOXES. THE CONTRACTOR AT HIS OPTION SHALL:
 - 1. IN DEMOUNTABLE ACOUSTIC TILE CEILINGS: INSTALL A JUNCTION BOX ABOVE CEILING, SIZED FOR NUMER OF WIRES INVOLVED, AND PROVIDE FLEXIBLE CONDUIT WITH CONDUCTORS FROM JUNCTION BOX TO FIXTURE (NOT TO EXCEED 6'). COVER PLATE TO BE FINISHED AS DIRECTED BY ARCHITECT.
 - 2. IN PLASTERED OR OTHER FIXED CEILINGS: ADJACENT TO THE FIXTURE, INSTALL A JUNCTION BOX (SIZED FOR NUMBER OF WIRES INVOLVED) WITH PLASTER RING AND FLAT PLATE FLUSH WITH FINISHED CEILING AND PROVIDE FLEXIBLE CONDUIT WITH CONDUCTORS TO RECESSED FIXTURE FROM JUNCTION BOX. COVER PLATE TO BE FINISHED AS DIRECTED BY ARCHITECT.
- F. EXTERIOR ADJUSTABLE LIGHTING FIXTURES SHALL BE ADJUSTED AFTER DARK IN PRESENCE OF THE ARCHITECT OR OWNER IN ORDER TO PROVIDE THE MAXIMUM ACHIEVABLE LIGHTING DISTRIBUTION WITHOUT CREATING LIGHT TRESSPASS.

1.07 GROUNDING: GROUNDING SHALL BE IN ACCORDANCE WITH ARTICLE 250 OF THE NEC, IN ITS ENTIRETY.

- A. PROVIDE AND INSTALL GROUND RODS AS REQUIRED, FULL LENGTH AND WITH MECHANICAL TYPE CONNECTORS OF THE CORRECT SIZE AND APPLICATION, SUITABLE FOR THE FULL RATED CURRENT OF THE CONDUCTOR.
- B. PROVIDE GROUNDING CONDUCTOR(S) IN ACCORDANCE WITH ARTICLE 250 (II) OF THE NEC. EQUIPMENT CONDUCTOR(S) SHALL BE IN ACCORDANCE WITH ARTICLE 250 (III) OF THE NEC.

1.08 CONNECTIONS TO EQUIPMENT: THE CONTRACTOR SHALL CONNECT ALL OWNER, MECHANICAL AND PLUMBING CONTRACTOR SUPPLIED EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS THROUGHOUT THE BUILDING.

1.09 PROTECTION AND RESPONSIBILITY: THE CONTRACTOR SHALL PROTECT ALL WORK, MATERIALS, AND EQUIPMENT OF THIS DISCIPLINE FROM DAMAGE. PROVIDE ADEQUATE AND PROPER STORAGE FACILITIES DURING PROGRESS OF WORK AND BE FULLY RESPONSIBLE FOR ALL INJURY OR DAMAGE THAT MAY OCCUR FROM ANY PART OF WORK FUNCTION.

1.10 CLEAN-UP: UPON COMPLETION OF WORK, AND PERIODICALLY AS REQUIRED FOR SAFETY AND SANITATION, REMOVE ALL TRASH AND DEBRIS RESULTING FROM WORK UNDER THIS SECTION.

END OF SECTION - END OF TECHNICAL SPECIFICATIONS - END OF BID PACKAGE