

Rancho Santa Fe Fire Protection District



REQUEST FOR PROPOSAL (RFP) 2018-01

**Modular Firefighter's Living Quarters
and
Office Space**

**RESPONSE DUE:
April 24, 2018**

Rancho Santa Fe Fire Protection District
RFP No. 2018-1

**Modular Firefighter's Living Quarters
and
Office Space**

TABLE OF CONTENTS

SECTION 1

- 1.0 STATEMENT OF WORK
- 2.0 SCOPE
- 3.0 BIDDERS MINIMUM QUALIFICATIONS
- 4.0 GENERAL REQUIREMENTS
- 5.0 MANUFACTURED BUILDING – SPECIFIC REQUIREMENTS
- 6.0 SEPTIC SYSTEM
- 7.0 SITE IMPROVEMENTS
- 8.0 CALENDAR OF EVENTS
- 9.0 BID SUBMISSION REQUIREMENTS
- 10.0 TIME AND PLACE OF BID OPENING
- 11.0 BID EVALUATION
- 12.0 RFP ACCEPTANCE
- 13.0 SINGLE PROPOSAL
- 14.0 RIGHT TO NEGOTIATE
- 15.0 NO OBLIGATION TO PROCEED
- 16.0 NOTICE OF AWARD
- 17.0 CONTRACT
- 18.0 PROTESTS

SECTION II

- 1.0. CONTRACT TERMS
- 2.0 EQUAL EMPLOYMENT OPPORTUNITY
- 3.0 BOND
- 4.0 CONTRACTOR'S FINANCIAL OBLIGATION
- 5.0 MATERIAL AND WORKMANSHIP
- 6.0 DEFECTIVE WORK
- 7.0 WARRANTY OF TITLE
- 8.0 WARRANTY OF FITNESS
- 9.0 SAFETY AND ACCIDENT PREVENTION
- 10.0 CHARACTER OF WORKFORCE
- 11.0 PREVAILING WAGES & DIR REGISTRATION

12.0 CHANGES
13.0 EFFECT OF EXTENSIONS OF TIME
14.0 DELAYS AND LIQUIDATED DAMAGES
15.0 TERMINATION
16.0 TERMINATION BY THE DISTRICT FOR CONVENIENCE
17.0 DAMAGES
18.0 ORDER OF PRECEDENCE
19.0 INDEMNIFICATION/RESPONSIBILITY
20.0 PROHIBITION OF ASSIGNMENT
21.0 NEWS RELEASES
22.0 TRANSFER OF INTEREST
23.0 SEVERABILITY
24.0 COVENANT AGAINST GRATUITIES
25.0 RIGHTS AND REMEDIES OF THE DISTRICT
26.0 WAIVER OF RIGHTS
27.0 WARRANTY
28.0 JOB MEETINGS
29.0 ACCEPTANCE OF THE WORK
30.0 SUB CONTRACTUAL RELATIONS
31.0 PROGRESS PAYMENTS
32.0 FINAL COMPLETION AND FINAL PAYMENT
33.0 INSURANCE AND INDEMNIFICATION REQUIREMENTS

EXHIBIT A

RFP RESPONSE PACKET GUIDELINES
BIDDER INFORMATION AND ACCEPTANCE
BID FORM
REQUIRED DOCUMENTATION AND SUBMITTALS
REFERENCES
EXCEPTIONS, CLARIFICATIONS, AMENDMENTS
AERIAL VIEW - PROPOSED BUILDING SITE

EXHIBIT B

SEPTIC LAYOUT AND SPECIFICATIONS

EXHIBIT C

SITE PLAN

EXHIBIT D

CONCEPTUAL FLOOR PLAN AND BUILDING ELEVATIONS

SECTION I

1.0 STATEMENT OF WORK:

1.01 The Rancho Santa Fe Fire District is seeking proposals from Bidders for the construction and installation of a new 2,500 square foot modular building, septic system, and various other site improvements as identified in this Request for Proposal (RFP). Location of the project is Rancho Santa Fe Fire Station 6 located at 20223 Elfin Forest Road, Elfin Forest, CA 92029. The Rancho Santa Fe Fire Protection District intends to award the contract to the most responsive lowest cost Bidder whose bid meets the District's requirements.

2.0 SCOPE:

2.01 It is the intent of this RFP to describe the terms, conditions, and specifications for the construction of a new modular building for the Rancho Santa Fe Fire Protection District. The projects scope shall include preconstruction activities, site preparation, delivery, set-up and finish construction of the modular building, obtaining final certificate of occupancy and completing the Fire District's final punch list and acceptance of the building. Activities are to include, but not limited to, providing engineered drawings, the plan check and permitting process, site preparation, foundation, building set-up, finish work, new septic system and other site improvements as identified in this RFP.

3.0 BIDDER MINIMUM QUALIFICATIONS:

3.01 Bidder, Bidder's principal, Bidder's staff, or Bidders subcontractor(s) shall have been regularly engaged in the business of designing and manufacturing factory built structures, or have worked in conjunction with manufacturer(s) of factory built structures in the design and manufacture of said structures for at least five (5) years.

3.02 Bidder and/or Bidder subcontractor(s) shall be a manufacturer, dealer, or contractor that is properly certified and holds the required licenses to construct, transport, install and final finish of modular buildings.

3.03 Bidder and/or subcontractor(s) for all work set forth in the RFP shall possess all required licenses, permits, professional credentials and experience necessary to supply and construct the product(s) as specified under this RFP.

4.0 GENERAL REQUIREMENTS:

4.01 The services sought by this RFP include all necessary services to purchase, construct, deliver to site, erect, and finish a modular building as well as other associated work as identified in this RFP. The proposal must be the total cost for the entire project and all of its related elements as required by this RFP. This may include, but not limited to the following:

- Geotechnical/soils reports if required
- Site and engineered building plans
- Structural and Civil engineering if required
- All zoning, permit, development fees and other related costs for the project
- Obtaining permits and all documents for construction
- Grading and site preparation
- Storm water and erosion control as required
- Constructing a permanent foundation system (raised)
- Purchase, delivery, set-up, and finish of a modular building
- Purchase and installation of septic system - Advantex AX20 Treatment Unit.
- All utility hook ups as required - water, electric, sewer, cable TV, phone, internet, and propane gas
- Finish grade and asphalt work
- Minor landscape as required
- All inspections as required and San Diego County certificate of occupancy
- Completion of Fire District punch list
- Additional tag on work as identified in this RFP

5.0 MANUFACTURED BUILDING – SPECIFIC REQUIREMENTS:

5.01 The Building is to be engineered, constructed and inspected in conformance with the California Building Code and other local codes as required in effect on the date of construction. These Standards set forth minimum requirements for the design and construction of homes designed to be used as dwellings.

5.02 The Building must be designed in compliance with the requirements for Risk Category IV/Table 1604.5 of the 2017 California Building Code.

5.03 All products shall be in new and unused condition and shall be of the most current and up to date model. All materials and supplies shall be of equivalent or better workmanship to those stated below.

5.04 The Building is to be ADA compliant as required for entry and exit, (1) office, (1) bathroom, (1) bedroom, or as required by law.

5.05 General Parameters:

- a. Single story building, approx. 2500 sq. ft.
- b. (4) Bunkrooms
- c. (3) bathrooms
- d. Laundry/utility room
- e. Kitchen
- f. Dining room
- g. Dayroom
- h. Office

5.05 Exterior:

- a. San Diego County and RSFFPD UWI compliant construction and materials
- b. Ceiling insulation R-38
- c. 16' x 10' Dormer/covered front entry porch over entrance w/stone veneered support column bases. Support columns shall be heavy timber type construction (min 8" x 8" construction).
- d. 2" x 6" exterior wall construction with R-19 insulation
- e. Interior ceiling height - 9' construction
- f. 16" boxed overhangs on front and rear
- g. Roof pitch 5:12 minimum
- h. Architectural high definition asphalt roofing shingles
- i. 2" x 8" fascia all 4 sides
- j. Rain gutters and drains
- k. Cement/fiber lap siding throughout
- l. Cement/fiber exterior trim w/architectural features
- m. Double pane, low E vinyl windows throughout w/screens
- n. R-22 floor insulation
- o. 360 degree exterior LED lighting
- p. Window shutters
- q. Subfloor shall be 2" x 10" construction or equivalent w/ 7/8" tongue and groove plywood. Minimum 16" on center or as required by code.
- r. Subfloor shall be glued and nailed to floor joists.
- s. Electronic lock system for exterior doors (Wireless enabled Omnilock).
- t. Stone veneer over raised foundation stem wall.
- u. Retaining walls if required.

5.06 Interior:

- a. Interior walls 2" x 4" framing throughout
- b. Interior bedroom walls R19 insulation for sound
- c. 5/8' drywall throughout; fully taped w/light texture finish
- d. Bull nose corners throughout
- e. Primed flat; painted per customer color choice
- f. Solid core interior doors
- g. Fiberglass exterior doors
- h. Vaulted ceilings
- i. Commercial grade laminate flooring throughout living areas
- j. Commercial grade carpet in bedrooms w/upgraded pad.
- k. Commercial grade sheet vinyl in bathrooms and utility room
- l. Lever doorknobs throughout
- m. 4.5" crown moldings throughout except bedrooms, bath/utility rooms
- n. 4" base molding throughout
- o. 3" door casing and trim throughout
- p. Window coverings throughout – cordless 1.5" faux wood, w/3" crown valance

- 5.07 Kitchen:
- a. Solid wood cabinets
 - b. Granite/quartz counter top and back splash
 - c. 60 - 40 kitchen stainless steel sink
 - d. ½ horsepower garbage disposal
 - e. Ice maker plumbing recessed in wall w/ shut off (for 3 refrigerators)
 - f. Plumbing fixtures: Mohen single lever handle
 - g. Samsung stainless steel appliances - energy star compliant
 - h. (3) refrigerators (26 cu ft)
 - i. Microwave
 - j. Dishwasher
 - k. Slide-in gas (propane) range/oven
 - l. Range hood
 - m. Recessed LED lighting in kitchen
- 5.08 Bathrooms:
- a. Corian or equivalent hard surface shower enclosures with frosted shower door. Minimum size 48" x 36"
 - b. Solid constructed vanities with porcelain sink basin
 - c. Plumbing fixtures – Mohen single lever, brushed nickel finish
 - d. White lavatory fixtures
 - e. Recessed LED bathroom lights
 - f. Exhaust fan
 - g. Linen/supply cabinet storage in each bathroom
- 5.09 Utility/Laundry:
- a. Corian countertop and laundry tub
 - b. Samsung top load washer w/matching propane gas dryer (high capacity, low E)
 - c. Built in linen storage cabinets
 - d. 220V 40 Amp circuit
- 5.10 Bedrooms:
- a. (3 ea.) 2' wide x 6' high lockers with (4) adjustable shelves w/clothes pole in/lieu of closet space in ea. bedroom
 - b. Ceiling fan in each bedroom – w/wired switch controls
 - c. Recessed LED lighting
- 5.11 HVAC:
- a. Whole home ducted HVAC System
 - b. Propane furnace - energy star compliant
 - c. Air conditioning - energy star compliant
- 5.12 Other:
- a. Lighting through shall be LED unless specified
 - b. 200 amp electric service w/forty circuit spots
 - c. Whole house water shut-off valve

- d. High efficiency gas (propane) 50 gallon water heater
- e. (4) Exterior electric receptacles, (1) ea side.
- f. Smoke detectors and carbon monoxide detectors as required by code
- g. Fire sprinkler system installed per code w/properly sized fire line and backflow prevention device(s) if required.
- h. Cable TV prewire in all bedrooms/day room and kitchen area
- i. (3) Cat 6 lines from Telcomm room to Office
- j. Com Tech station alerting prewire
- k. All electrical outlets shall be white/décor style

5.13 Telecom room:

- a. minimum size = 4' x 5'
- b. ducted a/c and ventilation
- c. (5) 1" conduct pre-runs stubbed to exterior
- d. (3) 1" conduct pre-runs to office

6.0 **SEPTIC SYSTEM**

6.01 The Bidder or Bidders subcontractor shall be a properly licensed contractor and have experience in the installation of an Advantex AX20 Model 3B Advanced Treatment Unit septic system per specifications and approved San Diego County design as described in Exhibit B. Note: The District currently has a San Diego County site approval for installation of system.

6.02 The scope of work for the septic system shall include all equipment, material, supplies, and labor to install the complete system with connections to the new modular building and the existing building. This shall include tight line and sewage pump if required.

6.03 Work shall include costs to pump the existing septic tank, and abandonment of said tank per County code. Back fill, and cleanup as needed. A final inspection and sign off approval from the County of San Diego Department of Environmental Health will be required before work is considered complete.

7.0 **SITE IMPROVEMENTS**

7.01 The Bidder shall complete all finish grading, base materials, compaction and installation of approximately 5,000 square feet of asphalt material.

7.02 The Bidder shall install retaining walls if required and minor landscape improvements as required where soil was disturbed and for visual appearance and erosion control.

7.03 Any required drainage and storm water prevention measures shall be included in the bid.

8.0 **CALENDAR OF EVENTS**

8.01 The estimated timeline/construction schedule events is listed below in Table 1. The District reserves the right to modify such timelines with sufficient notice to all Bidders.

8.02 Bidders are **STRONGLY ENCOURAGED** to attend an on-site walk through according to the schedule shown below. During the on-site walk through, Bidders shall identify, gather and obtain information on the existing site, utilities, or other information as needed in order to accurately complete the Scope of Work and bid worksheet in accordance with this RFP.

EVENT	DATE / LOCATION
Notice to Invite Bids - Opening	February 23, 2018
Site Walk through	March 22, 2018 @ 1300
Bid Closing	3:00 pm (PST) April 24, 2018
Bid Evaluation Period	April 25 - May 1, 2018
Recommendation to Board of Directors to proceed w/most responsive contractor; or not proceed, and terminate RFP	May 9, 2018
Anticipated Contract Award Date	May 18, 2018

Table 1

9.0 **BID SUBMISSION REQUIREMENTS:**

9.01 In order to receive consideration, all bids shall be made in accordance with the following instructions. Proposals must meet all the requirements herein to be eligible for consideration. Proposals that are unsigned, incomplete, conditional, illegible, unbalanced, obscure or that contain additions not called for, reservations, erasures, alteration, or irregularities of any kind maybe rejected as informal.

9.02 All bids shall include all costs to complete the desired work.

9.03 All Bidders must fill out the required forms in the Bidders packet – Exhibits A and submit their pricing on the enclosed bid form. Pricing shall include all costs associated with the design/ build as described in this RFP.

9.04 All pricing shall be valid, with no pricing changes, for ninety (90) days after bid closing date. Bids shall be made upon the forms provided therefore, properly executed and with all items filled out in accordance with these Bid instructions. The enclosed Bid Forms must be

submitted and all blanks completed in ink or typewriter. Numbers shall be stated in writing, the signature of all persons signing shall be in longhand and shall indicate the capacity in which the signature is executed. The completed form shall be free of interlineations, alterations or erasures. No verbal, telegraphic, or telephonic proposals or modifications will be considered. All prices shall be in U.S. dollars, with overhead, profits, permit/zoning fees delivery charges, unloading, insurance, and all other costs included in the bid.

9.05 Bids shall be accompanied by a certified check or a cashier's check, or an approved corporate surety bond, in an amount equal to at least ten percent (10%) of the amount bid, made payable to the order of the Rancho Santa Fe Fire Protection District. Said check, or bond shall be given as a guarantee that the Bidder will enter a contract if awarded the work, and in case of refusal or failure to enter into said contract within fifteen (15) working days after being requested to do so by the District, the check or bond, as the case may be, shall be forfeited to the District. A bid received and not accompanied by such certified check, cashier's check, or approved bond, may result in return of the bid without consideration. If the proposal is not accepted within 45 calendar days after the time set of the bid closing, or if the successful Bidder executes and delivers the required agreement and bonds, the bid security will be refunded.

9.06 Bidders are required to keep their proposals confidential and must not disclose their proposals, or information contained in them, to anyone else without the prior written consent of the District.

9.07 Any Bidder may withdraw its bid, whether personally or by a written request, at any time prior to the scheduled time for opening of bids. After the bid opening, the Proposal is irrevocable and open for acceptance for a minimum period of ninety (90) days from Bid Closing Date. Bidders will not be released from bid on account of errors of judgment.

9.08 Any addenda issued during the time of bidding, forming a part of the documents, shall be covered in the proposal and shall be made a part of the contract. Acknowledgment of any and all addenda must be provided on Bidder's submission of bid at bid time. Failure to list addenda on submitted proposal may disqualify a bid.

9.9 The District will ensure that pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, religious creed, color, national origin, ancestry, physical handicap, medical condition, marital status, sex or sexual orientation, in consideration for an award.

9.10 The District is not responsible and will not pay any cost associated with the preparation, submittal, presentation, or evaluation of any proposal.

9.11 Any references to manufacturers, trade names, brand names, and/or catalog numbers are intended to be descriptive, but not restrictive, unless otherwise stated, and are intended to indicate the quality level desired. Bidders may offer an equivalent product that meets or exceeds the specifications.

9.12 RFP responses based on equivalent products must use Exhibit A "Exceptions,

Clarification and Amendments” to:

- a. Clearly describe the alternate offered and indicate specifically how it differs from the product specified in this RFP.
- b. Include complete descriptive literature and/or specifications as proof that the proposed alternate will be equal to or better than the product named in this RFP.

9.13 The District reserves the right to be the sole judge of what shall be considered equal and/or acceptable, and may require the Bidder to provide additional information and/or samples. If the Bidder does not specify otherwise, it is understood that the brand and/or product referenced in this RFP will be supplied.

9.14 Taking exception to the RFP, or failure on the part of the Bidder to comply with all requirements and conditions of this RFP, may subject the RFP response to rejection. If no deviations are shown, the Bidder will be required to furnish the material exactly as specified. The burden of proof of compliance with the specifications will be the responsibility of the Bidder.

9.15 This RFP is subject to acceptance only on the terms and conditions stated in this RFP. Any additional or different terms and conditions proposed by the Bidder are hereby rejected, and shall be of no force or effect unless expressly assented to in writing by the District.

9.16 Proposals shall contain the following and be organized in the following order.

- a. Cover Letter
- b. Name of Bidder, subcontractors, the location of the Bidders principal place of business and, if different, the anticipated place of performance of the proposed contract.
- c. Brief history and description of the organization, to include its qualifications and major organizational strengths.
- d. Documentation as requested in Exhibit A – RFP Response Packet.
- e. Each proposal shall include how soon the Bidder, if selected, would be in a position to provide services.
- f. Provide detailed information on the professional and technical competence and experience of the respondent. Provide a listing of other contracts under which services similar in scope, size and/or discipline to the required services were performed over the last three years. Include a copy of all licenses and certificates.
- g. Provide an overview of the key personnel who will be involved in the project (including the key contact person), including description of their experience, education, and credentials. Organizations that are partnering shall disclose the name of the partner(s) and weave that participation into the response.
- h. References – provide the agency name, name and title of primary contact, address, phone number, fax, and email address of at least five professional references. Fax and/or E-mail address is mandatory. Also, include a brief description of your past experience(s) or relationship(s) for each reference.
- i. Provide descriptive literature which details the model, square footage, floor plan, interior finishes available, features, and delivery information.

- j. Provide detailed information regarding the factory's capabilities which will be the manufacturing site for the proposed modular units.
- k. Provide proof of type and level of Workers Compensation coverage, Professional Liability, and Automobile Liability Insurance coverage.

9.17 Any general information not specifically relevant to the proposal shall be omitted or bound in a separate document.

9.18 Contact Information:

Chief Fred Cox
18027 Calle Ambiente
Rancho Santa Fe, CA 92067
Email: Cox@rsf-fire.org
858 858-756-6002

9.19 RFP Submission deadline: **Sealed proposals are to be received by 3:00 p.m. (PST) on April 24, 2018 ("Bid Closing Date")** in the form outlined above. Facsimile, or, electronic submittals will not be accepted. Proposals may be submitted on or before the due date and time above to:

a. Fed Ex, UPS or hand delivered:

Rancho Santa Fe Fire Protection District
18027 Calle Ambiente
Rancho Santa Fe, CA 92067

b. US Mail:

Rancho Santa Fe Fire Protection District
PO Box 410
Rancho Santa Fe, CA 92067

9.20 Please provide one (1) signed original and two (2) copies. Sealed Proposals shall include the following notation on the bottom left hand corner of the proposal, **"Request for Proposal 2018-01 for MODULAR BUILDING."**

9.21 Any proposal received after the specified date and time will not be accepted.

9.22 All proposals will become property of the Rancho Santa Fe Fire Protection District upon submission.

10.0 TIME AND PLACE FOR BID OPENING:

10.01. All bids shall remain sealed until after the bid close date and time. Bids will be opened after the bid close in the presence of a minimum of two District Officials; the name of each Bidder and the amount bid will be recorded. All bids submitted will then be forwarded to the bid evaluation process. The bid opening **WILL NOT** determine the successful proposal.

11.0 BID EVALUATION:

11.01 All proposals will be evaluated to assess the qualifications and capabilities of Bidders to meet the minimum standards specified in the RFP. Throughout the evaluation process, the District, at its sole discretion, may request additional written clarifications and/or supplemental information from selected Bidders, as part of the initial proposal evaluation process.

11.02 Disqualification of Bidders. Bid proposals may be rejected for, but not limited to, the following reasons:

- a. More than one proposal from an individual, a firm or partnership, a corporation or an association under the same or different names will not be considered. Reasonable ground for believing that any Bidder has interest in more than one proposal for the work contemplated will cause the rejection of all proposals in which such Bidder is interested.
- b. If there is a reason for believing that collusion exists among the Bidders, none of the participants in such collusion will be considered in awarding of the contract.
- c. Proposals in which the prices obviously are unbalanced may be rejected.
- d. If the experience or financial background of a Bidder is inadequate or past performance has been unsatisfactory.
- e. Noncompliance with the bid instructions.
- f. Incomplete bid packets
- g. Itemization of products and/or services with complete description (including model numbers, fabric and finish grade, description, color, etc.) and price per item, and a summary of total cost for product, services, shipping, and tax. POs and payments for products and/or services will be issued only in the name of Contractor.
- h. False or misleading information.
- i. The Bidders written proposal and submittal drawings contradict each other; or are in conflict with the District's specifications without explanation or taking "Exception".

12.0 RFP ACCEPTANCE

12.01 All proposals will be evaluated within forty-five (45) days of the bid opening to assess the qualifications and capabilities of Bidders to meet the minimum standards specified in the RFP. Throughout the evaluation process, the District, at its sole discretion, may request additional written clarifications and/or supplemental information from selected Bidders, as part of the initial proposal evaluation process.

12.02 The District reserves the right to select a proposal that "best meets" the intent of the specifications and provides the "best value" for District; therefore the District is not bound to accept a bid on the basis of lowest price. At its sole discretion, the District may waive any minor informalities, irregularities, or technicalities and accept the offer that is deemed most favorable to the District whether or not it is the lowest price.

12.03 The District reserves the right to award to a single or to multiple Contractors, dependent upon what provides the lowest overall cost to the District.

12.04 The District at its sole discretion, reserves the right to decline to award this contract or any part of it for any reason; cancel this RFP, to reject any and all proposals, to waive any and all informalities and/or irregularities, or to re-advertise with either the identical or revised specifications, if it is deemed to be in the best interest of the District to do so.

12.06 The following are the key criteria that will be used by the District to select a proposal. The list is not in any particular order of priority. The District will base its selection on a combination of the following criteria as a minimum. The contract will be awarded, contingent upon the availability of funding, to the Bidder who submits the lowest responsible bid as determined by the Board of Directors of the Rancho Santa Fe Fire Protection District or their designated representative. In determining the lowest responsible bid, the District shall give consideration to the following:

- a. The degree to which the design features and functionality meet the District's needs.
- b. Proven, successful experience in providing quality modular buildings consistent with intended use.
- c. The responsiveness of the proposal to all RFP requirements.
- d. Materials used and construction methods employed to produce the finished product.
- e. The quality of the materials to be supplied.
- f. Acceptability of reference checks conducted by the District.
- g. Anticipated schedule for completion of the project.
- h. Warranty and any value added offerings.
- i. Price.

13.0 SINGLE PROPOSAL

13.01. In the event a single proposal is received, the District will, at its option, conduct a price and/or cost analysis of the proposal and negotiate the award, or reject the proposal and re-advertise. A price analysis would be performed by comparing current published public sector pricing, price quotations submitted on similar projects to other jurisdictions; past similar procurements indexed by CPI or PPI, or other established or competitive price processes.

14.0 RIGHT TO NEGOTIATE

14.01. The District shall reserve the right to negotiate any terms and conditions of RFP's received, with the short list Bidder(s) prior to entering into a contract.

14.02. The District reserves the right to terminate contract negotiations with any Bidder and to enter into contract negotiations with any other Bidder(s) if, in the opinion of the District at any time, the contract negotiations with the initially selected Bidder(s) will not be satisfactorily concluded in the best interests of the District.

15.0 NO OBLIGATION TO PROCEED

15.01. Though the District fully intends at this time to proceed through the RFP, the District is not under any obligation to award a contract, and reserves the right to terminate the RFP process at any time, reject any or all Proposals received and/or to withdraw from discussions with all or any of the Bidders who have responded.

15.02. The receipt by the District of any information (including any submissions, ideas, plans, drawings, models or other materials communicated or exhibited by any intended Proponent, or on its behalf) shall not impose any obligations on the District. There is no guarantee by the District, its officers, employees or agents, that the process initiated by the issuance of this RFP will continue, or that this RFP process or any RFP process will result in a contract with the District.

15.03 The District is without any obligation or any compensation or reimbursement to any Bidder, intended Proponent, or any other person associated in the preparation of a Bid proposal.

15.04. The District at its sole discretion, reserves the right to terminate this RFP process and re-advertise with either the identical or revised specifications, if it is deemed to be in the best interest of the District to do so.

15.05 In the event of rejection of any or all Bid responses, or the termination of the RFP process, the District will be held without liability for any loss, damage, cost or expense incurred or suffered by any Proponent as a result of that cancellation.

16.0 NOTICE OF AWARD

16.01 Staff will present the best proposal to Rancho Santa Fe Board of Directors for approval. Upon approval from the District Board, the successful Bidder will be notified in writing of the bid award.

16.02. A “Notice of Award” identifying the successful Bidder will be placed on the District’s website.

17.0 CONTRACT

17.01. The signing of a formal written agreement shall constitute the making of a contract between the District and the successful Bidder. No Bidder shall acquire any legal or equitable rights in relation to this bid award until signing of a written agreement. The Contract shall include all portions of the RFP unless expressly agreed to and identified in writing as exceptions in the final contract. If a question arises between these specifications and the proposer's proposal during construction, the final agreed upon specifications shall prevail.

17.02. The successful Bidder will have fifteen days to enter into a formal contract with the District. If the Bidder fails or refuses to enter that contract, or reach a negotiated agreement, the Bidder without limitation will be liable to the District for the lesser of; the difference in the amount of the Bidder's Proposal and the next preferred qualified Proposal and any costs incurred by the District in securing a substitute vendor; or forfeiture of the bid bond.

17.03. The successful Bidder, simultaneously with the execution of the Contract, shall be required to furnish a faithful performance bond in an amount equal to one hundred percent (100%) of the Contract price. Contract Surety Bonds shall be issued by a surety who meets the criteria for sufficiency set forth in Section 995.660 and 995.670 of the California Code of Civil Procedure.

17.04. The successful Bidder shall furnish to District properly executed certificates of insurance, and certified copies of endorsements and policies, which shall clearly evidence all insurance required as stipulated in Exhibit A upon execution of contract. Bidder shall not allow such insurance to be canceled, expire or be materially reduced in coverage except upon 30 days prior written notice to District.

17.05. Such insurance shall name District, its Directors, officers, employees, agents and consultants, as insured with respect of performance under this RFP. Such insured status shall contain no special limitations in the scope of its protection in the above-listed Insured. All insurance shall be primary with respect to any insurance or self-insurance programs covering District, its Directors, officers, employees, agents and consultants and shall contain standard separation of Insured's provisions.

18.0 PROTESTS:

18.01 Protests must be in writing and must be received no later than seven (7) calendar days after the District issues the Notice of Intent to Award which will be posted on the District's website.

18.02 The District will reject the protest as untimely if it is received after this specified time frame. Protests will only be accepted from Bidders whom had submitted a bid proposal.

18.03 If the protest is mailed and not received by the District, the protesting party bears the burden of proof to submit evidence (e.g., certified mail receipt) that the protest was sent in a timely manner so that it would be received by the District within the RFP protest period.

18.04 Bid protests must contain a detailed and complete written statement describing the reason(s) for protest. The protest must include the name and/or number of the bid, the name of the firm protesting, and include a name, telephone number, email address and physical address of the protestor. If a firm is representing the protestor, they shall include their contact information in addition to that of the protesting firm.

18.05 Bid protests must be addressed to the Fire Chief and either mailed, Rancho Santa

Fe Fire District, PO Box 410 Rancho Santa Fe, CA 92067; or hand delivered to Rancho Santa Fe Fire Protection District, 18027 Calle Ambiente, Rancho Santa Fe, CA 92067

18.06 The Fire Chief will make a determination of the appeal and respond to the protester by certified mail in a timely manner. If the appeal is denied, the letter will include the date, time, and location of the Board of Directors meeting at which staff will make a recommendation for award and inform the protester it may request to address the Board of Directors at that meeting.

18.07 The District may transmit copies of the protest and any attached documentation to all other parties who may be affected by the outcome of the protest. The decision of the District as to the validity of any protest is final. This District's final decision will be transmitted to all affected parties in a timely manner.

Section II

TERMS / TERMINATION / RENEWAL

1.0. CONTRACT TERMS

1.01 The term of the contract, which may be awarded pursuant to this RFP, will be three hundred sixty (360) days, or sufficient time as agreed to in writing to manufacture and deliver per requestor directions.

1.02 This Agreement may be terminated for convenience by the District provided the Contractor is given written notice of not less than 30 calendar days. Upon such termination, the District shall pay the Contractor the amount owing for the products ordered and satisfactorily received by the District. This shall be the sole and exclusive remedy to which the Contractor is properly entitled in the event of termination by the District.

2.0 EQUAL EMPLOYMENT OPPORTUNITY

2.01 All Contractors and their subcontractors performing work for the District must be Equal Employment Opportunity (EEO) employers, and shall be bound by all laws prohibiting discrimination in employment. There shall be no discrimination against any person, or group of persons, on account of race, color, religion, creed, national origin, ancestry, gender including gender identity or expression, age, marital or domestic partnership status, mental disability, physical disability (including HIV and AIDS), medical condition (including genetic characteristics or cancer), genetic information, or sexual orientation.

2.02 Contractor and its subcontractors shall abide by the requirements of 41 CFR §§ 60-1.4(a), 60-300.5(a) and 60-741.5(a). These regulations prohibit discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities, and prohibit discrimination against all individuals based on their race, color, religion, sex, sexual orientation, gender identity, or national origin in the performance of this contract. Moreover,

these regulations require that covered prime contractors and subcontractors take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, national origin, protected veteran status or disability.

2.03 All Contractors shall include the nondiscrimination provisions above in all subcontracts.

3.0 BOND

3.01 Upon award of contract, successful Bidder shall furnish a good and approved faithful performance bond and/or payment bond in the full amount of the project.

3.02 The bonds shall be executed by a sufficient, admitted surety insurer (as listed on website [http://interactive.web.insurance.ca.gov/webuser/idb_co_list\\$.startup](http://interactive.web.insurance.ca.gov/webuser/idb_co_list$.startup)) admitted to transact such business in California by the California Department of Insurance. After acceptance of the bond(s) by the District, a copy of the bond(s) will bearing the continuance of the Contract, any of the sureties, in the opinion of the District, are or become irresponsible, the District may require other or additional sureties, which the Contractor shall furnish to the satisfaction of the District within ten days after notice. If the Contractor fails to provide satisfactory sureties within the ten- day period, the Contract may be terminated for cause.

4.0 CONTRACTOR'S FINANCIAL OBLIGATION

4.01 The Contractor shall promptly make payments to all persons supplying labor and materials used in the execution of the contract.

5.0 MATERIAL AND WORKMANSHIP

5.01 All goods and materials must be new and of the specified quality and equal to approved sample, if samples have been required. In the event any goods or materials furnished or services provided by the Contractor in the performance of the Contract fail to conform to the requirements, or to the sample submitted by the Contractor, the District may reject the same, and it shall become the duty of the Contractor to reclaim and remove the item promptly or to correct the performance of services, without expense to the District, and immediately replace all such rejected items with others conforming to the Contract. All work shall be done and completed in a thorough, workmanlike manner, notwithstanding any omission from these specifications or the drawings, and it shall be the duty of the Contractor to call attention to apparent errors or omissions and request instructions before proceeding with the work. The Project Manager may, by appropriate instructions, correct errors and supply omissions, which instructions shall be binding upon the Contractor as though contained in the original Contract Documents.

5.02 All materials furnished and all Work must be satisfactory to the Project Manager. Work, material, or machinery not in accordance with the Contract Documents, in the opinion of

the Project Manager, shall be made to conform.

6.0 DEFECTIVE WORK

6.1 The Contractor shall replace at its own expense any part of the work that has been improperly executed, as determined by the Project Manager. If Contractor refuses or neglects to replace such defective work, the District at the expense of the Contractor may replace it, and its sureties shall be liable therefor.

7.0 WARRANTY OF TITLE

7.1 Contractor shall warrant to the District, its successors and assigns, that the title to the materials, supplies or equipment covered by the Contract, when delivered to the District or to its successors or assigns, is free from all liens and encumbrance.

8.0 WARRANTY OF FITNESS

8.1 Contractor hereby warrants that all materials furnished shall meet the requirements and conditions of the Contract Documents; shall be fit for the purposes intended and fulfill its design functions; be free of all patent and latent defects in design, materials and workmanship; and perform satisfactorily. It is understood and agreed that by acceptance of this warranty and the acceptance of the materials or supplies to be manufactured or assembled pursuant to these specifications, the District does not waive any warranty either expressed or implied in Sections 2312 to 2317, inclusive, of the Commercial Code of the State of California or any products liability of the Contractor as determined by any applicable decision of a court of the State of California or of the United States.

9.0 SAFETY AND ACCIDENT PREVENTION

9.01 In performing work under the Contract on District premises, Contractor shall conform to any specific safety requirements contained in the Contract or as required by law or regulation.

9.02 Contractor shall provide all facilities and shall follow all procedures required by the Occupational Safety and Health Act (OSHA) including, but not limited to, providing and posting all required posters and notices and shall otherwise be responsible for compliance with all other mandatory safety laws.

9.03 Contractor shall take any additional precautions as the District may reasonably require for safety and accident prevention purposes. The Contractor shall take all necessary precautions for the safety of, and shall provide all necessary protection to prevent damage, injury or loss to:

- a. all employees on the work site and all other persons who may be affected thereby;
- b. all the Work and all materials and equipment to be incorporated therein, whether in

- storage on or off the site, under the care, custody or control of the Contractor, or;
- c. any of his Subcontractors or Sub-subcontractors; and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.
- d. Post notice stating that this work site is nonsmoking and drug free workplace.

9.04 Any violation of such rules and requirements, unless promptly corrected, shall be grounds for termination of this Contract or Contractor's right to precede in accordance with the default provisions of the Contract Documents.

9.05 The Contractor shall erect and maintain, as required by existing conditions and progress of the work, all necessary safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying Districts and users of adjacent utilities and erecting fences and gates to isolate work sites and prevent entry by unauthorized persons and erecting egress-ways and protective enclosures as required by site and building configuration or local conditions, to maintain access ways and pedestrian safety.

10.0 CHARACTER OF WORKFORCE

10.01 The Contractor shall employ none but skilled competent qualified personnel to perform the Work, and shall maintain discipline and order in the conduct of the Work at all times.

11.0 PREVAILING WAGES & DIR REGISTRATION

11.01 This project is subject to prevailing wage and Contractors and Subcontractors performing such work shall be registered with the State Department of Industrial Relations (DIR) pursuant to Section 1725.5 of the Labor Code. No bid will be accepted nor any contract entered into without proof of the Contractor and Subcontractors' current registration with the DIR (LC § 1771.1).

11.02 To the extent applicable, pursuant to Section 1773 of the Labor Code, the District has obtained from the Director of Industrial Relations of the State of California, the general prevailing rates of per diem wages and the general prevailing rates for holiday and overtime work in the locality in which the Work is to be performed, for each craft, classification, or type of worker needed to execute the contract. Pursuant to Section 1773.2 of the Labor Code, a copy of the prevailing wage rates is on file with the District and available for inspection by any interested party at www.dir.ca.gov.

11.02 The Contractor and each Subcontractor shall keep an accurate payroll record, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker or other employee employed in connection with the Work. The payroll records shall be certified and shall be available for inspection in accordance with the provisions of Section 1776 of the Labor Code. Certified payroll records shall be on the forms

provided by the DIR or contain the same information required on the Department's form.

12.0 CHANGES

12.01 Changes in the Work can only be made in writing signed by the identified Project Manager. If the change causes an increase or decrease in the contract sum, or a change in the time for performance under the Contract, an adjustment may be made as determined by the Project Manager.

12.02 The District reserves the right to make changes in the design of materials, equipment, or machinery, to make alterations or additions to or deviations or subtractions from the Contract and any specifications and drawings, to increase or decrease the required quantity of any item or portion of the Work or to omit any item or portion of the Work, as may be deemed by the Project Manager to be necessary or advisable and to order such extra work as may be determined by the Project Manager to be required for the proper execution and completion of the whole Work contemplated. Any such changes will be ordered in writing by the Project Manager. The determination of the Project Manager on all questions relating to changes, including extra work, shall be conclusive and binding.

12.03 Prior to issuing an amendment or change to the Contract, the Project Manager may request that the Contractor submit a proposal covering the changes. Within 10 business days of receiving the request, the Contractor shall submit its proposal to the Project Manager of all costs associated with the proposed amendment or change and any request for an extension of Contract time. Contractor's proposal shall include detailed estimates with cost breakdowns, including labor, material, equipment, overhead, and profit. Labor shall be broken down into hours and rate per hour. If applicable, the proposal shall include a breakdown for off-site labor (including factory labor, engineering, etc.). The Contractor's proposal shall include an analysis of schedule impact when the Contractor is requesting an adjustment in contract time. The Contractor shall be responsible for any delay associated with its failure to submit its change proposal within the time specified. If the Project Manager decides not to issue an amendment or change after requesting a proposal from the Contractor, the Contractor will be notified in writing. The Contractor is not entitled to reimbursement for Change Order preparation costs if the Contractor's proposal is not accepted by the Project Manager.

12.04 If the Contractor agrees with the terms and conditions of the approved Change Order, the Contractor shall indicate its acceptance by signing the original copy and returning it to the Project Manager within 10 Work Days after receipt or with reasonable promptness and in such sequence as to not delay the Work or activities of the District or of separate contractors, whichever is sooner. If notice of any change is required to be given to a surety by the provisions of any bond, the Contractor shall provide notice and the amount of each applicable bond shall be adjusted separately. Payment in accordance with the terms and conditions set forth in the executed Change Order shall constitute full compensation for all Work included in the Change Order and the District will be released from any and all claims for direct, indirect, and impact expenses and additional time impact resulting from the Work. If the Contractor disagrees with the terms and conditions of the approved Change Order, the Contractor shall indicate specific areas of disagreement and return the approved Change Order to the Project Manager with a

detailed written dispute. No payment will be made on the disputed work until the approved Change Order is returned to the Project Manager. However, whether or not the Contractor agrees with the terms and conditions of an approved Change Order, the Contractor shall immediately revise its sequence of operations as required to facilitate timely completion of the changed work and shall proceed with the revised work sequence.

12.05 The Project Manager may, after having received a written cost quotation from the Contractor, order the Contractor, in writing, to proceed with the work prior to issuance of an approved Change Order through a change directive. The change directive will authorize the Contractor to proceed with the work subject to the cost quotation submitted by the Contractor. Within five days following receipt of the change directive, the Contractor shall submit a detailed change proposal documenting the amount of compensation. An approved Change Order shall supersede any previously issued written change directive covering the same Work.

13.0 EFFECT OF EXTENSIONS OF TIME

13.01 The granting, or acceptance, of extensions of time to complete the Work or furnish the labor, supplies, materials or equipment, or any one of the aforementioned, will not operate as a release of Contractor or the surety on Contractor's faithful performance bond.

14.0 DELAYS AND LIQUIDATED DAMAGES

14.01 The Contractor shall take reasonable precautions to foresee and prevent delays to the Work. When the Contractor foresees a delay event, and upon the occurrence of a delay event, the Contractor shall immediately notify the Project Manager of the probability or the actual occurrence of a delay, and its cause. With respect to all delays, the Contractor shall reschedule the Work and revise its operations, to the extent possible, to mitigate the effects of the delay. Within 15 days from the beginning of a delay, the Contractor shall provide the Project Manager with a detailed written description of the delay, its cause, its impact and the Contractor's mitigation plans. Failure to provide the notification required above waives the Contractor's right to any additional time resulting from the delay for whatever cause. The Project Manager will investigate the facts and ascertain the extent of the delay, and the Project Manager's findings thereon shall be final and conclusive, except in the case of gross error. An extension of time must be approved by the Project Manager to be effective, but an extension of time, whether with or without consent of the sureties, shall not release the sureties from their obligations, which shall remain in full force until the discharge of the contract.

14.02 District and Contractor recognize that time is of the essence and District will suffer financial loss if the Work is not complete within the time specified above, plus any extensions thereof allowed. If the Contractor fails to perform the Work within the specified time set forth in this agreement as adjusted pursuant to 14.01, the District and Contractor agree that as liquidated damages, and not as a penalty, for delay in performance the Contractor shall pay the District in the amount of **three-hundred dollars (\$300)** for each and every calendar day that expires after **May 01, 2019** where the Work is not complete and ready for Final Payment. The District shall have the right to deduct liquidated damages from any amount due or that may become due to

the Contractor, or to collect such liquidated damages from the Contractor or the Surety.

14.03 Such damages are uncertain in amount and difficult to measure and prove accurately. By executing this Contract, the Contractor agrees that the liquidated damages specified herein are reasonable in amount and are not disproportionate to actual anticipated damages. Liquidated damages do not include any sums of money to reimburse the District for extra costs, which the District may become obligated to pay on other contracts, which are delayed or extended because of Contractor's failure to complete the Work within the time period as specified herein, including costs associated with the delay or interference with the Project. Liquidated damages are not intended to include litigation costs or attorney fees incurred by the District, or other incidental or consequential damages suffered by the District due to the Contractor's performance. If the District charges liquidated damages to the Contractor, this shall not preclude the District from commencing an action against the Contractor for other actual harm resulting from the Contractor's performance, including but not limited to, costs associated with the delay or interference with the Project.

14.04 In order to recover liquidated damages, the District is under no obligation to prove the actual damages sustained by the District due to the Contractor's delay in performance. The parties agree that liquidated damages shall be computed at the agreed upon rate for each and every calendar day late as identified in 14.02.

14.05 The liquidated damages herein specified shall only apply to Contractor's delay in performance. Liquidated damages are intended only to compensate the District for additional personnel efforts in administering the Contract after normally scheduled completions dates, District inconvenience, lost opportunities, and lost confidence in government and morale of government when work is not completed on time.

15.0 TERMINATION

15.01 The District may terminate the Contractor's right to proceed under the Contract, in whole or in part, for cause at any time after the occurrence of any of the following events, each of which constitutes a default:

- a. The Contractor becomes insolvent or files for relief under the bankruptcy laws of the United States.
- b. The Contractor makes a general assignment for the benefit of its creditors or fails to pay its debts as the same become due.
- c. A receiver is appointed to take charge of the Contractor's property.
- d. The Contractor fails to supply skilled supervisory personnel, an adequate number of properly skilled workers, proper materials, or necessary equipment to prosecute the Work in accordance with the Contract Documents.
- e. The Contractor fails to make progress to endanger performance of the Work within the contractually required time.
- f. The Contractor disregards legal requirements of agencies having jurisdiction over the Work, the Contractor, or the District.
- g. The Contractor fails to provide the District with a written plan to cure a District identified default within five business days after the District's request for a plan to

cure; the District does not accept the Contractor's plan for curing its default; or the Contractor does not fully carry out an accepted plan to cure.

- h. The Contractor abandons the Work. Abandonment is conclusively presumed when the District requests a written plan to cure a default and the Contractor does not submit the plan within five business days of the District's request.
- i. The Contractor materially fails to meet its obligations in accordance with the Contract Documents.
- j. The Contractor is in default of any other material obligation under the Contract Documents.

15.02 If any of the above events occur, the District may, in its discretion, require that the Contractor submit a written plan to cure its default, which plan must be provided to the District within 5 business days of the request and must include a realistic, executable plan for curing the noted defaults.

15.03 Upon any of the occurrences referred to in 15.01, the District may, at its election and by notice to the Contractor, terminate the Contract in whole or in part; accept the assignment of any or all of the subcontracts; and then complete the Work by any method the District may deem expedient. If requested by the District, the Contractor shall remove any part or all of the Contractor's materials, supplies, equipment, tools, and machinery from the site of the Work within seven (7) days of such request; and, if the Contractor fails to do so, the District may remove or store, and after 90 days sell, any of the same at the Contractor's expense.

15.04 No termination or action taken by the District after termination shall prejudice any other rights or remedies of the District provided by law or by the Contract Documents.

16.0 TERMINATION BY THE DISTRICT FOR CONVENIENCE

16.01 The District may, at its option, and for its convenience, terminate the Contract at any time by giving written notice to the Contractor specifying the effective date of termination. Upon such termination, the Contractor agrees to comply with the notice and further agrees to waive any claims for damages, including loss of anticipated profits, on account of the termination; and, as the sole right and remedy of the Contractor, the District shall pay the Contractor as set forth below. Upon receipt of a notice of termination for convenience, the Contractor shall, unless the notice directs otherwise, do the following:

- a. Immediately discontinue its performance of the Contract to the extent specified in the notice.
- b. Place no further orders or subcontracts for materials, equipment, services, or facilities, except as may be necessary for completion of a portion of the Work that is not discontinued or that is necessary for an orderly cessation of the Work.
- c. Promptly cancel, on the most favorable terms reasonably possible, all subcontracts to the extent they relate to the performance of the discontinued portion of the Work.
- d. Thereafter, do only such Work as may be necessary to preserve and protect Work already in progress and to protect materials, plants, and equipment in transit to or on the site of performance.

16.02 Upon such termination for convenience, the District will pay to the Contractor the sum of the following:

- a. The amount of the contract sum allocable to the portion of the Work properly performed by the Contractor as of the effective date of termination, less sums previously paid to the Contractor.
- b. Previously unpaid costs of any items delivered to the project site that were already fabricated for subsequent incorporation into the Work.
- c. Any proven losses with respect to materials and equipment directly resulting from the termination.
- d. Reasonable demobilization costs.

16.03 The above reimbursement is the sole and exclusive remedy to which the Contractor is entitled in the event the contract is terminated for convenience; and the Contractor expressly waives any other claims, damages, demands, compensation or recovery related to this contract or project. The Contractor agrees to sign a general release incorporating this waiver.

16.04 Upon termination, the obligations of the Contract shall continue as to portions of the Work already performed and, subject to the Contractor's obligations as to bona fide obligations assumed by the Contractor prior to the date of termination.

16.05 If the contract is suspended or terminated by the District because Contractor's performance is prevented or delayed by an event including an irresistible, superhuman cause, or by the act of public enemies of the State of California or of the United States ("Force Majeure") , the Contractor will be paid for Work performed prior to the Force Majeure event at either (i) the unit prices named in the Contract; or (ii) in the event no unit prices are named, a sum equal to the percentage of the total contract amount that matches the percentage of the total contract Work performed prior to the Force Majeure event.

17.0 DAMAGES

17.01 All losses or damages to material or equipment to be furnished pursuant to the Contract Documents occurring prior to receipt and final acceptance of the Work shall be sustained by the Contractor. The Contractor shall sustain all losses arising from unforeseen obstructions or difficulties, either natural or artificial, encountered in the prosecution of the Work, or from any action of the elements prior to final acceptance of the work, or from an act or omission on the part of the Contractor not authorized by the Contract Documents.

18.0 ORDER OF PRECEDENCE

18.01 In the case of conflicts, errors, or discrepancies in any of the Contract Documents, the order of precedence is as follows. Within the same order of precedence, specific requirements shall take precedence over general requirements.

1. Approved Change Orders.

2. Addenda.
3. RFP.
4. Referenced Standard Specifications and Drawings.
5. Contractor's Response Packet
6. With reference to drawings:
 - a. Numerical dimensions govern over scaled dimensions.
 - b. Detailed drawings govern over general drawings.
 - c. Addenda/Change Order drawings govern over contract drawings.
 - d. Contract drawings govern over standard drawings.
7. Notes apply only to the drawing where the notes appear, unless classified as "typical" or intended to apply elsewhere in which case they apply to all drawings where the conditions or circumstance noted occurs. Typical details apply to all drawings unless a specific different detail is shown

19.0 INDEMNIFICATION/RESPONSIBILITY

19.01 Contractor shall indemnify, keep and save harmless the District and each of its directors, officers, agents and employees against any and all suits, claims or actions arising out of any of the following:

- a. Any injury to persons or property that may occur, or that may be alleged to have occurred, arising from the performance or implementation of this Contract; or
- b. Any allegation that materials or services developed, provided or used for this Contract infringe or violate any copyright, trademark, patent, trade secret, or any other intellectual-property or proprietary right of any third party.

19.02 Contractor further agrees to defend, with counsel acceptable to District, any and all such actions, suits or claims and pay all charges of attorneys and all other costs and expenses of defenses as they are incurred. If any judgment is rendered, or settlement reached, against the District or any of the other agencies or individuals enumerated above in any such action, Contractor shall, at its expense, satisfy and discharge the same. This indemnification shall survive termination or expiration of the Contract.

20.0 PROHIBITION OF ASSIGNMENT

20.01 The Contractor shall not assign, transfer, or otherwise dispose of any of its rights, duties or obligations under this Contract.

21.0 NEWS RELEASES

21.01 The Contractor, its employees, subcontractors, and agents shall not refer to the District, or use any logos, images, or photographs of the District for any commercial purpose, including, but not limited to, advertising, promotion, or public relations, without the District's prior written consent. Such written consent shall not be required for the inclusion of the District's name on a customer list.

22.0 TRANSFER OF INTEREST

22.01 Contractor shall not assign, transfer or otherwise substitute its interest in the Contract or any of the contract obligations without prior written consent from the District.

23.0 SEVERABILITY

23.01 Should any part of the Contract be declared by a final decision by a court or tribunal of competent jurisdiction to be unconstitutional, invalid or beyond the authority of either party to enter into or carry out, such decision shall not affect the validity of the remainder of the Contract, which shall continue in full force and effect, provided that the remainder of the Contract can be interpreted to give effect to the intentions of the parties.

24.0 COVENANT AGAINST GRATUITIES:

24.01 The Contractor warrants that no gratuities (in the form of entertainment, gifts, or otherwise) were offered or given by the Contractor, or any agent or representative of the Contractor, to any officer or employee of the District with a view toward securing the Contract or securing favorable treatment with respect to any determinations concerning the performance of the Contract. For breach or violation of this warranty, the District shall have the right to terminate the Contract, either in whole or in part, and any loss or damage sustained by the District in procuring on the open market any items which Contractor agreed to supply shall be borne and paid for by the Contractor. The rights and remedies of the District provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or in equity.

25.0 RIGHTS AND REMEDIES OF THE DISTRICT:

25.01 The rights and remedies of the District provided herein shall not be exclusive and are in addition to any other rights and remedies provided by law or under the Contract.

26.0 WAIVER OF RIGHTS:

26.01 Any action or inaction by the District or the failure of the District on any occasion, to enforce any right or provision of the Contract, shall not be construed to be a waiver by the District of its rights and shall not prevent the District from enforcing such provision or right on any future occasion. Rights and remedies are cumulative and are in addition to any other rights or remedies that the District may have at law or in equity.

27.0 WARRANTY:

27.01 Bidder expressly warrants that all goods and services to be furnished pursuant to any contract awarded it arising from the Bid will conform to the descriptions and specifications contained herein and in supplier catalogs, product brochures and other representations, depictions or models, and will be free from defects, of merchantable quality, good material, and workmanship. Bidder expressly warrants that all goods and services to be furnished pursuant to such award will be fit and sufficient for the purpose(s) intended. This warranty shall survive any inspections, delivery, acceptance, payment, or contract termination for any reason, by the District. Bidder warrants that all work and services furnished hereunder shall be guaranteed for no less than **one (1) year from the date of acceptance by the District.**

28. JOB MEETINGS

28.01 Job meetings shall be coordinated and scheduled by the Contractor at least every two weeks once site work begins. The Contractor shall record and distribute minutes of each meeting. District Project Manager, and other interested parties that attend the meetings.

28.02 The District may impose fines which shall not exceed \$500 per occurrence, which may be deducted by Change order from the amount due the Contractor for missed meetings.

28.03 The Contractor shall require the appropriate subcontractors to attend such job meetings. The purpose of the job meeting is to assure proper coordination; determine construction progress; monitor and update progress schedules; review requisitions and change orders; expedite completion of the Project in accordance with the Contract Documents and review other relevant items.

29.0 ACCEPTANCE OF THE WORK:

29.01 No act of the District or the District's Representative, either in superintending or directing Work, or any extension of time for the completion of the Work, shall be regarded as an acceptance of such Work or any part thereof, or of materials used therein, either wholly or in part. Acceptance shall be evidenced only by the final certificate of the District. Before any final certificate shall issue, Contractor shall execute an affidavit on the certificate that it accepts the same in full payment and settlement of all claims on account of Work done and materials furnished under this Contract, and that all claims for materials provided or labor performed have been paid or set aside in full. No waiver of any breach of this Contract by the District or anyone acting on District's behalf shall be held as a waiver of any other subsequent breach thereof.

29.02 Contractor agrees to guarantee all work under this Contract for a period of one year from the date of Final Settlement by the District. If any unsatisfactory condition or damage develops within the time of this guaranty due to materials or workmanship that are defective, inferior, or not in accordance with the Contract, as reasonably determined by the District, then the Contractor shall, when notified by the District immediately place such guaranteed Work in a condition satisfactory to the District.

30.0 SUB CONTRACTUAL RELATIONS:

30.01 By an appropriate written agreement, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by the terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities which the Contractor, by these Documents, assumes toward the District. Said agreement shall preserve and protect the rights of the District under the Contract Documents with respect to the Work to be performed by the Subcontractor so that the subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the Contractor-Subcontractor agreement, the benefit of all rights, remedies and redress against the Contractor that the Contractor, by these Documents, has against the District. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with his Sub-subcontractors. Each subcontract shall contain provision for execution of lien waivers in form and substance acceptable to District as a condition of payment by the Contractor. Contractor shall require each Subcontractor to (1) inspect the Project site, including all relevant surfaces and job conditions, before beginning Work and (2) accept or cite necessary corrections in the Project site, including surfaces or job conditions, before beginning Work.

30.02 Contractor shall include a provision in all subcontracts and purchase orders, except as may otherwise be specified by District with respect to purchase orders for minor purchases, that, in order to permit verification of contractor's costs, District shall have the right to have its representatives in addition to governmental auditors inspect and audit the books of account and records of the Subcontractors and Materialmen, including the right to make excerpts from such books and records. Contractor shall include a provision in all subcontracts and purchase orders that will enable representatives of the District to obtain access during working hours to the appropriate books of account and records of the Subcontractors and Materialmen relating to the work to determine if there is compliance with the requirements of law or the Construction Documents.

30.03 The District shall have no obligation to pay, or to see to the payment of, any monies to any Subcontractor. Nothing contained in section 30 shall be deemed to create any contractual relationship between the District and any Subcontractor or to create any rights of any Subcontractor against the District.

30.04 All subcontract agreements shall conform to the requirements of the Contract Documents, and Contractor hereby assigns to District (and District's permitted assigns) all its interest in any subcontract agreements and purchase orders now existing or hereinafter entered into by Contractor for performance of any part of the Work, which assignment will be effective upon acceptance by District in writing and only as to those subcontract agreements and purchase orders that District designates, in its sole discretion, in said writing. It is agreed and understood that District may accept said assignment at any time during the course of construction prior to Final Completion.

30.05 Upon such acceptance by District, (1) contractor shall promptly furnish to District true and correct copies of the designated subcontract agreements, and purchase orders, and (2) District shall only be required to compensate the designated Subcontractor(s) or supplier(s) for compensation accruing to such party(ies) for Work done or materials delivered from and after the

date on which District determines to accept the subcontract agreement(s) or purchase order(s). All sums due and owing by Contractor to the designated Subcontractor(s) or supplier(s) for work performed or materials supplied prior to District's determination to accept the subcontract agreement(s) or purchase order(s) shall constitute a debt between such parties and Contractor. It is further agreed that all subcontract agreements and purchase orders shall provide that they are freely assignable by Contractor to District and assigns under the terms and conditions stated hereinabove. It is further agreed and understood that such assignment is part of the consideration to District for entering into the Contract with Contractor and may not be withdrawn prior to Final Completion. Contractor shall deliver or cause to be delivered to District a written acknowledgment in form and substance satisfactory to District from each of its Subcontractors and suppliers of the contingent assignment described herein no later than ten (10) days after the date of execution of each subcontract agreement and purchase order with such parties.

31.0 PROGRESS PAYMENTS

31.01 Contractor may submit for progress payments upon completion of section work as identified in table 2 of this agreement. All payments will be based upon:

- a. Inspection and approval of work by project manager.
- b. Conditional lien release indicating contractor has paid for materials and labor and sub-contractors.

31.02 Any section payment may be withheld on account of:

- a. Defective work that is not remedied.
- b. Third party claims filed or reasonable evidence indicating probable filing of such claims.
- c. Non-compliant materials or products to specification.
- d. Failure of the Contractor to make payments properly to Sub-Contractors or for labor, materials, or equipment.
- e. Unsatisfactory completion of the Work by the Contractor.
- f. Failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment.
- g. Reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract sum,
- h. Damage to the District or another Contractor,

31.03 Upon receipt of section invoice and compliance to terms stated in 31.01, payment shall occur within twenty (20) days of receipt of invoice.

Table 2

NO.	SECTION	DESCRIPTION	DOLLAR AMOUNT	PERCENTAGE
MODULAR UNIT				
1.	Deposit:	Upon contract execution and receipt of performance bond		3%
2.	Preconstruction:	Engineering , approved drawings, all permits pulled		5% plus permit fees
3.	Site work:	Foundation completed		8%
4.	Modular Unit:	Delivery of Modular Unit		20%
5.	Modular Unit:	Modular Set - Rough		25%
6.	Modular Unit:	Modular Finish w/grade and minor landscape as required		15%
7.	Certificate of Occ.	Certificate of Occupancy w/all County permit approvals		15%
8.	Completion:	Project Completion w/District punch list		9%
SEPTIC SYSTEM				
1.	Septic:	Materials and Supplies at site		50%
2.	Septic:	Completed install w/SD County final inspection approval		50%
SITE IMPROVEMENTS				
1.	Asphalt work	Completed grade, compact, finish asphalt		100%

32.0 FINAL COMPLETION AND FINAL PAYMENT:

32.01 Upon receipt and approval of certificate of occupancy from the County of San Diego; receipt of unconditional lien releases; and written notice that the work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the project manager will promptly make such inspection and, when he finds the Work acceptable under the Contract Documents and the Contract fully performed, he will promptly issue a final Certificate for Payment stating that to the best of his knowledge, information and belief, and on the basis of his observations and inspections, the Work has been completed in accordance with the terms and conditions of the Contract Documents and that the remaining fund balance found to be due and payable to Contractor.

32.02 The Contractor upon receipt of certificate of payment will provide the District with the following documents before final payment will be issued:

- a. Contractor's Affidavit of Payment of Debts and Claims, and Contractor's Affidavit of Release of Liens written consent of surety, if any is given, or other forms satisfactory to District, which have been completed and approved by the District, covering all Work including that of all Subcontractors, vendors, labor, materials and services, executed by an authorized officer and duly notarized.

- b. The permanent Certificate of Occupancy.
- c. Any manufacturers or suppliers warranties and equipment literature.
- d. All applicable as built drawings and documents showing significant changes in the Work made during construction, job records, certificates and other project record documents are delivered to District,

32.03 Invoices shall contain, at a minimum, District PO number, invoice number, remit to Address, and itemized products and/or services description.

32.04 The District will pay Contractor in an amount not to exceed the remaining balance of total amount quoted in the RFP response, minus any charges as stipulated in 14.0, unless agreed to in writing through the change order process. The District shall notify Contractor of any invoice adjustments as required in this agreement.

32.05 Final payment will be made within thirty (30) days following compliance of Section 32.

33.0 INSURANCE AND INDEMNIFICATION REQUIREMENTS

33.01 CONTRACTOR expressly agrees to defend, indemnify, and hold harmless the District and its Directors, officers, agents, and employees from and against any and all loss, liability, expense, claims, suits, and damages, including attorneys' fees, arising out of or resulting from CONTRACTOR's, its associates', employees', subcontractors', or other agents' negligent acts, errors or omissions, or willful misconduct, in the operation and/or performance under this Agreement.

33.02 Insurance certificates are not required at the time of submission; however, by signing Exhibit A – RFP Response Packet, the CONTRACTOR agrees to meet the minimum insurance requirements stated in the RFP. This documentation must be provided to the District, prior to award. The following are the minimum insurance limits, required by the District, to be held by the Contractor performing on this RFP:

33.03 CONTRACTOR shall take out and maintain during the life of the Agreement all the insurance required in this section, and if requested shall submit certificates for review and approval by the District. The Notice to Proceed shall not be issued, and CONTRACTOR shall not commence work until such insurance has been approved by the District. The certificates shall be on forms approved by the District. Acceptance of the certificates shall not relieve CONTRACTOR of any of the insurance requirements, nor decrease the liability of CONTRACTOR. The District reserves the right to require CONTRACTOR to provide insurance policies for review by the District.

a. Workers Compensation Insurance

CONTRACTOR shall take out and maintain during the life of the Agreement Workers Compensation Insurance for all of its employees on the project. In lieu of evidence of Workers Compensation Insurance, the District will accept a Self-Insured Certificate from the State of California. CONTRACTOR shall require any subcontractor to provide it with evidence

of Workers Compensation Insurance.

b. Commercial General Liability Insurance

CONTRACTOR shall take out and maintain during the life of the Agreement Automobile and General Liability Insurance that provides protection from claims which may arise from operations or performance under this Agreement. If CONTRACTOR elects to self-insure (self-fund) any liability exposure during the contract period above \$50,000, CONTRACTOR is required to notify the District immediately. Any request to self-insure must first be approved by the District before the changed terms are accepted. CONTRACTOR shall require any subcontractor to provide evidence of liability insurance coverages. The amounts of insurance shall be not less than the following:

- \$2,000,000/Occurrence, Bodily Injury, Property Damage -- Automobile.
- \$2,000,000/Occurrence, Bodily Injury, Property Damage -- General Liability. The following coverages or endorsements must be included in the policy(ies):
 - The District, its Directors, officers, and employees are Additional Insureds in the policy(ies) as to the work being performed under the contract.

33.04 The coverage is Primary and non-contributory to any other applicable insurance carried by the District.

- a. The policy(ies) covers contractual liability.
- b. The policy(ies) is written on an occurrence basis.
- c. The policy(ies) covers the District's Property in Consultant's care, custody, and control.
- d. The policy(ies) covers personal injury (libel, slander, and wrongful entry and eviction) liability.
- e. The policy(ies) covers explosion, collapse, and underground hazards.
- f. The policy(ies) covers products and completed operations.
- g. The policy(ies) covers the use of owned, non-owned and hired automobiles.
- h. The policy(ies) and/or a separate pollution liability policy(ies) shall cover pollution liability for claims related to the release or the threatened release of pollutants into the environment arising out of or resulting from Contractors performance under this agreement.
- i. The policy(ies) will not be canceled nor the above coverages/endorsements reduced without 30 days written notice to the District at the address above.



**EXHIBIT A
RFP RESPONSE PACKET**

To: The RANCHO SANTA FE FIRE PROTECTION DISTRICT District (“District”)

From: _____

RFP RESPONSE PACKET GUIDELINES:

- 1. AS DESCRIBED IN SECTION 9 – BID SUBMISSION REQUIREMENTS, BIDDERS ARE TO SUBMIT ONE (1) ORIGINAL HARDCOPY RFP RESPONSE WITH ORIGINAL INK SIGNATURES AND (2) ONE COPIES IN THEIR ENTIRETY**
- 2. EXHIBIT A – RFP RESPONSE PACKET, and ALL ADDITIONAL REQUIRED DOCUMENTATION AS DESCRIBED IN EXHIBIT A - “REQUIRED DOCUMENTATION AND SUBMITTALS”**
- 3. ALL PRICES AND NOTATIONS MUST BE PRINTED IN INK OR TYPEWRITTEN; NO ERASURES ARE PERMITTED; ERRORS MAY BE CROSSED OUT AND CORRECTIONS PRINTED IN INK OR TYPEWRITTEN ADJACENT, AND MUST BE INITIALED IN INK BY PERSON SIGNING THE RFP RESPONSE.**
- 4. BIDDERS THAT DO NOT COMPLY WITH THE REQUIREMENTS, AND/OR SUBMIT AN INCOMPLETE RFP RESPONSE MAY BE SUBJECT TO DISQUALIFICATION AND THEIR RFP RESPONSE REJECTED IN TOTAL.**
- 4. IF BIDDERS ARE MAKING ANY CLARIFICATIONS AND/OR AMENDMENTS, OR TAKING EXCEPTION TO ANY PART OF THIS RFP, THESE MUST BE SUBMITTED IN THE EXCEPTIONS, CLARIFICATIONS, AND AMENDMENTS SECTION OF THIS EXHIBIT A – RFP RESPONSE PACKET. THE DISTRICT, AT ITS SOLE DISCRETION, MAY ACCEPT AMENDMENTS/EXCEPTIONS, OR MAY DEEM THEM TO BE UNACCEPTABLE, THEREBY RENDERING THE RFP RESPONSE DISQUALIFIED.**



EXHIBIT A RFP RESPONSE PACKET

BIDDER INFORMATION AND ACCEPTANCE

The undersigned declares that all RFP documents, including, without limitation, the RFP, Addenda, and Exhibits, have been read and that the terms, conditions, certifications, and requirements are agreed to.

1. The undersigned is authorized to offer, and agrees to furnish, the articles and services specified in accordance with the RFP documents of RFP No. 2018-01.
2. The undersigned acknowledges acceptance of all addenda related to this RFP. List Addenda for this RFP on the lines below:

Addendum #	Date

3. The undersigned hereby certifies to the District that all representations, certifications, and statements made by the Bidder, as set forth in this RFP Response Packet and attachments, are true and correct and are made under penalty of perjury pursuant to the laws of California.
4. The undersigned acknowledges that the Bidder is, and will be, in good standing in the State of California, with all the necessary licenses, permits, certifications, approvals, and authorizations necessary to perform all obligations in connection with this RFP and associated RFP documents.
5. It is the responsibility of each Bidder to be familiar with all of the specifications, terms, and conditions and, if applicable, the site condition. By the submission of an RFP response, the Bidder certifies that if awarded a contract it will make no claim against the District based upon ignorance of conditions or misunderstanding of the specifications.
6. Patent indemnity: Contractors who do business with the District shall hold the District, its Directors, officers, agents, and employees, harmless from liability of any nature or kind, including cost and expenses, for infringement or use of any patent, copyright, or other proprietary right, secret process, patented or unpatented invention, article, or appliance

furnished or used in connection with the contract or purchase order.

7. Insurance certificates are not required at the time of submission. However, by signing Exhibit A – RFP Response Packet, the Bidder agrees to meet the minimum insurance requirements stated in the RFP. This documentation must be provided to the District prior to execution of an agreement by the District, and shall include an insurance certificate which meets the minimum insurance requirements, as stated in the RFP.
8. The undersigned Bidder hereby submits this RFP response and binds itself on award to the District under this RFP to execute in accordance with such award a contract and to furnish the bond or bonds and insurance required by the RFP. The RFP, subsequent Addenda, Bidder's Response Packet, and any attachments, shall constitute the Contract, and all provisions thereof are hereby accepted.

Official Name of Bidder (exactly as it appears on Bidder's corporate seal and invoice):

Street Address Line 1: _____

Street Address Line 2: _____

City: _____ State: _____ Zip Code: _____

Webpage: _____

Type of Entity / Organizational Structure (check one):

☐ Corporation

☐ Joint Venture

☐ Limited Liability Partnership

☐ Partnership

☐ Limited Liability Corporation

☐ Non-Profit / Church

☐ Other: _____

Jurisdiction of Organization Structure: _____

Date of Organization Structure: _____

Federal Tax Identification Number: _____

Primary Contact Information:

Name / Title: _____

Telephone Number: _____ Fax Number: _____

E-mail Address: _____

Street Address Line 1: _____

City: _____ State: _____ Zip Code: _____

SIGNATURE: _____

Name and Title of Signer (printed): _____

Dated this _____ day of _____ 20 _____



**EXHIBIT A
RFP RESPONSE PACKET
BID FORM**

All associated costs with this RFP shall be submitted on this Bid Form. The prices quoted shall include all fees including design, engineering, permitting, labor, profit, sales tax, and any or all other fees to provide a finished modular building to the District.

No alterations or changes of any kind to the Bid Form(s) are permitted. RFP responses that do not comply may be subject to rejection in total. The cost quoted below shall be the cost the District will pay for the term of any contract that is a result of this RFP process.

ITEM NUMBER	DESCRIPTION	UNIT COST
SECTION 4	All costs for pre-construction design, engineering, site prep and permitting process.	
SECTION 5	All costs for purchase, delivery, set-up, and finish construction of modular building including profit and overhead.	
SECTION 6	All costs for materials/supplies and the installation of Advantex AX20 Septic System per Attachment B	
SECTION 7	Site improvements	
TOTAL PROJECT COST:		



EXHIBIT A REQUIRED DOCUMENTATION AND SUBMITTALS

All of the specific documentation listed below is required to be submitted along with the Exhibit A – RFP Response Packet. Bidders shall submit all documentation, in the order listed below, and clearly label each section of the RFP response with the appropriate title

1. Description of the Proposed Modular Building: RFP response shall include a description of the proposed equipment/system, as it will be finally configured during the term of the contract.

2. The description shall specify the proposed equipment/system will meet or exceed the requirements of the District and shall explain any advantages that this proposed equipment/system would have over other possible equipment/systems. The description shall include any disadvantages or limitations that the District should be aware of in evaluating the RFP response. Finally, the description shall describe all product warranties provided by Bidder.

3. Delivery Plan and Schedule: The RFP response shall include an implementation plan and schedule. The plan for implementing the proposed equipment/system and services shall include an Acceptance Test Plan. In addition, the plan shall include a detailed schedule indicating how the Bidder will ensure adherence to the timetables for the final equipment/system and/or services.

4. References: MUST be for purchase and installation of Modular Building, same size and style as described in the RFP. Bidders must use the templates in the “References” section of this Exhibit A – RFP Response Packet to provide references.

5. References should have similar scope, volume, and requirements to those outlined in these specifications, terms, and conditions.

6. Bidders must verify the contact information for all references provided is current and valid. Bidders are strongly encouraged to notify all references that the District may be contacting them to obtain a reference.

7. The District may contact some or all of the references provided in order to determine Bidder’s performance record on work similar to that described in this RFP. The District reserves the right to contact references other than those provided in the RFP response.

**EXHIBIT A
REFERENCES**

Bidder must provide a minimum of five (5) references.

Company Name:	Contact Person:
Address:	Telephone Number:
City, State, Zip:	E-mail Address:
Services Provided / Date(s) of Service:	

Company Name:	Contact Person:
Address:	Telephone Number:
City, State, Zip:	E-mail Address:
Services Provided / Date(s) of Service:	

Company Name:	Contact Person:
Address:	Telephone Number:
City, State, Zip:	E-mail Address:
Services Provided / Date(s) of Service:	

Company Name:	Contact Person:
Address:	Telephone Number:
City, State, Zip:	E-mail Address:
Services Provided / Date(s) of Service:	

Company Name:	Contact Person:
Address:	Telephone Number:
City, State, Zip:	E-mail Address:
Services Provided / Date(s) of Service:	

EXCEPTIONS, CLARIFICATIONS, AMENDMENTS

Bidder Name: _____

List below requests for clarifications, exceptions, and amendments, if any, to the RFP and associated RFP Documents, and submit with Bidder's RFP response. **The District is under no obligation to accept any exceptions and such exceptions may be a basis for RFP response disqualification.**

[illegible]

Proposed Building Site



Proposed Building Site is approximately 53' wide x 68' long or 3604 square feet.

EXHIBIT B

SEPTIC LAYOUT FOR: ELFIN FOREST/HARMONY GROVE VOLUNTEER FIRE DEPT.

SHEET 2 OF 4

NOTES:

*** THE LOCATION OF UNDERGROUND AND OVERHEAD UTILITIES IS APPROXIMATE. LIKEWISE, STRUCTURE AND PAVEMENT LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATION OF UTILITIES, DRIVEWAYS AND STRUCTURES SHOULD BE FIELD VERIFIED PRIOR TO THE INSTALLATION OF THE PROPOSED SEPTIC SYSTEM. ANY REVISIONS TO THE SYSTEM SHOULD BE APPROVED BY THE DESIGN ENGINEER PRIOR TO IMPLEMENTING.

I CERTIFY THAT THE LAYOUT DRAWING SHOWS THE LOCATION OF ALL KNOWN EASEMENTS ON THE LOT AND PUBLIC WATER LINES ON OR WITHIN 20 FEET OF THE LOT BOUNDARIES.

KEVIN BRESNAHAN, P.E.

DEH Control Number:

LOWTS-006471

This approval will be VOID unless the Structures, Driveways and Grading are located as shown and the Lines or Seepage Pit(s) are located exactly as shown or indicated. Any proposed change shall be approved by the Department of Environmental Health prior to beginning construction. The applicant shall provide a full listing of all utility trenches to be installed. The location of all utility trenches shall be shown on the plan. The location of all utility trenches shall be shown on the plan. The location of all utility trenches shall be shown on the plan.

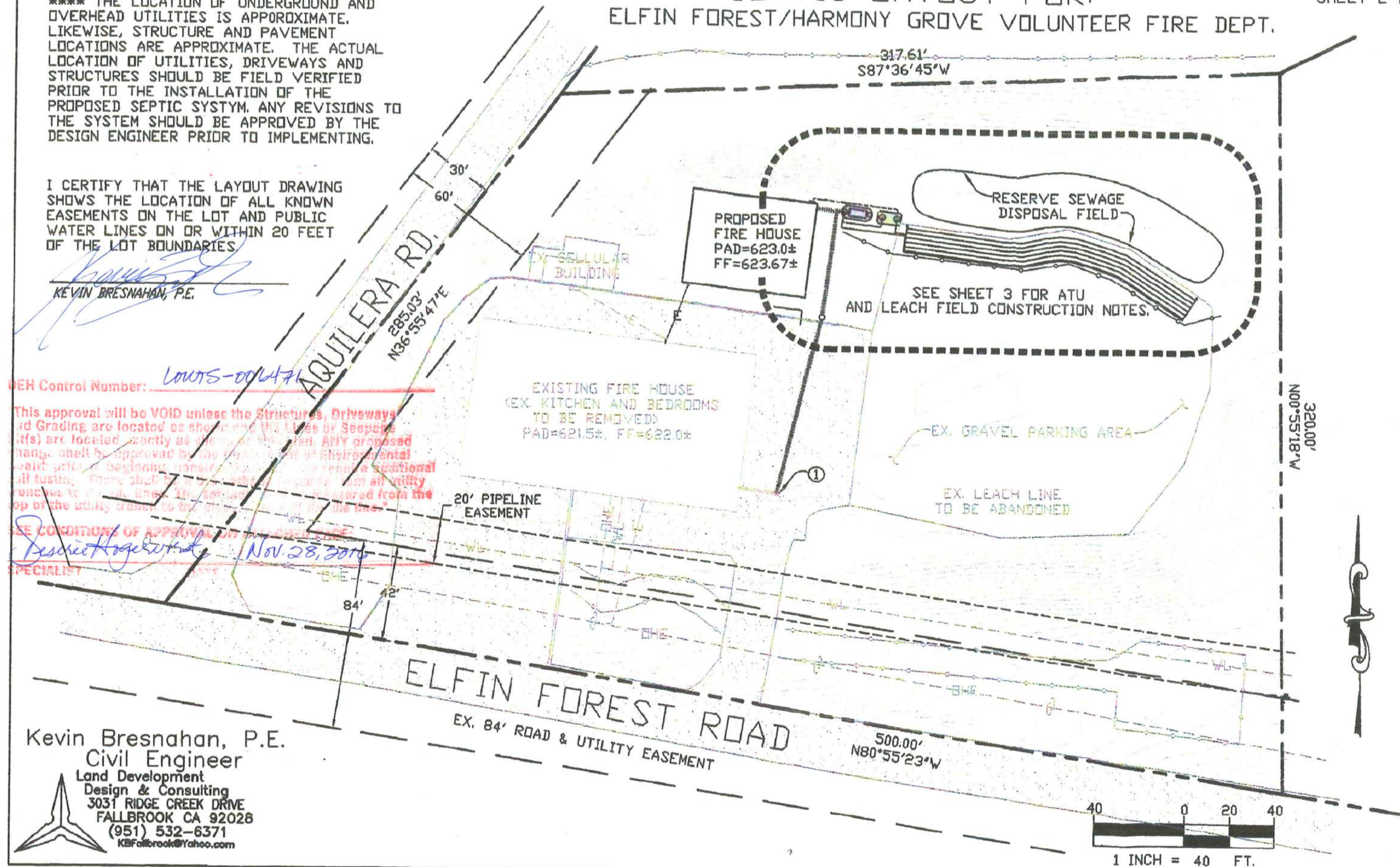
SEE CONDITIONS OF APPROVAL ON ALL SHEETS.

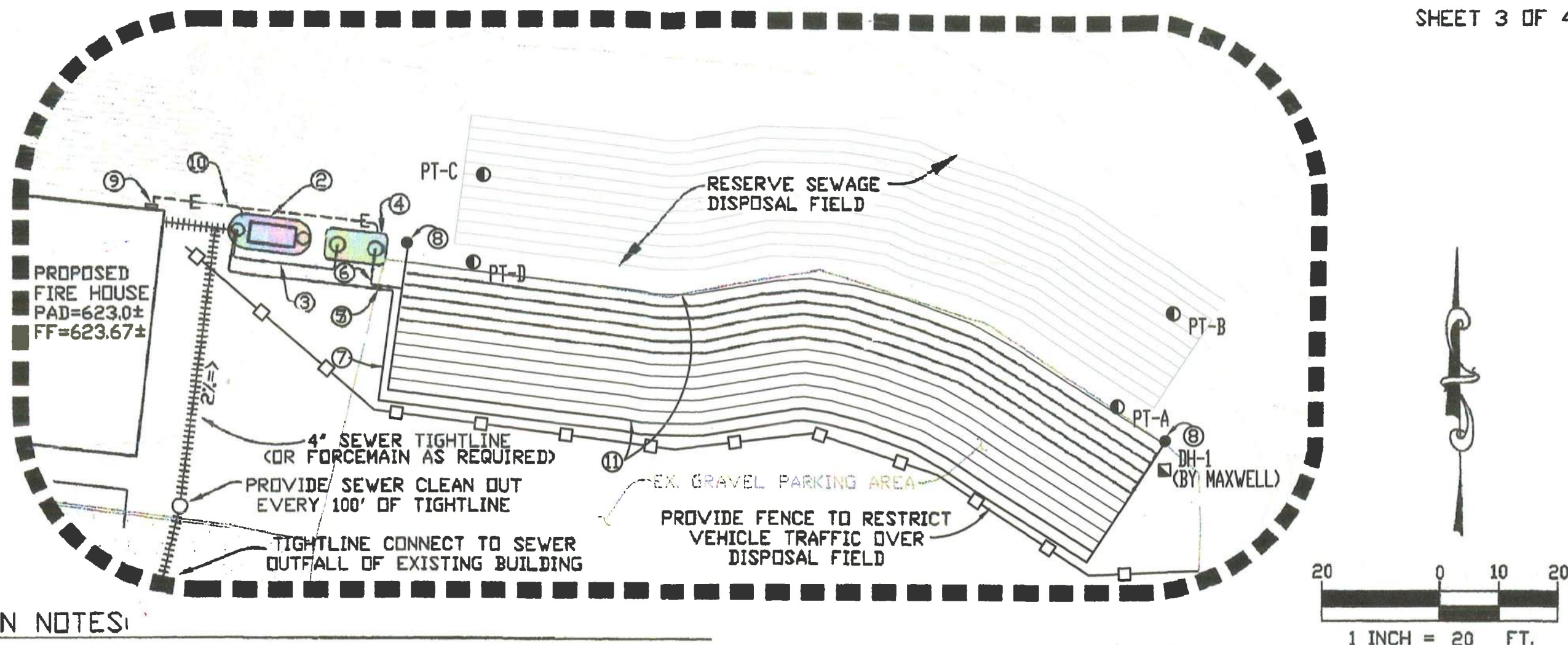
Respectfully,
SPECIALIST

Nov. 28, 2016

Kevin Bresnahan, P.E.
Civil Engineer

Land Development
Design & Consulting
3031 RIDGE CREEK DRIVE
FALLBROOK CA 92028
(951) 532-6371
KBFallbrook@yahoo.com





CONSTRUCTION NOTES:

- ① REMOVE EXISTING CONCRETE SEPTIC TANK, OR UTILIZE AS CHAMBER FOR ANCILARY PUMP AS ELEVATION REQUIRES FOR FALL TO ATU (SEE SHEET 2)
- ② INSTALL ADVANTEX AX20 MODE 3B W/ 1500 GAL. FIBERGLASS TANK & ORENCO MODEL NO. P300511 PUMP VAULT 57' HIGH VAULT W/ 24' FILTER CARTRIDGE). ELEVATIONS PER DETAIL ON SHEET 2. PROVIDE FOR ANTI-BOUYANCY MEASURE ON ADVANTEX TANK AND AX-20 POD PER MANUFACTURER RECCOMENDATIONS.
- ③ INSTALL 24 L.F. 2' SCHEDULE 40 PVC OUTFLOW LINE (2% MIN. SLOPE TO PUMP CHAMBER)
- ④ INSTALL ROTH (RMT1250 GAL) SINGLE COMPARTMENT SEPTIC TANK (AS PUMP CHAMBER) WITH ORENCO 1/2 HP ORENCO (PF3005-1-1-20) EFFLUENT PUMP. ELEVATIONS PER DETAIL ON SHEET 4. NOTE: PROVIDE ANTI-BOUYANCY MEASURES.
- ⑤ INSTALL ORENCO (WHW-1.0-AUT) 1' AUTOMATIC FIELD FLUSH VALVE
- ⑥ INSTALL 12 L.F. 1-1/4' SCHEDULE 40 PVC SUPPLY LINE
- ⑦ INSTALL 185 L.F. 1-1/4' SCHEDULE 40 PVC RETURN LINE
- ⑧ INSTALL ADVANTEX (AX-VENT) AIR VENT AT HIGH POINTS AS NOTED.
- ⑨ INSTALL CONTROL PANEL ON FREE STANDING 4'X4' REDWOOD POST
- ⑩ INSTALL ELECTRICAL SUPPLY LINE AS REQUIRED PER ELECTRICIAN
- ⑪ INSTALL 1500 L.F. WASTEFLOW PC-1 GPH GEOFLOW PIPE 2' D.C. W/OMITTEERS AT 1' DC. 6' BURIAL DEPTH (12 LINES AT 125 L.F. EACH)

NOTE: DRIPFIELD SHALL BE LAWN OR
OTHER LANDSCAPE AS APPROVED
BY DESIGN ENGINEER

Kevin Bresnahan, P.E.
Civil Engineer
Land Development
Design & Consulting
3031 RIDGE CREEK DRIVE
FALLBROOK CA 92028
(951) 532-6371
KEBfallbrook@yahoo.com



County of San Diego

Department of Environmental Health

Land and Water Quality
5500 Overland Ave., Suite 210, San Diego, CA 92123 / (858) 565-5173
www.sdcdeh.org

ELFIN FOREST / HARMONY GROVE

Owner: County Of San Diego *FIRE DEPT.* **Site:** 20223 ELFIN FOREST RD, ESCONDIDO
Address: 20223 Elfin Forest
Escondido, CA 92029 **Parcel:** 264-042-12-00
Phone: **Certification:** *GRANT DEED*
Professional: Kevin Bresnahan; DEH Engineer #59954 **Record ID:** DEH2016-LOWTS-006471

This project is **APPROVED** for the following:

Commercial / Residential: Commercial Gallons / Day: 600

Number of Bedrooms: *SEE CALCS. ON ATTACHED PAGE.*

THIS IS NOT A SEPTIC PERMIT

You have until 11/28/2017 to obtain a septic permit. However, a site recheck may be required at any time to determine if site conditions have changed. Refer to the County of San Diego, Department of Environmental Health Local Agency Management Program for Onsite Wastewater Treatment Systems for all applicable setbacks and standard conditions of approval.

ONSITE WASTEWATER SYSTEM REQUIREMENTS

Primary Septic Tank (in gallons): 1500

Pump Tank (in gallons): 1250

Supplemental Treatment: See Below *

* Supplemental Treatment Type: AdvanTex AX Pod

Soil Disposal System:

CONDITIONS TO BE COMPLETED PRIOR TO THE ISSUANCE OF A SEPTIC PERMIT

1. VERIFICATION OF POTABLE WATER SOURCE
2. REVIEW OF GRADING BY **DEH STAFF** (CALL THE INSPECTION LINE AT (858) 694-2553 AFTER GRADING IS COMPLETED IF NOT SIGNED OFF BELOW)
3. REVIEW OF STAMPED BUILDING PLANS

Potable Water Source: Public Water Supply

Water District: Olivehain Municipal Water District

DEH Grading Inspection:

DEH Building Plan Review:

DEH Pump System Review:

COMMENTS: PROPOSED VOLUNTEER FIRE STATION, 5 permanent firefighters, 1 office staff, 10 trainees twice a week. See calculations attached.

Advantex AX20 Mode 3B ATU w/ 1500 gal fiberglass tank and mounted Orenco Pump Vault w/ 24" Filter Cartridge. Roth 1250 gallon pump chamber, both tanks require manufacturer- recommended anti-buoyancy straps.

Fencing or barrier required to prohibit vehicular traffic over drip field and treatment tanks.

1500 linear feet of GeoFlow drip tubing, 2' on center, 6" deep, emitters 1' on center.

100% reserve in area of Water Wise Garden. Revision of this area may be required to accommodate installation of reserve area.

Approved By: Desiree Hogervorst

Date: 11/28/2016

APPENDIX A

PERCOLATION CERTIFICATION & APPLICATION CALCULATIONS

COUNTY OF SAN DIEGO
DEPARTMENT OF ENVIRONMENTAL HEALTH
PERCOLATION TEST REPORT

DEH Control #: LAUTS006471
Date: Nov. 28, 2016
Activity Code: E12

Assessor's Parcel #: APN 264-042-12 Map #: BY DEED Lot #: --

Site Address: 20223 ELFIN FOREST ROAD Town: ELFIN FOREST Zip Code: 92029

Owner: ELFIN FOREST/HARMONY GROVE FIRE DEPARTMENT Phone: _____

Mailing Address: 20223 ELFIN FOREST ROAD, ELFIN FOREST CA 92029

Test Hole	Test Depth	Stabilized Rate	Test Hole	Test Depth	Stabilized Rate	Test Hole	Test Depth	Stabilized Rate	Average Perc Rate	
A	12"	52							USE 60 MPI USE 0.200 GAL/SF/DAY	
B	12"	40	NOTE: YOU HAVE ONE YEAR TO OBTAIN A SEPTIC TANK PERMIT. HOWEVER, A SITE RECHECK MAY BE REQUIRED ANY TIME TO DETERMINE IF SITE CONDITIONS HAVE CHANGED.							
C	12"	55								
D	12"	39								

TYPE OF SOIL: (clay, silt, sand, decomposed granite, etc.)

Surface DESC. PER MAXWELL PERC IN COUNTY FILE

1-3' ft. below surface SILTY SAND WITH CLAY TO DECOMPOSED GRANITE

3-5' ft. below surface DECOMPOSED GRANITE WITH VARIABLE CALY

5-8' ft. below surface DECOMPOSED GRANITE WITH VARIABLE CALY

8-20' ft. below surface DECOMPOSED GRANITE WITH VARIABLE CALY

Depth to Refusal: RANDOM ROCK Depth to Groundwater: OBSERVED AT 11'

RECOMMENDATIONS:

Septic Tank: _____ gal. Pump Chamber: _____ gal. Surge Tank: _____ gal.

Leach Line Length: _____ ft. Seepage Pit Type: _____ Number of Pits: _____

Trench Depth: _____ ft. Length: _____ ft. Width: _____ ft.

Rock Below Pipe: _____ in. Total Depth: _____ ft. Cap Depth: _____ ft.

Other: ADVANTECH AX20 ATU W 1250 GAL PUMP TANK AND 3000 SQFT DRIP DISPOSAL (6' DEPTH)

Proposed Structure: PROPOSED FIRE STATION ADDITION ~ SEE CALCS FOR SIZING

WATER SUPPLY:

Source of Potable Water: OLIVENHAIN Well Permit Number: N/A

Registered CE, PE, Geologist, REHS: KEVIN BRESNAHAN RCE 59954

Address: 3031 RIDGE CREEK DRIVE ~ FALLBROOK CA 92028 Phone: 951-532-6371 Date: 10/2016

FOR DEPARTMENTAL USE ONLY

APPROVED YES ✓ NO _____ DATE 11/28/16 FINAL MAP REQUIREMENTS _____ NO ✓

Specialist: Asierio Aguerworst

Bldg. Plan Review: _____ DATE: _____

Grading Review: _____ DATE: _____

Water Analysis Results: _____ DATE: _____

Septic System Design:

- Calculate Daily Flow (DF):

Given a anticipated usage the daily flow is calculated as

Typical Usage: 5 Firefighters w/ 24 Hour Shift Daily (75 GPD per F.F.)

1 Regular Office Staff 8 hours Daily (20 GPD per Staff)

Training Twice Weekly additional 10 F.F.

For 8 hrs (total of 15 including on call F.F.) (20 GPD per Staff)

Flow values established per the UPC Private On-site Sewage "Appendix K."

Typical Daily Flow (TDF) = 5 Fire Fighters. x 75gallons/per./day

Plus

1 Office Staff. x 20 gallons/person/day

TDF = 395 Gallons Per Day

Peak Daily Flow (PDF) = 15 Fire Fighters. x 75 gallons/person/day

Plus

1 Office Staff. x 20gallons/person/day

Plus

10 Trainees x 20 gallons/person/day

PDF = 595 Gallons Per Day

Average Daily Flow (ADF)

= Typ. Daily Flow x (5 days/7days) +Peak Daily Flow (2days/7days) ADF = 452.14 Gallons Per Day

Design ATU and Drip Disposal system for 600 GPD.

- **Determine Soil Application**

Given observed perc rate of 55 mpi, conservatively utilize a 60 minute per inch percolation rate which corresponds to a rate of 0.20 gal./sq.ft./day for a design hydraulic loading rate requiring a total area of 500-sq.ft./100 gallons/day of disposal area. This conservative percolation rate allows for manipulation of the manufactures spreadsheet to provide a design that utilizes all the available area in the front yard. It is felt the additional drip line expense is minimal and will provide for a long term maintenance free distribution system.

Total square feet of disposal area= (daily flow)/(design hydraulic loading rate) Total square feet of disposal area= (600)/(0.200 gal./sq.ft./day)=3000 sq.ft. Use 3000 s.f. as a minimum allowing for calculated use.

- **Wasteflow Dripline Parameters**

Utilize 1500 l.f. Wasteflow PC 1 gph Dripline, Place 24" on center,
Place emitters 12" on center along length of tubing,
Bury dripline 6" below ground,

TABLE K-2
Capacity of Septic Tanks*

Single-Family Dwellings – Number of Bedrooms	Multiple Dwelling Units or Apartments – One Bedroom Each	Other Uses: Maximum Fixture Units Served per Table 7-3	Minimum Septic Tank Capacity in	
			Gallons	(Liters)
1 or 2		15	750	(2,838)
3		20	1,000	(3,785)
4	2 units	25	1,200	(4,542)
5 or 6	3	33	1,500	(5,678)
	4	45	2,000	(7,570)
	5	55	2,250	(8,516)
	6	60	2,500	(9,463)
	7	70	2,750	(10,409)
	8	80	3,000	(11,355)
	9	90	3,250	(12,301)
	10	100	3,500	(13,248)

*Note:

Extra bedroom, 150 gallons (568 liters) each.

Extra dwelling units over 10,250 gallons (946 liters) each.

Extra fixture units over 100,25 gallons (95 liters) per fixture unit.

Septic tank sizes in this table include sludge storage capacity and the connection of domestic food waste disposal units without further volume increase.

TABLE K-3

Estimated Waste/Sewage Flow Rates

Because of the many variables encountered, it is not possible to set absolute values for waste/sewage flow rates for all situations. The designer should evaluate each situation and, if figures in this table need modification, they should be made with the concurrence of the Authority Having Jurisdiction.

Type of Occupancy	Gallons (liters) Per Day
1. Airports	15 (56.8) per employee 5 (18.9) per passenger
2. Auto washers	Check with equipment manufacturer
3. Bowling alleys (snack bar only)	75 (283.9) per lane
4. Camps:	
Campground with central comfort station	35 (132.5) per person
Campground with flush toilets, no showers	25 (94.6) per person
Day camps (no meals served)	15 (56.8) per person
Summer and seasonal	50 (189.3) per person
5. Churches (Sanctuary)	5 (18.9) per seat
with kitchen waste	7 (26.5) per seat
6. Dance halls	5 (18.9) per person
7. Factories	
No showers	25 (94.6) per employee
With showers	35 (132.5) per employee
Cafeteria, add	5 (18.9) per employee
8. Hospitals	250 (946.3) per bed
Kitchen waste only	25 (94.6) per bed
Laundry waste only	40 (151.4) per bed
9. Hotels (no kitchen waste)	60 (227.1) per bed (2 person)

TABLE K-3 (Continued)

Type of Occupancy	Gallons (liters) Per Day
10. Institutions (Resident)	75 (283.9) per person
Nursing home	125 (473.1) per person
Rest home	125 (473.1) per person
11. Laundries, self-service	
(minimum 10 hours per day)	50 (189.3) per wash cycle
Commercial	Per manufacturer's specifications
12. Motel	50 (189.3) per bed space
with kitchen	60 (227.1) per bed space
13. Offices	20 (75.7) per employee
14. Parks, mobile homes	250 (946.3) per space
picnic parks (toilets only)	20 (75.7) per parking space
recreational vehicles -	
without water hook-up	75 (283.9) per space
with water and sewer hook-up	100 (378.5) per space
15. Restaurants - cafeterias	20 (75.7) per employee
toilet	7 (26.5) per customer
kitchen waste	6 (22.7) per meal
add for garbage disposal	1 (3.8) per meal
add for cocktail lounge	2 (7.6) per customer
kitchen waste - Disposable service	2 (7.6) per meal
16. Schools - Staff and office	20 (75.7) per person
Elementary students	15 (56.8) per person
Intermediate and high	20 (75.7) per student
with gym and showers, add	5 (18.9) per student
with cafeteria, add	3 (11.4) per student
Boarding, total waste	100 (378.5) per person
17. Service station, toilets	1000 (3785) for 1st bay
	500 (1892.5) for each additional bay
18. Stores	20 (75.7) per employee
public restrooms, add	1 per 10 sq. ft. (4.1/m ²) of floor space
19. Swimming pools, public	10 (37.9) per person
20. Theaters, auditoriums	5 (18.9) per seat
drive-in	10 (37.9) per space

(a) **Recommended Design Criteria.** Sewage disposal systems sized using the estimated waste/sewage flow rates should be calculated as follows:

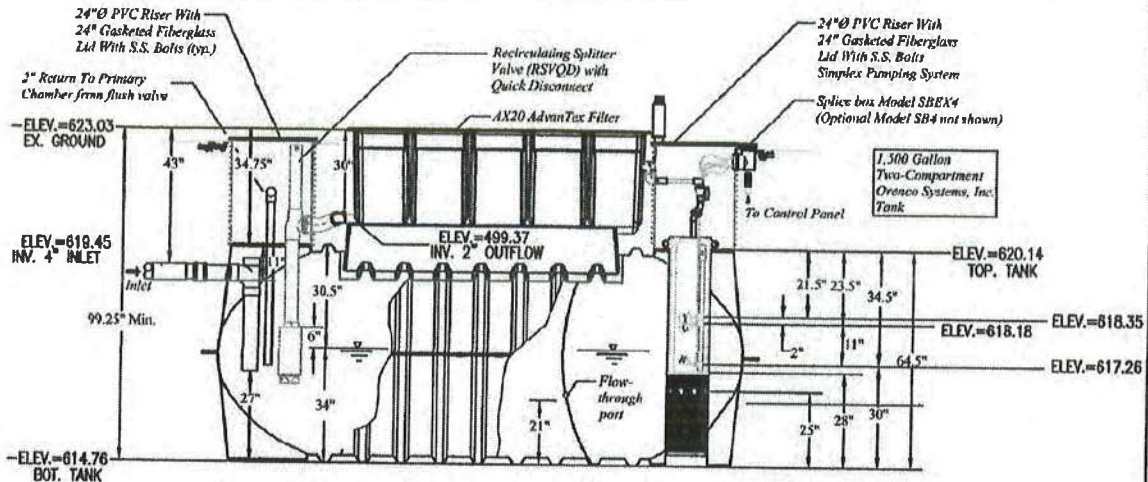
- (1) Waste/sewage flow, up to 1,500 gallons/day (5,677.5 L/day)
Flow x 1.5 = septic tank size
- (2) Waste/sewage flow, over 1,500 gallons/day (5,677.5 L/day)
Flow x 0.75 + 1,125 = septic tank size
- (3) Secondary system shall be sized for total flow per 24 hours.

(b) Also see Section K 2 of this appendix.

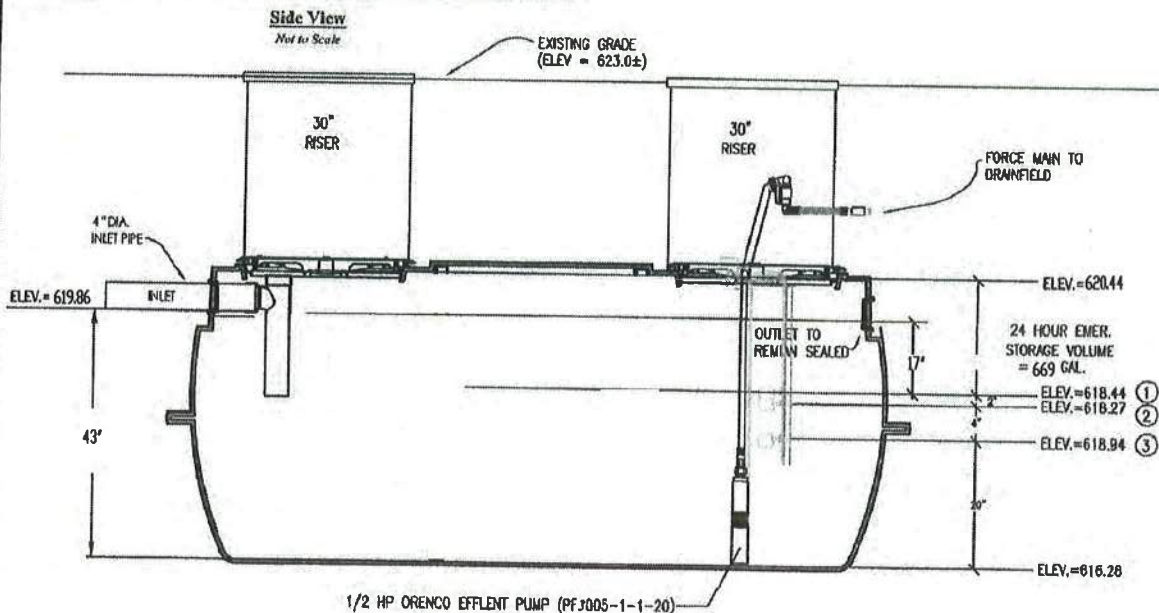
Advantex AX20 Mode 3B w/Fiberglass Tank (Modified)

SPECIFICATIONS FOR A 3 BEDROOM HOME UTILIZING A 1500 GALLON TANK			
FLOAT SETTINGS			
FLOAT	DISTANCE FROM TOP OF TANK (IN.)	LIQUID DEPTH (IN.)	GALLONS IN TANK
HIGH LEVEL ALARM (Y)	21.5"	43"	1305
OVERRIDE TIMER ON/OFF (G)	23.5"	41"	1234
LOW LEVEL ALARM/O (W)	34.5"	30"	823
INTERVAL VOLUMES			
INTERVAL	DISTANCE FROM TOP OF TANK (IN.)	LIQUID DEPTH (IN.)	GALLONS IN TANK
NORMAL LOW LIQUID LEVEL	30.5"	34"	977
SURGE VOLUME	30.5-23.5"	34"-41"	257
EMERGENCY STORAGE	0.5"-21.5"	43"-64"	495

Float Functions	
Y	High Level Alarm
G	Override Timer ON/OFF
W	Low Level Alarm
B	Pump On
R	Pump Off



Pump Basin w/ Tank



Dosing Calc:
dose volume = (600 gal/day) / (12 dose/day) = 50 gal/dose
Tank Capacity = 1343 gal/43" = 31 gal/inch
1 dose = approximately 2.0 inches

- ① HIGH LEVEL ALARM
- ② REDUNDANT ON/OFF
- ③ LOW LEVEL ALARM

Kevin Bresnahan, P.E.
Civil Engineer
Land Development
Design & Consulting
3031 RIDGE CREEK DRIVE
FALLBROOK CA 92028
(951) 532-6371
KEFBrook@yahoo.com



DEP 2016-1015-006471

Received

NOV 07

County of San Diego
Dept. of Environmental Health
Land & Water Quality Div.

SHEET 1

SEPTIC LAYOUT FOR: ELFIN FOREST/HARMONY GROVE VOLUNTEER FIRE DEPT.

APPLICANT:
ELFIN FOREST/HARMONY GROVE
VOLUNTEER FIRE DEPT.

20223 ELFIN FOREST ROAD
ELFIN FOREST CA 92029
PH: 760-744-2186

OWNER:
COUNTY OF SAN DIEGO
20223 ELFIN FOREST ROAD
ELFIN FOREST CA 92029

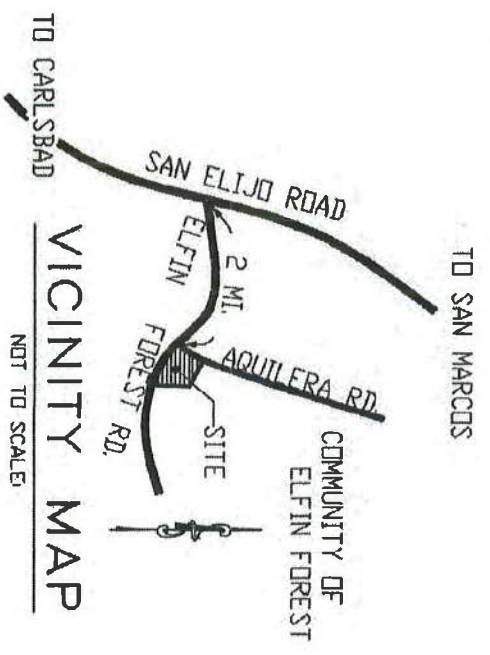
INDEX:	
COVER SHEET	SHEET 1
OVERALL PLAN VIEW	SHEET 2
DESIGN DETAIL	SHEET 3
TANK/PUMP CROSS SECTIONS	SHEET 4
PERCOLATION RATES	APPENDIX A
& APPLICATION CALCULATIONS	
DISPOSAL FIELD PUMP HEAD &	APPENDIX B
PUMP TANK SIZING CALCULATIONS	APPENDIX C
PARTS SPECIFICATIONS	APPENDIX D
NOTES	

SITE DESC.

2.01 ACRES BY GRANT DEED DDC223849REC69 IN NW/4 OF NE/4 SEC 3-13-3W.
20223 ELFIN FOREST ROAD, ELFIN FOREST CA 92029
APN 264-042-12-00

PROPOSED USE:

- VOLUNTEER FIRE STATION
- EXISTING FACILITY TO BE REMODELED TO A NON-HABITABLE SPACE WITH BATHROOM TO REMAIN.
- NEW 5 MM FIRE STATION V/1 ADMIN. STAFF.
- SEWAGE DISPOSAL PER ADVANTEX AX-20 ALTERNATIVE TREATMENT UNIT WITH PRESSURE FLOW GEORGRID DISPOSAL FIELD.
- SOURCE OF DRINKING WATER:
OLIVENHAIN MUNICIPAL WATER DISTRICT



Kevin Bresnahan, P.E.
Civil Engineer
Land Development
Design & Consulting
3031 RIDGE CREEK DRIVE
FALLBROOK CA 92028
(951) 532-6371
kbr@bresnahan-engineers.com

APPENDIX B

DISPOSAL FIELD PUMP HEAD CALCULATIONS

FIELD FLOW

Job Description: **ELFIN FOREST FIRE**
 Contact: **ELFIN FOREST FIRE**
 Prepared by: **KEVIN BRESNAHAN PE**
 Date: **1-Nov-16**

Please fill in the shaded areas and drop down menus:
 This spreadsheet is a guide for **small** systems with **residential** waste & is not a complete

Worksheet 1- Field Flow

Total field

Total Quantity of effluent to be disposed per day	Total	600	gallons / day
Hydraulic loading rate	Hydraulic loading rate	0.2	gallons / sq.ft. / day
Minimum Dispersal Field Area		3,000	square ft.
Total Dispersal Field Area	Total Dispersal Field Area	1,500	square ft.

Flow per zone

Number of Zones		1	zone(s)
Dispersal area per zone	Dispersal area per zone	1,500	square ft.
Choose line spacing between WASTEFLOW lines	Choose line spacing between WASTEFLOW lines	2	ft.
Choose emitter spacing between WASTEFLOW emitters	Choose emitter spacing between WASTEFLOW emitters	2	ft.
Total linear ft. per zone (minimum required)	Total linear ft. per zone	750	ft. per zone
Total number of emitters per zone	Total number of emitters per zone	375	emitters per zone
Select Wasteflow dripline (16mm)	Wasteflow PC - 1 gph		dripline
Pressure at the beginning of the dripline		30	psi
Feet of Head at the beginning of the dripline		69.3	ft.
What is the flow rate per emitter in gph?		1.02	gph
Dose flow per zone		6.38	gpm

Note: A few States or Counties require additional flow for flushing. Please check your local regulations.
 Flush velocity calculation below is for PC dripline. Classic dripline requires less flow to flush than PC.

Please refer to Geoflow's spreadsheet "Design Flow and Flush Curves" at www.geoflow.com or call 800-4

If required, choose flush velocity		2	ft/sec
How many lines of WASTEFLOW per zone?		12	lines
Fill in the <i>actual</i> length of longest dripline lateral		125	ft.
Flush flow required at the end of each dripline		1.48	gpm
Total Flow required to achieve flushing velocity		17.76	gpm
Total Flow per zone- worst case scenario		24.14	gpm

Select Filters and zone valves

Select Filter Type	BioDisc Filter	
Recommended Filter (item no.)	BioDisc Filter-150	1.5in < 30 gpm
Select Zone Valve Type	Electric Solenoid	
Recommended Zone Valve (item no.)	0	0

Dosing

Number of doses per day / zone:		12	doses
Timer ON. Pump run time per dose/zone:		7.51	mins:secs
Timer OFF. Pump off time between doses		1:52	hrs:mins
Per Zone - Pump run time per day/zone:		1:34	hrs:mins
All Zones - Number of doses per day / all zones		12	doses / day

PUMP SIZING

Job Description:	ELFIN FOREST FIRE
Contact:	ELFIN FOREST FIRE
Prepared by:	KEVIN BRESNAHAN PE
Date:	11/1/2016

Please fill in the shaded areas and drop down menus:

This spreadsheet is a guide for small systems with residential waste & is not a complete design. Pressure losses may be grossly overstated, particularly if designing with WASTEFLOW. The letters on the diagram(right) match the letters in section 2 below.

Worksheet - Pump Sizing

Section 1 - Summary from Worksheet 1

Flow required to dose field	6.38	gpm
Flow required to flush field	17.76	gpm
Flow required to dose & flush field	24.14	gpm
Filter	BioDisc Filter-150	
No. of Zones	1	zones
Zone valve	-	
Dripline	Wasteflow PC - 1	gph
Dripline longest lateral	125.00	ft.

Section 2

A. Flush line - Losses through return lineA. Flush

Select Pipe from dropdown menu	PVC schedule 40	
Select Flush Line Diameter	1-1/4" inch	
Length of return line	185 ft.	
Equivalent length of fittings	46 ft.	
Elevation change. (if downhill enter 0)	0 ft.	
Pressure loss in 100 ft of pipe	4.80 ft.	2.08 psi
Total pressure loss from end of dripline to return tank	11.1 ft.	4.80 psi

B. Dripline - Losses through Wasteflow driplineB. Dripline - Losses through Wasteflow dripline

Length of longest dripline lateral	23 ft.	
Minimum dosing pressure required at end of dripline	23.10 ft.	10.00 psi
Loss through dripline during flushing	4.13 ft.	1.79 psi
Total minimum required dripline pressure	27.23 ft.	11.79 psi

A+B. Minimum Pressure required at beginning of dripfieldA+B. Minimum Pressure required at beginning of dripfield

CALCULATED pressure required at beginning of dripfield	38.33 ft.	16.59 psi
SPECIFIED pressure at beginning of dripfield (from worksheet)	69.3 ft.	30.00 psi
Great! SPECIFIED Pressure is greater than CALCULATED Pressure requirement. Go to next step		

C. Drip components - Losses through headworks

Filter	11.6 ft.	5.00 psi
Zone valve pressure loss (not in diagram)	- ft.	- psi
Flow meter pressure loss (not in diagram)	- ft.	- psi
Other pressure losses	- ft.	- psi
Total loss through drip components	11.55 ft.	5.00 psi

D. Supply line - Minimum Pressure head required to get from pump tank to top of dripfield

Select Pipe from dropdown menu	PVC schedule 40	
Select Supply line diameter	1-1/4" inch	
Length of supply line	12 ft.	
Equivalent length of fittings	3 ft.	
Height from pump to tank outlet	5 ft.	
Elevation change. (if downhill enter 0)	0 ft.	
Pressure loss/gain in 100 ft. of pipe	8.48 ft.	3.67 psi
Total gain or loss from pump to field	6.3 ft.	2.71 psi
Total dynamic head	87.1 ft.	37.71 psi
Pump capacity * - Field Flush Flow	24.1 gpm	37.71 psi
- Field Dose Flow	6.4 gpm	
- Filter Flush Flow	- gpm	- psi
Pump Model Number		
Voltz / Hp / phase	plot	

* Note: Pump capacity flow assumes flow in dripline does not change during a dose cycle. With Wasteflow CLE, For more accurate flows please see Geoflow's Flushing worksheet.

If you need assistance designing for this additional flow, please

- See Geoflow flushing worksheet or
- Contact Geoflow at 800-828-3388.

AX20 Timer Settings Calculations:

(see attached sheet for manufacturers notes on timer settings)

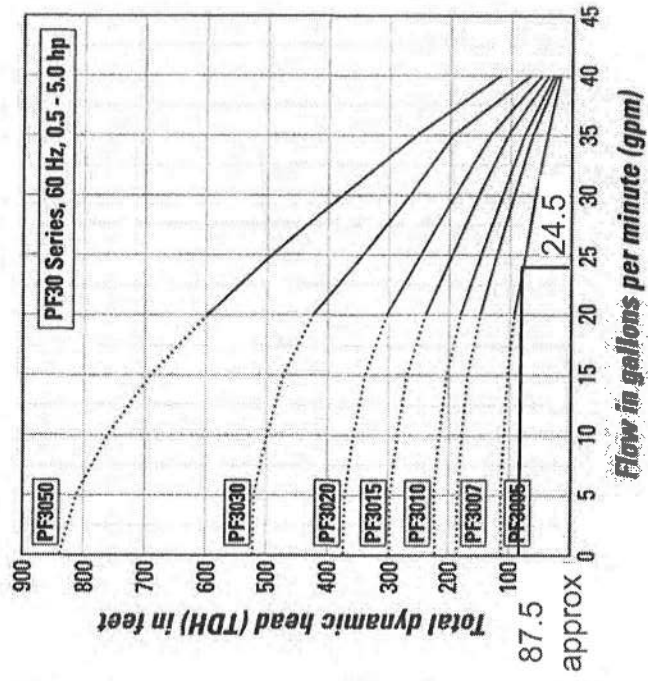
Design for 600 GPD

Parameters:	Values:	Notes:
Q_i Actual Daily Flow	600 gpd	
R_b Return Circulation Ratio	3:1	$600 \times (3 + 1) = 2400 < 3000$
R_f Filter Recirculation Ratio	4:1	
Q_d Actual Pump Dose Rate	30 gpm	Nominal 30gpm for specified high head pump model no. P300511
T_d Pump On Cycle Time	0.50 minutes	----
T_r Pump Off Cycle Time	11.5 minutes	----

$$T_r = \left[\frac{1440 \times T_d \times Q_d}{(R_b + 1) \times Q_i} \right] - T_d = \left[\frac{1440 \times 0.50 \times 30}{(3 + 1) \times 600} \right] - .50 = 8.5 \text{ minutes}$$

Cycle Time	9.0 minutes	less than 20 minutes, OK
Pumps cycles per day	160 cycles	less than 300 minutes, OK
Gallons per Cycle	15 gallons	0.22 gallons per orifice

Note: These parameters assume a specific daily usage and pump performance. Based on actual usage, the cycle times may need to be reevaluated to achieve optimal performance. The installer and/or maintenance provider shall contact the engineer to discuss any changes to the timer settings.



APPENDIX C

PARTS SPECIFICATIONS

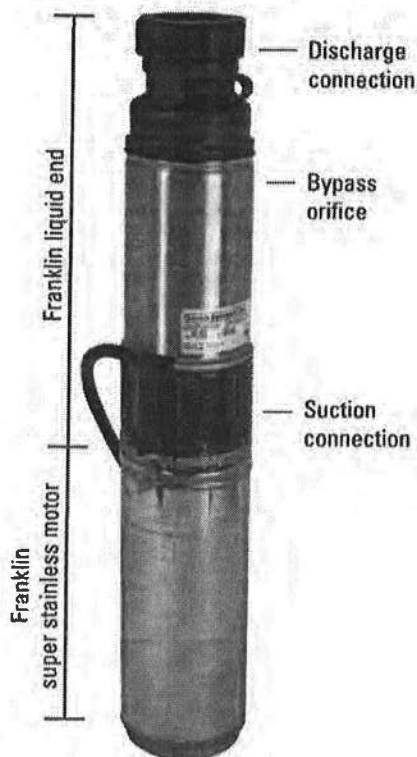
PF Series 4" (100 mm) Submersible Effluent Pumps



Applications

Our 4" (100 mm) Submersible Effluent Pumps are designed to transport screened effluent (with low TSS counts) from septic tanks or separate dosing tanks. All our pumps are constructed of lightweight, corrosion-resistant stainless steel and engineered plastics; all are field-serviceable and repairable with common tools; and all 60-Hz PF Series models are CSA certified to the U.S. and Canadian safety standards for effluent pumps, meeting UL requirements.

Orenco's Effluent Pumps are used in a variety of applications, including pressurized drainfields, packed bed filters, mounds, aerobic units, effluent irrigation, effluent sewers, wetlands, lagoons, and more. These pumps are designed to be used with a Biotube® pump vault or after a secondary treatment system.



Powered by
Franklin Electric

Features/Specifications

To specify this pump for your installation, require the following:

- Minimum 24-hour run-dry capability with no deterioration in pump life or performance*
- 1/8-inch (3-mm) bypass orifice (patent pending) to ensure flow recirculation for motor cooling and to prevent air bind
- Liquid end repair kits available for better long-term cost of ownership
- TRI-SEAL™ floating impeller design on 10, 15, 20, and 30 gpm (0.6, 1.3, and 1.9 L/sec) models; floating stack design on 50 and 75 gpm (3.2 and 4.7 L/sec) models
- Super stainless Franklin Electric motor, rated for continuous use and frequent cycling
- Type SOOW 600-V motor cable (suitable for Class I, Division 1 and Division 2 applications)
- Five-year warranty on pump or retrofit liquid end from date of manufacture against defects in materials or workmanship

* Not applicable for 5-hp (3.73 kW) models

Standard Models

See specifications chart, pages 2-3, for a list of standard pumps. For a complete list of available pumps, call Orenco.

Nomenclature

PF					
					Cord length, ft (m):
					Blank = 10 (3) 20 ¹ = 20 (6)
					30 = 30 (9) 50 = 50 (15)
					Voltage, nameplate:
					1 = 115 ² 200 = 200
					2 = 230 ³ 4 = 460
					Frequency:
					1 = single-phase 60 Hz 3 = three-phase 60 Hz
					5 = single-phase 50 Hz
					Horsepower (kW):
					03 = 1/8 hp (0.25) 05 = 1/4 hp (0.37)
					07 = 3/8 hp (0.56) 10 = 1 hp (0.75)
					15 = 1-1/2 hp (1.11) 20 = 2 hp (1.50)
					30 = 3 hp (2.24) 50 = 5 hp (3.73)
					Nominal flow, gpm (L/sec):
					10 = 10 (0.6) 15 = 15 (1.0)
					20 = 20 (1.3) 30 = 30 (1.9)
					50 = 50 (3.2) 75 = 75 (4.7)

Pump (PF Series)

¹ Note: 20-foot cords are available only for single-phase pumps through 1-1/2 hp

² 1/2-hp (0.37kW) only

³ 220 volts for 50 Hz pumps



Rancho Santa Fe Fire Protection District

PROPOSED: SITE IMPROVEMENTS FOR FUTURE MODULAR BUILDING



Kwang W. Chang Architect P.C.

Rancho Santa Fe Fire Protection District

Elfin Forest Fire Station No. 6

Phase I: Site Improvements

20223 Elfin Forest Road

Elfin Forest, CA 92029

PROJECT INFORMATION

GOVERNING CODES

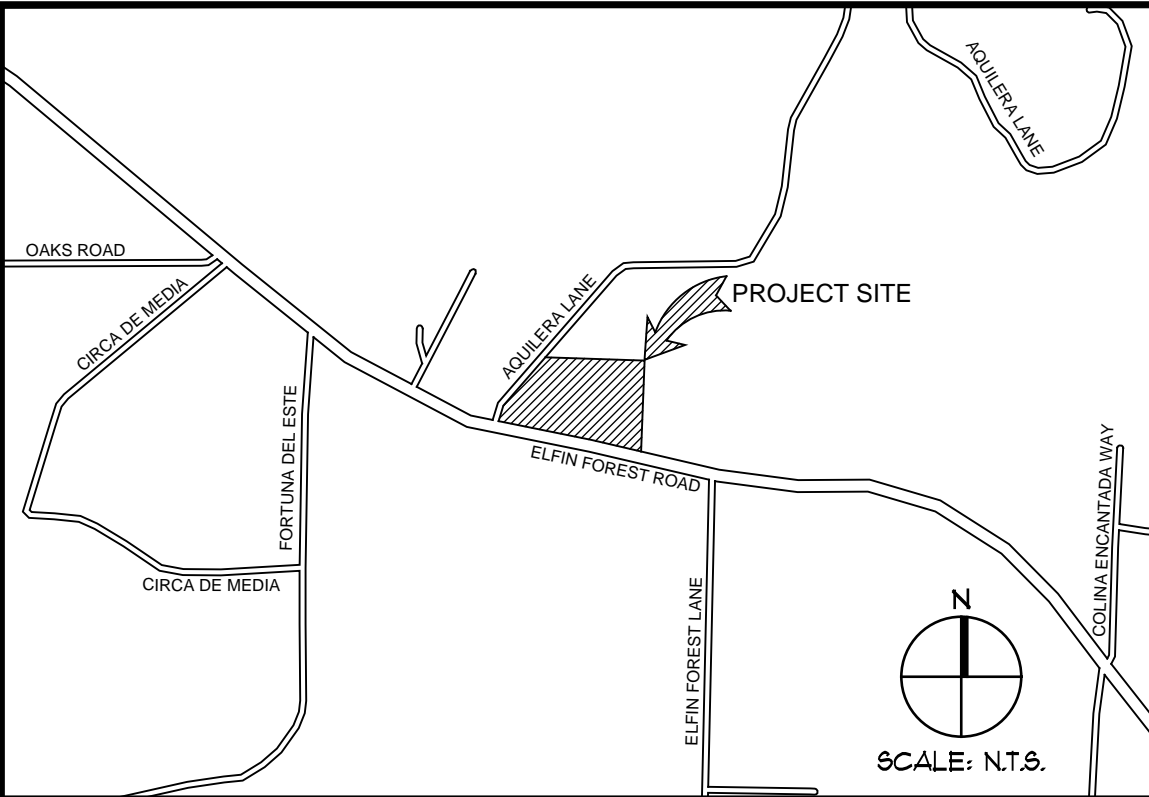
GR	Grade
GS	Galvanized Steel
GYP.	Gypsum

SCALE: N.T.S.

PROJECT NUMBER: 20170920

DRAWING
NUMBER:

T1



VICINITY MAP

- SITE PLAN NOTES:
1. THE CLEAR WIDTH FOR SIDEWALKS AND WALKS SHALL BE 48 INCHES MINIMUM.
 2. NEW PATH OF TRAVEL TO BE MAX. 5% SLOPE AND MAX. 2% CROSS SLOPE.

SITE PLAN NOTES

ARCHITECT
KWC ARCHITECTURE + DESIGN
KWANG W. CHANG ARCHITECT P.C.
8333 E. FOOTHILL BLVD., SUITE 103
RANCHO CUCAMONGA, CA 91730
(909) 919-8019 (OFFICE)
(909) 263-1280 (CELL)

CLIENT
RANCHO SANTA FE
FIRE PROTECTION DISTRICT
18021 CALLE AMBIENTE P.O. BOX 410
RANCHO SANTA FE, CA 92061
(858) 756-5911

PROJECT INFORMATION
ADDRESS:
20223 ELFIN FOREST ROAD
ELFIN FOREST, CA 92029
ASSESSOR'S PARCEL No.:
264-042-12-00

PROJECT DATA

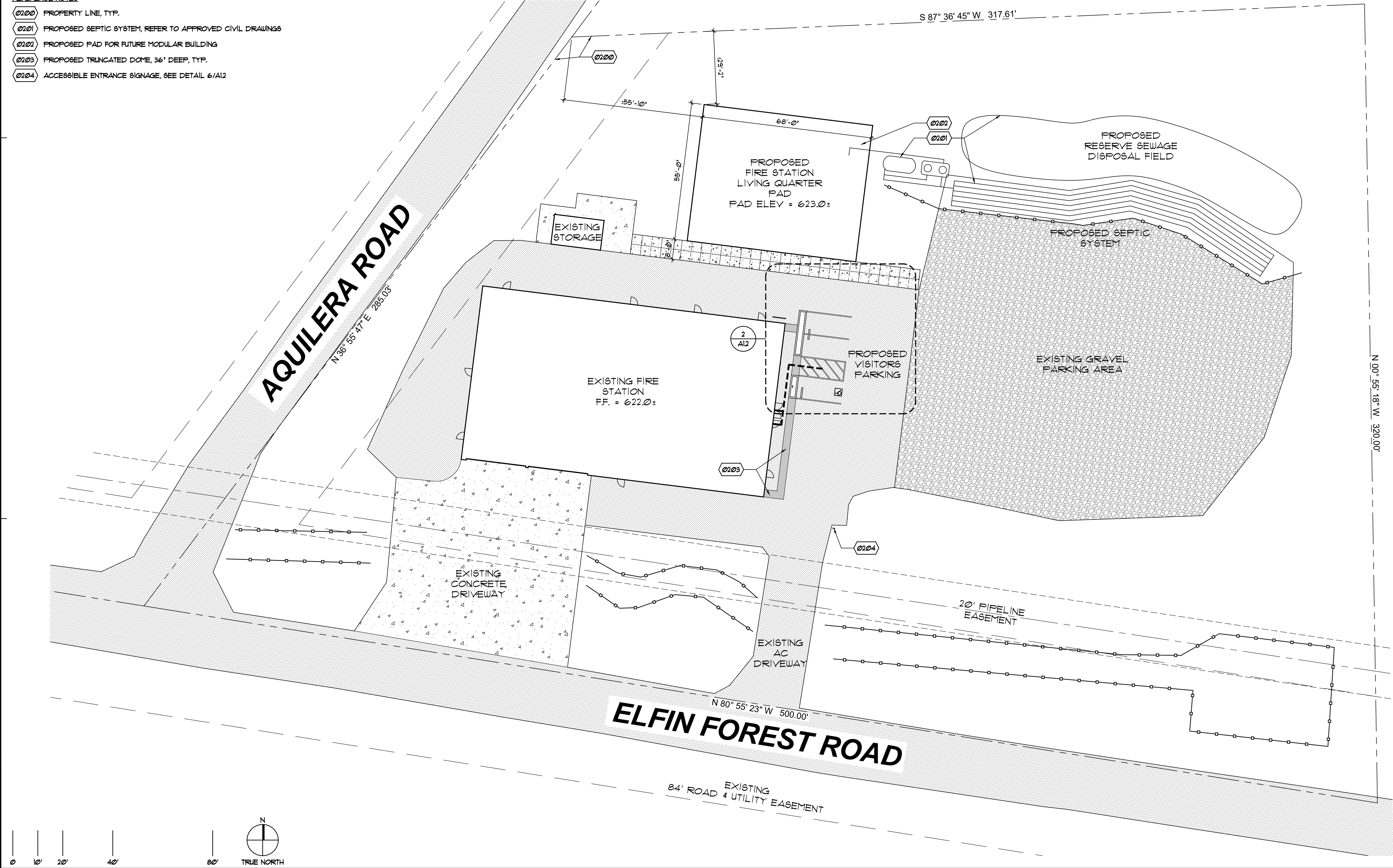
SITE PLAN DATA
TOTAL SITE AREA: 2.61 AC
EXISTING BUILDING: APPROXIMATELY 8,500 SF.
PERCENTAGE OF LOT COVERED BY BUILDINGS: 7%
PERCENTAGE OF LOT COVERED BY LANDSCAPING: 41%
PERCENTAGE OF LOT COVERED BY HARDSCAPE: 46%
(INCLUDING GRAVEL GROUND COVER)

SITE PLAN DATA

- PROPOSED PATH OF TRAVEL
- EXISTING WOOD FENCING
- EXISTING CONCRETE PAVEMENT
- EXISTING ASPHALTIC CONCRETE PAVEMENT
- EXISTING GRAVEL GROUND COVER
- PROPOSED NEW CONCRETE SIDEWALK
SAW CUT JOINT T/J, SEE DETAIL 8/A12
EXPANSION JOINT E/J, SEE DETAIL 8/A12

SITE LEGEND

- REFERENCE NOTES**
- 0100 PROPERTY LINE, TYP.
 - 0101 PROPOSED SEPTIC SYSTEM, REFER TO APPROVED CIVIL DRAWINGS
 - 0102 PROPOSED PAD FOR FUTURE MODULAR BUILDING
 - 0103 PROPOSED TRUNCATED DOME, 36" DEEP, TYP.
 - 0104 ACCESSIBLE ENTRANCE SIGNAGE, SEE DETAIL 6/A12



SITE PLAN
1"=20'-0"

Rancho Santa Fe Fire Protection District
Elfin Forest Fire Station No. 6
Phase I: Site Improvements
20223 Elfin Forest Road
Elfin Forest, CA 92029

LICENSED ARCHITECT
KWANG W. CHANG
C-32819
Exp. Date 09/30/19
STATE OF CALIFORNIA

CONSULTANT

△				
△				
△				
△				
△				
△				
NO		DATE	BY	DESCRIPTION
REVISIONS				
DRAWN: KC		CHECKED: KC		
DATE: 01/02/2018		SCALE: AS NOTED		
PROJECT NUMBER: 20170920				

SITE PLAN



DETAILS

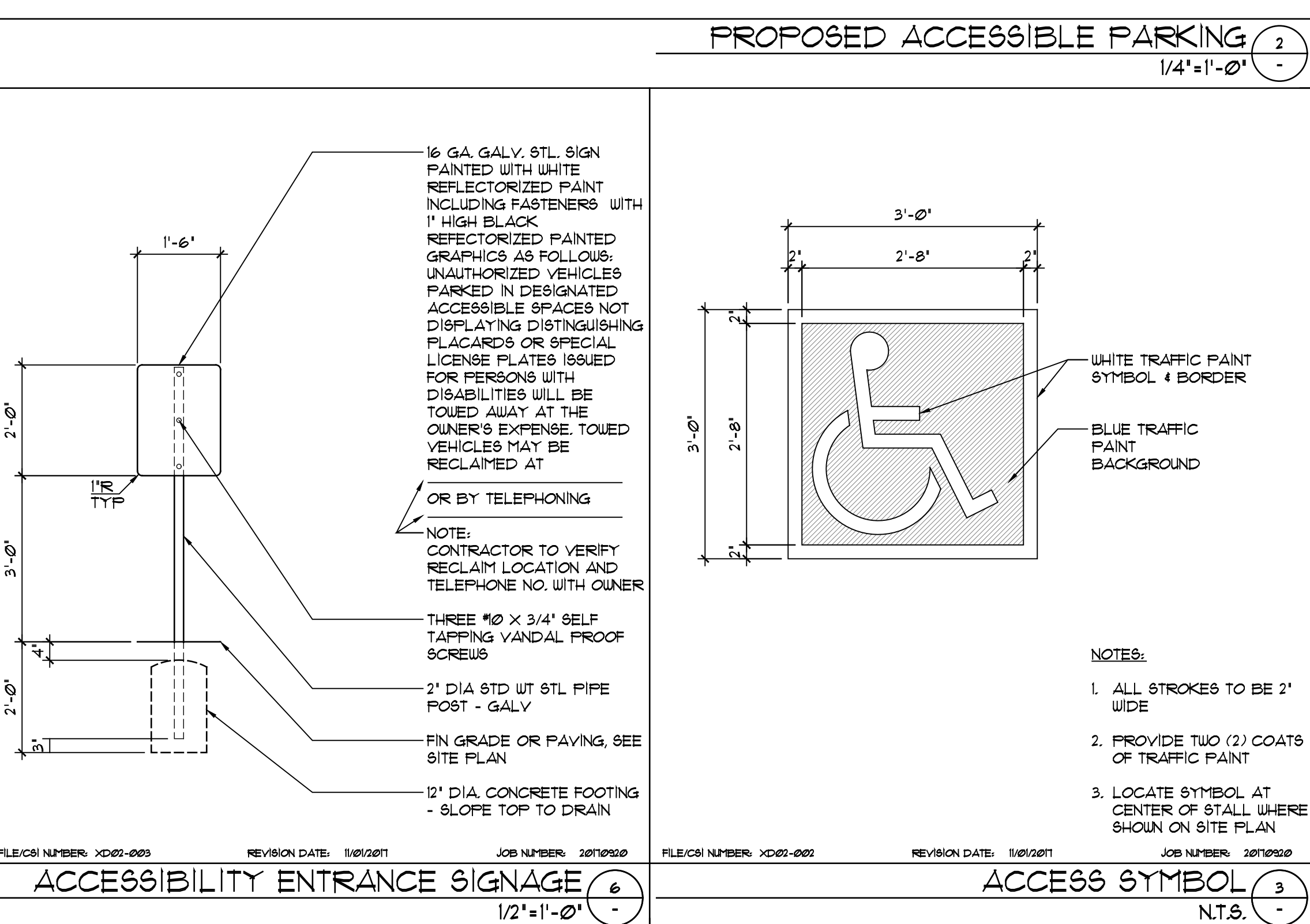


EXHIBIT D

NOTE: The conceptual floor plan and building elevations in Exhibit D are provided as a means to visually communicate what the District is seeking in the proposed modular building.

Bidders will be allowed to submit proposals with minor modifications or offer alternate design concepts to allow for conformance to individual manufacturing processes as long as the conceptual intent is maintained.

The Fire District will have the sole authority on determining if a modification or alteration is acceptable.





PERSPECTIVE VIEW 1



PERSPECTIVE VIEW 2



PERSPECTIVE VIEW 3



PERSPECTIVE VIEW 4